

Graduate Medical Education in Psychiatry

From Basic Processes to True
Innovation

Matthew Macaluso
L. Joy Houston
J. Mark Kinzie
Deborah S. Cowley
Editors

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From MM, LJH, JMK, and DSC:

To our trainees, the future leaders of our field. Our work is dedicated to the next generation of clinical psychiatrists, psychiatric researchers, and educators, who will continue to advance the field and advocate for patients.

From MM:

To my wife Katharine and children Matthew Jr (Matty) and William. You are the most important people in my life and the inspiration for everything that I do.

To my mentor and dear friend Sheldon Preskorn, who taught me important lessons about academic medicine and life. Your teachings made me a better person and professional.

From LJH:

To my husband, Chad, for his constant support and affirmation. You make me a better physician and human being. Thanks, as well, to all of those who have served as professional mentors in my journey. They are too numerous to name, but I thank you all for your support and wisdom.

From JMK:

To my wife, Sylvia, for her humor, encouragement, and support. To my children, Sebastian and Rémi, for their curiosity and interest. And, to my mother, Karen, and father, David, who are my greatest mentors.

From DSC:

To my husband Mark for his unfailing love and support over all these years. And thank you to the many trainees, colleagues, and mentors who have taught me so much and who have made being a program director and a psychiatric educator such a joy.

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Introduction

1

Matthew Macaluso, L. Joy Houston, J. Mark Kinzie,
and Deborah S. Cowley

The graduate medical education (GME) offerings of any hospital, academic department, or medical school are arguably one of the most important functions of each entity. GME not only produces the next generation of board-certified physicians but also contributes education, clinical care, advocacy for patients and the profession, research, and scholarship to the communities each program resides within. This book aims to provide background, best practices, and innovations for GME programs in psychiatry. The chapter authors are leaders in psychiatry GME. The authors are experienced program directors, and many have been involved at the level of national professional organizations and societies related to GME. The book editors have a combined total of more than 80 years of experience in academic

psychiatry. The book is intended for leaders in academic and non-academic GME settings interested in developing, managing, or improving new or existing psychiatry GME programs. The book also has value for trainees and those interested in general psychiatric residency, sub-specialty fellowships, or academic psychiatry. The book additionally should appeal to non-psychiatrists (including non-psychiatric physicians or non-physician clinicians) teaching in psychiatric GME programs and non-physician administrators in any setting where medical education or GME is being offered or considered.

Administering a GME program is a complex task that involves meeting large numbers of requirements, managing educational and employment issues, and ensuring appropriate systems are in place, including academic- and healthcare-related systems. While there is much written on organizing, managing, and innovating psychiatry residency programs in journal articles, there is not a single reference book that compiles standard and best practices on this topic for programs, trainees, and others. To our knowledge, this book is the first of its kind to compile this content into a single, published resource in psychiatry. The chapters focus on key areas of GME program management and innovation, including meeting accreditation requirements, clinical and didactic curricula, assessment and evaluation, resident and faculty wellness, managing resident and faculty performance issues, recruitment, preparing

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residents for fellowship, research, and scholarly activity in psychiatry GME programs, rural training programs, and faculty development.

We aim to cover the core areas of day-to-day program development, program management, and program evaluation while providing pearls from established programs. This includes the vital topic of program accreditation, reviewed by Drs. Boland and Sampang. They have experience at the Residency Review Committee (RRC) level, a component of the Accreditation Council for Graduate Medical Education (ACGME). Program accreditation ensures the quality of programs and that they meet criteria set by national accrediting bodies to provide quality training and graduate physicians eligible for board certification in the specialty. A challenge for all programs is serving as the resident or fellow's employer while providing necessary education and training at the same time. Then, on top of creating proper clinical and educational programs, programs must simultaneously create an environment that lends itself to wellness and the development of habits of lifelong learning. Using example vignettes, Dr. Anzia's chapter will help us understand how to create a safe and stimulating program to promote professional and personal development.

Dr. Adams and colleagues add discussion on creating a diverse, equitable, and inclusive environment for GME training, which is vital for creating a workforce that mirrors our patients and communities and for ensuring the participation of people of different backgrounds and skill sets. Dr. Kovach and collaborators further this discussion by helping us understand the best practices for residency recruitment, while Dr. Oakman's group discusses advocacy, including advocating for issues related to social justice. Dr. Khan's group deepens this discussion by helping us understand the needs of international medical graduates, whose role in American medicine is essential and contributes to its strength and diversity.

The book also provides background on developing curricula in specific areas, including psychopharmacology, psychotherapy, research, quality improvement, and professionalism. Dr. DeJong's chapter builds on the discussion from many sections of the book by clarifying the developmental stages of professionalism and demonstrating the impact of professionalism on improving patient care. In addition, the chapter includes a discussion on harnessing frontiers of clinical innovation to teach professionalism.

The book is rounded out with a review of program evaluation, including how to manage concerns with the performance of both residents and faculty and how to negotiate for needed change and resources. Next, Dr. Young reviews the literature on developing a competency-based assessment system. Competency-based medical education continues the desire to certify physicians based on measurable training outcomes, rather than training inputs such as time in training, which has been a significant paradigm shift in the decade leading up to this book's publication. The book also reviews how to globally manage program change, with examples from Dr. Sudak and colleagues. Program change may be managed in a strategic and planned way or may occur due to a crisis such as economic, social, or public health crises, all of which are discussed in this book.

Because of its critical importance in many areas, developing the next generation of psychiatrists being the most important, GME in psychiatry must be developed with the community's needs, key partners, and trainees in mind. In addition, it is critical to thoughtfully maintain and continually adapt a GME program to ensure that it continues to optimally meet its goals. This includes staying up to date on best practices, creatively leveraging resources, and maintaining awareness of new challenges and threats. We hope this book will be a guide throughout all stages of this process.



Starting a New Program

2

Ann Cunningham, Areef Kassam, Tanya Keeble,
and Bill Sanders

Overview

Nearly three times the number of categorical psychiatry programs were newly accredited in the five academic years between 2016 and 2021 than in the prior 5-year period, as shown in Table 2.1 [1]. Growth in categorical psychiatry residency development reflects the trend in numbers of medical students applying to psychiatry residency.

Sidney Weissman, MD, clinical professor of Psychiatry at Northwestern University Feinberg School of Medicine, analyzed the Match data between 2011 and 2021 and writes “the total number of psychiatric positions in the ‘Match’ has risen from 1,097 in 2011 to 1,907 in 2021. The total number of senior allopathic medical school graduates selecting psychiatry has nearly doubled from 640 (4.1%) of 15,588 in 2011 students to 1,205 (6.5%) of 18,435 in 2021. A simi-

Table 2.1 Growth in new psychiatry residency programs

| Academic year | Number of new programs | Academic year | Number# of new programs |
|----------------|------------------------|----------------|-------------------------|
| AY 11–12 | 1 | AY 16–17 | 19 |
| AY 12–13 | 2 | AY 17–18 | 22 |
| AY 13–14 | 5 | AY 18–19 | 9 |
| AY 14–15 | 5 | AY 19–20 | 13 |
| AY 15–16 | 15 | AY 20–21 | 18 |
| Total AY 11–15 | 28 | Total AY 16–21 | 81 |

lar increase has been seen in osteopathic medical school graduates” [2]. The increase in numbers of medical students choosing psychiatry residency between 2020 and 2021 was greater than that of all other specialties. Only three psychiatry positions in the 2020 National Resident Match Program (NRMP) went unfilled [3]. Psychiatry is becoming a highly desirable and competitive specialty.

This chapter provides a practical overview intended to help those in the early planning stages of psychiatry residency and/or fellowship development, those programs with initial accreditation or in the early stages of an existing program, and those who are considering track development.

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Why Create a New Residency Program?

Establishing a new graduate medical education (GME) program is a noteworthy endeavor and a major undertaking. When thinking of developing a program, it is important to discuss needs, strategy, and commitment with key potential partners. Key institutional partners are identified in conjunction with your Designated Institutional Official (DIO), but these individuals may include your DIO, department chair, chief executive officer (CEO), and chief financial officer (CFO). Involving partners from the broader community such as civic leaders, other hospital system leaders, local and regional medical association leaders, and leaders from non-psychiatry departments (e.g., neurology, internal medicine, and pediatrics) is critical at an early stage. These collaborators can provide testimony about mental health shortages, advocate for psychiatric service needs in their specialty area, and secure potential funding partnerships. They may also contribute future rotation sites to the new program.

In the initial consideration of the development of the program, there are important questions to consider. Some of these questions include the following:

1. *What gap is being addressed by starting a residency program?* Most new programs develop secondary to regional psychiatry shortages. Development of a residency program attracts psychiatrists who are interested in education, research, quality improvement (QI), and other scholarly activities, enhancing the overall quality of the psychiatric care for an entire community. Some GME programs develop as sites to address the need for regional medical student core clerkships.
2. *Is there longitudinal financial support for the establishment of a residency program?* Establishing a five-year pro forma can help to concretely project costs and determine whether the program will be sustainable. The initial startup budget should include salary costs for individuals planning the program and costs for residency office space (for the residents, faculty, coordinator, and program director), meeting space for didactic education, audiovisual equipment, library facility, and call rooms.
3. *Are there board-certified psychiatrists who are passionate about teaching and the development of the program?* The hospital's medical staff needs to be engaged and supportive of program initiation. Identifying core faculty members for the development of the program and clinical faculty members for teaching and supervision is imperative. These program trailblazers will have the challenge (and joy!) of creating the foundation of the program. This team collaboration and commitment are essential for the success of the program.
4. *Are there core rotation components available for a residency program? If not, what partnerships are available to complete these requirements?* It is important to review the Accreditation Council for Graduate Medical Education (ACGME) requirements to ensure that required clinical and other educational experiences will be met within the institution or with partnerships in the community. For example, core requirements for a general psychiatry residency program currently include inpatient, outpatient, consultation/liason, emergency, child and adolescent, geriatric, community, forensic, and addiction psychiatry, as well as neurology and primary care. There needs to be robust training for supportive, psychodynamic, and cognitive behavioral psychotherapies and combined psychotherapy and medication management to enable competence prior to graduation. If ancillary sites are utilized for rotation requirements, Program Letters of Agreement (PLAs) must be in place and submitted to the ACGME with the application for initial accreditation of the program.
5. *Is the community able to support ACGME requirements for scholarly activity or will this need significant focus prior to program development?* Development of a program and faculty scholarly culture can be challenging for

new programs, especially those in community settings. Identifying gaps prior to the formal application for accreditation enables the sponsor to proactively identify the types of scholarly activities that align with the mission of the institution and the clinical environment. Faculty working in a clinical setting may not have significant interest in traditional research, writing, or grant writing. They may be much better suited to quality or patient safety (PS) initiatives, as these activities already exist in most institutional clinical environments. Doing a full assessment of participation of potential faculty in professional organizations, committees, research, quality improvement and patient safety (QIPS), medical student education that involves curriculum development, or those who have an expertise in implementation may help identify those who can be of most help in shifting the culture toward scholarship.

6. *Will be there be community versus academic sponsorship?* There may be a local medical school interested in a relationship with the program that could range from full sponsorship/accreditation to affiliation. The benefits and costs of such a relationship must be weighed by the institution given the unique local circumstances. Clear benefits of medical school accreditation and sponsorship include applicant recruitment of those medical students highly invested in an academic-sponsored residency environment. Other benefits include state-sponsored GME funding that in many states must flow through state organizations and not to private sponsors. Other benefits include an existing scholarly culture and faculty who are invested in demonstrating scholarship as it is tied to their academic advancement. The downsides of academic sponsorship include hierarchical rigidity in developing a resident site that may be quite remote from and have significantly different local and regional needs from the sponsoring academic site. Though scholarly activity may be robust, it may not be of the kind you want to emphasize in your program,

especially if your desire is to train advanced clinicians rather than to develop research psychiatrists. Aligning departmental priorities with an academic sponsor may be challenging if your site is rural and serves a different population from that seen in the academic environment.

7. *Are your faculty and institution ready to adapt and support a positive clinical learning environment?* Medical residency training culture has shifted significantly over time, and physicians trained in years past may have an outdated view of the clinical learning environment and the role of residency education. There are now ACGME expectations surrounding limits on duty hours, faculty modeling of professionalism, graded levels of resident supervision and autonomy, the need for education as a primary emphasis rather than service, resident and faculty engagement in safety and quality initiatives, and the requirement to support the well-being of our residents and faculty.

Residency Track Development

Increasingly, large academic medical centers are reaching out to rural or underserved communities to address workforce shortages. Having psychiatry residents rotate at remote sites for a brief elective rotation is unsuccessful in encouraging those residents to practice at the site postgraduation. However, developing a specific training track is much more successful in retaining those graduates into practice within the underserved community [4]. Several programs have expertise in rural, public health, or underserved track development (see Table 2.2). Determining whether to create a track or a stand-alone rural residency program will be important from the outset. Track programs have unique Electronic Residency Application Service (ERAS) identification numbers from the main program and are typically structured to allow for core rotations not available at the track site to be completed in the first 2 years of training before the resident moves to

Table 2.2 Examples of psychiatry residency track programs

| Psychiatry rural/underserved track | Website |
|---|---|
| University of Washington | https://depts.washington.edu/psychres/tracks.shtml |
| University of Texas Southwestern | https://www.utsouthwestern.edu/education/medical-school/departments/psychiatry/education-and-training/residency-program/rpmh-track.html |
| Michigan State University | https://psychiatry.msu.edu/adult-residency/adult-rural.html |
| University of Wisconsin public health track | https://www.psychiatry.wisc.edu/education-training/residency/tracks/#public-health-track |

the track site for the senior training years focused on the particular educational emphasis important for that location.

Funding Models

Understanding GME funding is essential for developing and maintaining a sustainable program. Residency program funding across specialties has some common sources and unique opportunities. Additionally, psychiatry programs in particular have some funding advantages and unique challenges compared with other specialties. The development of a new program provides specific opportunities for funding and risks of common mistakes that can affect future funding. Furthermore, established psychiatry residency training programs may have opportunities to develop new revenue streams such as clinical reimbursements and research funding. The growing focus on and importance of mental healthcare fortunately have also created some uncommon opportunities for funding a psychiatry residency training program.

The more common sources of GME funding include the federal government (Medicare), state government (Medicaid), Health Resources and Services Administration (HRSA), Department of Defense (DOD), Department of Veterans Affairs (VA), hospital systems, healthcare organizations, health insurance companies, residency clinic revenue, and other private sector funding. It is common and recommended for residency training programs to use various combinations of funding sources. Government funding through the Centers for Medicare and Medicaid Services (CMS) is the most common and consistent source of funding. It is imperative to understand the rules of

CMS funding when developing a new program. For example, the rules for developing a residency program funding cap through CMS will affect the funding of the program for many years. Each funding mechanism has its own unique set of rules and regulations. Understanding these rules and regulations will help each individual program determine whether the funding is worth the requirements involved.

GME funding through CMS starts the day the residents begin their training [5]. Thus, revenue from CMS starts to become available July 1st of the inaugural year of the residency program. It is recommended to secure funding for developing the program through grants as no CMS funds will be available until the official start of the program. Startup costs to consider include program director time, costs of initial resident recruitment, application fees (e.g., accreditation application fee), residency administrator salary, updating facilities (e.g., call rooms), and time of the director of graduate medical education or DIO (administrative support for program development). CMS funding is determined by calculating the amount of time residents spend training within the residency program's internal sites. CMS will fund new residency programs in hospitals that have never had a graduate medical education department. Hospitals that had received GME funding in the past and/or have a current GME residency program will not be eligible for new GME funding. CMS determines the funding by calculating a funding "cap." The cap is calculated at the end of the fifth year of the new program [6]. In Table 2.3 below, we demonstrate the equation for cap building along with an example:

The cap will be calculated using the largest residency class within the first 5 years of the resi-

Table 2.3 Funding “cap” calculation

| Largest class in the last 5 years | × amount of time spent internal sites | × years of training |
|-----------------------------------|---------------------------------------|--------------------------|
| <i>Example</i> | | |
| 10 Residents | × 90% internal sites | × 4 years for psychiatry |
| <i>Equation</i> | $10 \times 0.9 \times 4 =$ | 36 Residents |

Table 2.4 DGME payment calculation

| | | | | |
|--------------|---|---|---|--|
| DGME payment | = | Total approved DGME amount (adjusted rolling average FTE count × per resident amount) | × | Medicare patient load (Medicare inpatient days % total inpatient days) |
|--------------|---|---|---|--|

residency program’s existence. That number is then multiplied by the amount of time the residents spend training within the teaching hospital or sites the training program can claim (i.e., sites without graduate medical education funding). Finally, the number is then multiplied by the number of years of the training program (4 for psychiatry residency training). To maximize the cap, it is important to have the residents train within the teaching hospital or sites so the program can claim as much funding as possible. This time would include having resident lectures on site at the teaching hospital.

GME funding is dispersed to the sponsoring hospitals and is divided into direct and indirect funding [7]. Direct GME funding is supplied to the sponsoring hospital by CMS to pay the direct expenses of residency training (resident and faculty salary & benefits, certain administrative and overhead costs). Direct GME funding for a program is calculated by multiplying weighted resident count times per resident amount times Medicare bed-day ratio (see Table 2.4). The Medicare bed-day ratio is the ratio of the hospital’s Medicare inpatient days to total inpatient days. This helps to approximate Medicare’s share of training costs. The weighted resident count is a 5-year rolling average of the hospital’s weighted number of full-time equivalent residents in an accredited program. This weighted average is a combination of residents in their initial residency training program (counted as 1.0 FTE) and residents training outside their initial program

appointment (e.g., residents doing a second residency or subspecialty fellows; counted as 0.5 FTE). The initial per resident amount is a dollar amount calculated by claimable expenses for residents during the initial year of the program divided by the number of residents in the inaugural class. This number is compared to regional averages given per resident. The lesser of the two is the number used by CMS as the per resident amount. It is recommended to spend the appropriate amount of money developing the program so that the cost is above the regional average. This strategy would ensure the program is receiving the highest funding rate possible.

Indirect medical education (IME) funding is defined as an adjustment to the teaching hospitals’ prospective payment system (PPS) inpatient rates to defray additional costs of care to patients that are associated with funding training programs [6]. IME becomes part of hospital revenue, not medical education funds. However, often this funding is used by hospital systems to support medical education. Typical CMS funding is approximately one-third direct GME and two-thirds indirect GME. CMS also uses a disproportionate share adjustment for some hospitals. Disproportionate share hospitals serve a significantly disproportionate number of low-income patients and receive payments from the CMS to cover the costs of providing care to uninsured patients.

GME can also be supported by state funding through Medicaid. Many states provide support for graduate medical education through managed care contracts and fee for service. A common funding mechanism is a per resident stipend to the teaching hospital. Commonly, state-funded and state-run community mental health centers (CMHCs) are opportunities for psychiatry residency program training. CMHCs will typically cover the cost of the overhead, while residents spend time providing valuable care to a vulnerable patient population. States can also leverage Medicaid funding for innovative training programs such as rural and urban track programs.

HRSA grants are available to support the development of behavioral health training programs mainly focusing on rural and inner-city

healthcare development. HRSA grants typically focus on primary care training; however, behavioral healthcare training is considered within the Teaching Health Center Graduate Medical Education Program. These federally qualified health centers (FQHCs) can provide excellent training environments while covering overhead costs and allowing the residency program to claim the residents' time on their cost report.

The Department of Veteran Affairs (VA) is a common training site for residents. The VA provides funded GME positions for thousands of residents across the country. VA training allows residents to provide meaningful care to veterans but typically does not offer the diversity of patients and training environments to provide a complete residency experience. Therefore, many VA programs affiliate with academic programs. The VA can provide a unique funding opportunity for established residency training programs that are over their "cap." The VA will support the direct costs and overhead of residents who spend time training in the VA when programs are over their "cap." The VA, however, will retain the IME funding. Therefore, this opportunity would be less beneficial for programs that are under their cap number. In this case, it would be preferable for the training program to retain all the funding (both direct and indirect).

The Department of Defense (DOD) also supports many ACGME training programs. These training programs are focused mainly on three branches of the military, namely, the Army, Navy, and Air Force.

Private insurance companies occasionally provide additional funding for graduate medical education programs. It is advisable to meet with insurance companies and negotiate reimbursement rates and contracts. Residency training programs can provide increased access to high-quality patient care and justify enhanced reimbursement. There is typically a shortage of psychiatric providers in communities, and residency programs that have an outpatient clinic can negotiate favorable rates to help support the expense of medical education. Many psychiatry residencies have reported the development of funding opportunities through collaborative/integrated care and telepsychiatry, especially to rural areas.

Philanthropy can also be an important resource for supporting the development of a psychiatry GME program. It is common to explore philanthropy and grants to cover startup costs. Private and public donors can support many opportunities in graduate medical education such as the development of clinics, updating facilities, purchasing electronics, external rotations, international rotations, and endowed chair positions. Consulting with your organization's foundation or administrative leaders can provide information regarding donor and philanthropic opportunities.

"Right Sizing" Your Program

When developing a training program, it is important to have a vision and a best-guess end goal in mind for what the program would like to accomplish. A solid understanding of the strengths and weaknesses of an organization can help guide the size of the program. The number of residents in the program might vary depending on the training environment. An organization with a 200-bed psychiatric inpatient unit with 20 psychiatrists will have different resources and opportunities compared to a program with a 20-bed inpatient psychiatric unit and 2 psychiatrists. An organization with a large outpatient or multiple outpatient clinics with 40 psychiatrists will likewise have different opportunities compared with a program with 4 outpatient psychiatrists. Also, residency programs that have more intensive overnight call schedules may require more residents to maintain resident wellness by dividing call responsibilities among a larger pool of residents. Programs that have a limited number of supervisors may not be able to support a larger number of residents.

To balance financial sustainability with appropriate supervision, outpatient residency clinics typically require faculty to resident ratios that vary between 1:3 and 1:5, depending on the residents' level of training. Another consideration will be how many residents may fast track into a fellowship program, thereby losing senior-level residents. If the psychiatry program has a child and adolescent fellowship program, it will be important to consider attrition of residents into the fellowship. The development of a psychiatry residency training

program will initially require significant resources and energy; however, once fully developed, the program can provide significant benefits and resources to an organization. It will be important to carefully consider what will be the ideal balance of service and education to maintain a safe and quality educational environment that supports resident and faculty wellness [8].

When considering the application for initial accreditation of the program, the ACGME will evaluate the scope of resources available to educate residents and meet the Common Program Requirements (CPRs). The ACGME typically approves programs and positions if there is demonstration of a safe academic environment with adequate faculty, facilities, and resources. Furthermore, the ACGME is motivated to increase residency training opportunities given the increased need for physicians and the significant increase in the number of graduating medical students. The ACGME is responsible for approving the number of GME slots available, but they do not determine funding for those positions. It is recommended to request as many positions as necessary as the program is not required to fill all positions. When starting a new program, it might be determined that a smaller class is required for a couple of years while the foundation and structure of the program are being developed, before growing the class size to that accredited by the ACGME.

Rightsizing a residency program can provide a great benefit to residents, faculty, the organization, and the community. A residency program that is built beyond its resources will struggle to provide adequate education and supervision, and this will negatively affect patient quality and safety. A program that has too few residents could put added pressure on the residents to cover clinical responsibilities, thereby affecting resident wellness.

Mission and Vision of Your Program

When starting a new program, it is imperative to develop a mission and vision with subsequent

detailed aims. The defined mission and vision will be a guiding compass for faculty recruitment, resident recruitment, curriculum, and the development of the program. The aims provide a roadmap for sustaining and advancing your program. The mission, vision, and aims help to define what kind of graduates you intend to produce and for what kind of settings and roles. They also help to differentiate the program from other programs in the same specialty. The mission and vision will continue to serve as the shared focus for the direction and growth of the program.

A mission statement focuses on your program's core purpose, focus, and aims in the current state (here and now). To be relevant, the program's mission statement needs to be an extension of your department or division and sponsoring institution's mission. An effective mission statement is succinct, outcome oriented, and specific to your program. As an example, the mission statement for the ACGME [9] reads as follows:

The mission of the ACGME is to improve health-care and population health by assessing and enhancing the quality of resident and fellow physicians' education through advancements in accreditation and education.

A vision statement is aspirational and articulates how the program hopes to evolve over time (future). The vision statement should be rooted in the mission of your program. Here is the opportunity to think big about future goals—dare to be bold. The vision statement should be inspiring and uplifting and broad and inclusive and embody core ideology. As an example, the ACGME's vision statement [9] is as follows:

We envision a healthcare system in which the Quadruple Aim* has been realized. We aspire to advance a transformed system of graduate medical education with global reach that is:

- Competency-based with customized professional development and identity formation for all physicians.
- Led by inspirational faculty role models overseeing supervised, humanistic, clinical educational experiences.

- Immersed in evidence-based, data-driven, clinical learning and care environments defined by excellence in clinical care, safety, cost-effectiveness, professionalism, and diversity, equity, and inclusion.
- Located in healthcare delivery systems equitably meeting local and regional community needs; and,
- Graduating residents and fellows who strive for continuous mastery and altruistic professionalism throughout their careers, placing the needs of patients and their communities first.

Once the mission and vision statements have been created, it is important to develop aims. The ACGME WebAds© system requires aims, both for a new program application and as part of subsequent annual reviews for an established program. The ACGME requests that programs provide aims (e.g., goals and objectives) that are guided by the mission statement. The program aims should describe what the program intends to achieve in accordance with the Common Program Requirements. Aims should be consistent with the overall mission of the sponsoring institution, the needs of the community and graduates it serves, and the distinctive capabilities of its graduates (e.g., leadership, research, public health). The aims should be defined and reviewed as part of the annual self-improvement process discussed by the Program Evaluation Committee (PEC) and articulated in the annual program evaluation. Aims may change over time in response to factors such as advances in the field, new training opportunities, or new demands on physician workforce. Three to five discrete aims should be clearly identified with defined SMART goals (i.e., goals that are specific [who and what], measurable [measurement that gives feedback on progress], achievable [based on institutional or

regional resources], relevant [to the community setting in which the program is located], and time limited [realistically identified time frame for completion]).

When defining the mission, vision, and aims for the program, it is important to include input from key faculty and program, departmental, and institutional leadership. Creating a faculty development session to draft the mission, vision, and aims is a great team building activity and creates solidarity around a guiding compass for the direction of your program in the current and future states.

As part of such a faculty development event, breakout sessions to examine the key questions listed below are an excellent strategy for promoting engagement, dialogue, and inclusion of multiple perspectives:

Who are we?

What basic needs do we have?

What structures need to be in place to meet these needs?

What are our guiding principles?

How should we respond to our key collaborators or partners?

What makes us unique?

Once these questions have been discussed, breakout groups can draft the mission statement, vision statement, and aims, which can then be shared, edited, and combined within the larger group. These statements can then be vetted by key partners within your institution (typically Designated Institutional Official (DIO), department chair) for approval. This process fosters engagement of faculty and key leadership in the foundational elements of mission, vision, and aims for the intentional and strategic development of a new program.

Useful Mission and Value Resources:

<https://www.acgme.org/Portals/0/PDFs/SelfStudy/SSAimsIPLK.pdf>

<https://www.acgme.org/About-Us/Overview/Mission-Vision-and-Values/>

<https://www.hrsa.gov/sites/default/files/advisorycommittees/cogme/COGME%20Meetings/2016/20160407-hrsa-carter.pdf>

Successful Collaboration Within Your Sponsoring Organization

Strategic placement of residents in your sponsoring institution's GME residency programs and clinical services increases the likelihood that you will be considered critical to the operations and mission of the organization, which, in turn, enhances long-term residency sustainability. Programs that have achieved success in this area include those that have implemented brand-new paradigms of care or services that have not previously existed. These include integrated care models in the primary care setting, hospital-based addiction consultation, and rural telepsychiatry.

In developing services that align with the hospital mission and strategic priorities, you are often partnering with productivity-based non-teaching departments and clinical services in a community-based psychiatry setting. You can embed strong evidence-based rotations and residents who can then be easily hired into the organization following graduation. Identifying an unmet service need is helpful in creating a niche area that has not previously been addressed. This also has the added advantage of involving partnering across specialties (e.g., primary care, hospital medicine, surgery). Collaboration with those departments creates further goodwill, visibility, and advocacy.

Example

At one community-based psychiatry residency, there had previously been no embedded primary care behavioral health. The developing psychiatry residency program identified this gap and partnered not only across the GME Internal Medicine and Family Medicine programs but also into the organization's primary care environment to implement and expand collaborative care over the next 5 years. At the same time, Medicaid expansion in the state required integrated behavioral health in the primary care setting. This enabled the psychiatry residency program to harness additional funding to expand faculty positions to supervise residency rotations providing consultation to these primary care sites.

Creation of new rotations or services that train psychiatry residents in an interprofessional setting is another way to demonstrate value to the sponsoring organization. Interprofessional rotations including psychiatry residents, social work students, pharmacy students, and psychiatric advanced practice nursing (APRN) students are educationally valuable for psychiatry residents, provide much-needed clinical placements for other learners, and help the sponsoring organization to recruit well-trained professionals from a variety of highly sought-after disciplines.

Collaboration with other GME programs such as family medicine, internal medicine, or pediatrics can benefit all programs involved. Examples of this are training primary care residents in consultation psychiatry by embedding them on the primary psychiatry consultation liaison service for a required residency rotation or training family medicine residents in collaborative care during residency. These residents often take hospitalist or ambulatory positions at the organization and can advocate for continued access to those models of care, bringing value to the psychiatry residency program that trained them.

Development of strategic GME or sponsoring institution partnerships across common program required areas such as quality improvement (QI), patient safety (PS), and well-being, which enable mutually beneficial work to be done.

Example

One program with success in this area developed a new telepsychiatry service to a rural part of the state and at the same time created a quality improvement project based on that work. The QI project involved residency and non-residency partners, won an institutional quality improvement award, and generated significant scholarly activity for all members of the team, who went on to create posters, present workshops, and speak nationally about this project. Most importantly, the project enabled access to specialty mental healthcare for a rural underserved population.

Community Relationship Development

Developing and growing community relationships can significantly improve the quality of a psychiatry residency training program. A psychiatry program can also transform behavioral health throughout a community. Residents can improve access to care throughout the community during training by providing direct patient care. In addition, residents may practice in the community after graduation, further improving access to behavioral healthcare over time. The Association for American Medical Education (AAMC) data show that 54.2% of all residents remain in the state where they train [10]. Further, providing residents with multiple experiences in the community improves the likelihood they will remain to practice in a variety of settings they have developed familiarity and comfort with during training.

There are often several known, as well as unknown, private and public programs in a community that can help support a residency. It is useful for residency program leaders to contact as many medical and behavioral health organizations as possible to learn about all the opportunities available for training residents. Some external organizations will be able to provide unique medical and behavioral health training experiences such as maternal mental health, neuropsychology clinics, mental health courts, autism spectrum disorder programs, and collaborative care. Such organizations may be willing and able to provide resources such as volunteer faculty and funding to help support the residency training program. Fostering relationships with community partners can be one of the most enjoyable activities for program leaders. Developing these relationships and experiences diversifies and enhances the quality of the residency training experience.

Partnering with other organizations and utilizing volunteer faculty can provide the added benefit of relieving some of the burden on the program's core faculty. Faculty often balance clinical work with non-reimbursed teaching. Supervising and teaching residents are an enjoy-

able experience if faculty have reasonable time commitments. Faculty can experience a sense of burnout and lack of appreciation if they are overly burdened with resident training activities, especially uncompensated expectations. Residents learn new and innovative processes, procedures, and techniques while rotating at external sites, which can help foster quality improvement within the organization that sponsors the residency training program. Residents also provide great advertisement for the external organizations within their home institution. External organizations will often value having the opportunity to recruit residents that rotate through their facility. Psychiatrists and other clinicians in the community often value and find meaning in teaching. The benefits of program–community relationships provide a quid pro quo relationship with community partners. They help community partners recruit psychiatrists, improve community psychiatrist morale, and improve access to behavioral healthcare. In return, they help add more teaching faculty for the residency training program, provide unique training opportunities, and improve the quality of the training program.

Residents learn a lot by spending time at multiple organizations. They are exposed to multiple practice styles, electronic medical records, and unique specialty clinics. Residents have an opportunity to learn which type of hospitals, clinics, and specialties they enjoy the most. Spending time in the community prepares residents for the flexibility necessary to be successful in the current medical environment. External rotations often expose psychiatry residents to practice styles and settings with varying patient acuities, patient volumes, clinical responsibility, and productivity requirements. These experiences can help improve the resident's understanding of the pace of clinical psychiatry after residency.

While external rotations can be great experiences, it is important to monitor external sites regularly. Providers at external sites will need an orientation to the rules and regulations for supervising residents, rotation goals and objectives, and program expectations. It is recommended that regular meetings take place with leadership

and supervisors at the external rotations to enable bidirectional feedback and response to areas for improvement. It is also valuable to invite external volunteer faculty to residency activities such as case conferences, journal clubs, and grand rounds. It is recommended to limit the distance a resident needs to travel for external training experiences. Some external rotation experiences are extremely valuable or necessary and worth the travel time. The residency program can consider easing the burden of travel with a stipend for travel expenses, building travel time into the schedule, creating virtual experiences to minimize travel, and arranging for lodging at the rotation site.

Development of community relationships can also help with recruitment of medical students to the residency training program. Medical students interested in psychiatry value a diverse and comprehensive training program, with a focus on evidence-based care. The varied training locations and educational experiences can further help residents discern which area of psychiatry they will want to practice. Thoughtful planning of external rotations can provide job opportunities for residents without impacting the residency program faculty recruitment needs.

Faculty Recruitment and Retention

Nearly 76% of residency directors and 69% of fellowship directors report challenges in recruiting and/or retaining teaching faculty [11]. Modifiable challenges are centered around non-competitive pay compared to the private sector, increased total (clinical, educational, administrative, and scholarly activity) workload in academic settings relative to practice in the community where workload demands often only involve clinical care, chronic short staffing leading to a vicious cycle of difficult recruitment and retention, and uncompensated teaching time [11].

In determining the best faculty salary model in a new program, it is critical to understand common GME compensation models [12].

1. 100% Salary Model

This model is one in which faculty receive a fixed salary with a retirement and benefit package and no or small additional financial incentives. This model is common at many large academic medical centers where salary is tied to academic rank. In academic settings, salaries are generally lower, but retirement and benefits can be substantial. Ways to compensate for salary gaps relative to community practice include dedicated administrative time, faculty development funds, using an educational value unit (EVU) system to recognize and reward teaching, reduced clinical relative value unit (RVU) expectations, and providing protected time for scholarship. Departments can also develop specific faculty pathways, such as faculty scientist, clinician educator, and salaried clinician pathways with distinct expectations for performance and promotion and mentorship and career development support.

2. Salary Plus Incentive (Hybrid) Model

This model has a base salary with additional income available for components that are “on top” of the minimum job requirements for program faculty. The benefits of this model are that it allows for job role choice and allows faculty to augment the base salary in a flexible manner. This model financially incentivizes certain ACGME Common Program Requirement (CPR) behaviors, enables faculty to focus on areas of work that are most satisfying to them, and allows them to receive additional compensation for work that directly benefits the program. This model is more common in community-based residency environments, where a shift to an academic culture may need to be cultivated over time, by financially reinforcing ACGME educational and scholarly job functions that go above and beyond those typically encountered in community clinical positions.

The following are two examples of salary plus incentive models from recently developed successful community programs.

New Community Program #1

- *Base salary*
 - Fifty percent Medical Group Management Association (MGMA) median “*psychiatry faculty*” salary/50% MGMA median “*general psychiatry*” salary
 - Past 3-year rolling average data used to create median salary for the upcoming year to account for salary variations that may include salary decreases in some specialty areas
- *Teaching tier*
 - Time in teaching position model where salary increases by the number of years of residency and/or medical student educational experience
 - Tier 1, 0–2 years; tier 2, 3–6 years; tier 3, 7+ years
- *Quality and service incentives*
 - Aligned with the Accreditation Council for Graduate Medical Education (ACGME) faculty Common Program Requirements (CPRs) for faculty and program scholarly activity expectations
- *Additional call pay*
 - \$/24 shift on weekend and official holidays
- *Transparency and equity*
 - No gender differences, no fellowship-based differences, no hospital versus ambulatory setting differences
- *Program director/associate program director stipend* to recognize and compensate for leadership responsibilities

New Community Program #2

- *Base salary*
 - Independent salary data review occurs annually to keep up with psychiatry salary trends and community salaries

- *Productivity above base salary*
 - productivity incentivized above base productivity expectations
- *Quality bonus*
 - Incentivizes ACGME CPR behaviors
- *Compensation (a la carte)* for additional educational activities that benefit the program
 - For example, creation and facilitation of seminars, on-call responsibilities, scholarly activity participation, resident supervision, educational program leadership, committee participation/leadership, residency recruitment (interviewing)

Table 2.5 common GME compensation(base salary chosen entirely for simplicity of calculation)

| Tier definition | Assistant 0–2 years | Associate 3–7 years | Full 7+ years |
|---|---------------------|---------------------|----------------|
| % Above median | Median | 105% of median | 110% of median |
| Base | 200 | 210 | 220 |
| Quality & service (10% median salary at all levels) | 20 | 20 | 20 |
| Compensation | 220 | 230 | 240 |
| Call/year | 10 | 10 | 10 |
| Total compensation | 230k | 240k | 250k |
| Increase from current | % | % | % |

An example of salaries and salary composition for faculty members at different ranks in a hybrid model is shown in Table 2.5.

3. Pure Productivity

This model is a structure typical in most private or community employers across the country. Income is determined by work relative value units (RVUs), net charges, or net revenues. This structure creates a competitive environment with less predictable income and less dedicated time for teaching. Patient volumes can fluctuate significantly, and the emphasis is on clinical service

and typically needs to meet all patient care needs in the organization. This model leads to high clinical service experience for residents but may have the disadvantage of a lower emphasis on education with reduced faculty time spent teaching.

Multiple salary resources exist that can help with data collection when setting salaries and determining the model that works best for your program and employer (see Table 2.6).

Table 2.6 Salary information resources

| Resource | Pros | Cons |
|-----------------------------------|--|---|
| MGMA | Most comprehensive, gold standard | Expensive to obtain report |
| AAMC | Best for academic departments | Not a good private practice measure |
| Merritt Hawkins | Based on Internet posted jobs | A lot of data to decipher |
| Medscape | Surprisingly accurate | Survey of members. Generalizability to educational setting may be limited |
| Salary.com | Largely based on online postings, provides information on large numbers of specialties | Source lacks context or explanation |
| Doximity | Geographically strong, based on physician self-report | Self-reports can be misleading |
| Medical Economics Annual Report | Physician-led information | Low number of participants |
| US Bureau of Labor and Statistics | Large number of federal jobs | Salary is low compared to national averages |
| Graduating Residents | Current year salary data for first jobs | Not as accurate for more mature positions/faculty depending on structure |
| Job Fairs | Real-time information from a live person | Information often censored to impress candidates |
| New Hires | Current year salary data | May conflate information to enhance competing offers |

In a 2018 survey of 722 American Association of Directors of Psychiatric Residency Training (AADPRT) members, the top 3 identified needs of GME teaching faculty were more protected time (48%), teaching skills workshops (38%), and mentorship (16%) [13].

Several residency programs have addressed the challenge of faculty mentoring and retention in creative ways. The following are two examples, one from a major academic program with new track development and the other in a new small community program.

Example #1: Large Academic Program With a New Regional Track

This program has the challenge of being part of a large, multi-site academic department and has a new community-based regional track geographically distant from the core program.

At the core site, this program had developed several programs to enhance faculty mentoring and retention. These included a mentoring and career development program, in which each faculty member is assigned a mentor and meets with that mentor at least every 6 months to assess progress and set goals toward promotion using a templated individual development plan (IDP). The mentoring program offers information, support, and career development guidance.

The program developed site-based groups to support career development for junior faculty. These include a successful peer mentoring group available to clinician educator faculty, with a regular cadence of meetings and food provided by department. Each meeting includes member check-in, discussion of any career-related topic, support, feedback, advice from peers in the meeting, setting action plans, and accountability [14].

The program also worked to foster a sense of community for teaching faculty, including annual teaching retreats.

With the development of the new track, the program needed to consider ways to foster community and faculty development at a distant site, as well as a feeling of connection with the core program. Faculty of the new regional track were invited to participate in the annual teaching retreat in person or virtually. The program director collaborated with the regional track director to design and deliver specific faculty development sessions for regional track faculty before any track residents started at the regional site. These sessions were designed for faculty new to residency education. Faculty from the core program, including the associate program directors, participated in teaching these sessions and met with regional track faculty. The program director also negotiated teaching time for regional track faculty as part of the track development process, ensured that they had clinical faculty appointments, and oriented them to the program, department, and resources of the sponsoring institution that they could take advantage of (e.g., library resources, online grand rounds). Based on a needs assessment of the regional track faculty, the program director and regional track director made a plan for ongoing faculty peer mentoring groups at the regional site, focused on the needs of track faculty, and ongoing collaboration and sharing of teaching and supervision approaches between core site and regional faculty.

Example #2: New Non-academic Medical Center Accredited Community-Based Program

This program developed its faculty structure as it began initial recruitment into the program. Most faculty come directly from residency or fellowship training.

Initial program development of faculty positions included protected time for the work of administration, rotation, and seminar implementation and teaching. All faculty have the opportunity to receive a 0.6 full-time equivalent (FTE) clinical position with 0.4 FTE administrative and teaching time. Faculty who prefer higher clinical education care responsibilities over administration can choose a higher clinical FTE with less administrative FTE. This allows flexibility in job roles, enhancing job satisfaction and faculty retention.

Every new faculty receives weekly program director mentorship for the first year post hire. This enhances early career support, enables faculty to select administrative and leadership interests based on identified program needs, and allows the program director to work with faculty to set goals and then track progress. After year 1, faculty move to a biweekly and then monthly mentorship model. A benefit of this model is that the program director and faculty develop a collaborative relationship, enhancing whole faculty team functioning, since time is also spent discussing family, stressors, well-being, and outside interests.

This program intentionally worked on development of a culture of trust and teamwork through biannual retreats, biweekly all-faculty administrative meetings, biweekly peer-led faculty development, and, in the initial stages of faculty build, recruitment dinners to meet new faculty candidates.

Utilization of the Institute of Healthcare Improvement (IHI) open school faculty development courses in quality improvement and patient safety has led to robust individual and programmatic knowledge and skill set in this scholarly activity and led to collaborations across GME departments and interprofessional collaboration at the home hospital institution. Following Shanafelt's research, it has been found that

providing faculty with at least one day per week on an activity that is personally meaningful reduced burnout by half [15], and this program has encouraged and supported faculty in critical curricular or rotation development of particular interest to them. Examples have included integrated behavioral health, telepsychiatry, low threshold addictions, transplant, addiction consultation services, and psychotherapy seminars and rotations.

Working with physician recruitment is an often-overlooked area essential for strong recruitment of energetic and good fit faculty. Tips for success include relationship building with your recruitment department and specific personnel assigned to recruitment of your faculty positions. Involving and including recruitment partners in residency program strategic planning can be very helpful in enabling them to market your positions effectively and be invested in program success. Involving recruitment proactively in physician contract negotiation and salary adjustment can be helpful.

ACGME Application

Developing an ACGME application submission for accreditation of a new program is an investment of time, energy, and thought. However, there are many tools and resources available to make this process more efficient, less complicated, and more effective. Membership in American Association of Directors of Psychiatric Residency Training (AADPRT) and Association of Academic Psychiatry (AAP) can assist greatly with mentorship by experienced program directors/faculty, access to resources for the creation of the application (such as the AADPRT Virtual Training Office), and networking opportunities with other program directors and faculty who have recently undergone new application submission. These organizations are very collaborative and willing to share resources, tools, and support

to assist with the development of the program and application.

Generally, approximately 1 year is needed for preparation of the application, site visit completion, and the accreditation decision. The ACGME Psychiatry Review Committee (RC) announces the next Review Committee agenda closing and meeting dates. Of note, the application submission, scheduling of the site visit, and site visit completion must occur prior to being placed on the Review Committee agenda. Submitting the application at least 3 months prior to the agenda closing date is generally recommended. The Psychiatry RC staff members can be contacted for a recommended timeline of submission to allow for any delays in application reviews and scheduling (such as holidays). It is strongly recommended to contact them for confirmation of the application timeline so that you know when you can aim for recruitment of residents for the program.

When initiating an application for accreditation of a new program, it is essential to review the ACGME instructions. These outline information to be submitted in WebADS® that is common to all applications, such as program director and program coordinator information, rotation site details, faculty member information, and information regarding expected duty hours and overall evaluation methods of the program. There are separate PDF uploads for a variety of documents, such as policies, goals for the program, Program Letters of Agreement, evaluations, and a block diagram of rotations. Additionally, the program-specific application is required and can be downloaded from the ACGME Psychiatry RC website. Reviewing all of the necessary items for completion from the onset of application development will help to develop a strategy for completion and ensure all necessary elements are addressed.

The ACGME Psychiatry RC requirements and frequently asked questions (FAQs) on their website are an absolute MUST for a thorough, detailed review [16]. Pay close attention to the words “must” and “should” to ensure compliance with the requirements. The program director needs to ensure that all of the ACGME requirements are met within the program, demonstrated

within the application, and can be detailed during the ACGME site visit. Program faculty need to review and become familiar with the requirements for both the development of the application and the ACGME site visit.

When crafting the documents for the application, be sure to engage both an editor and a reviewer who are familiar with the ACGME requirements. Attention to detail is important, including grammar, composition, and consistency in formatting. A complete, organized, and clearly written application will make it easier for reviewers to evaluate the application materials to ensure compliance with ACGME rules and regulations. It is helpful to reach out to colleagues who have recently successfully submitted an application to get an idea of the composition of the documentation. Additionally, utilization of shared resources from other programs or organizations (such as AADPRT) is permissible—work smarter not harder!

After the application is submitted, a site visit will be scheduled. The minimum notice for site visits is approximately 30 days. All accreditation site visits for programs are performed by the accreditation field representatives who are employed by the ACGME. Biographies of the accreditation field representatives are available on the ACGME website. The site visitor is a fact finder for the application. The site visit seeks to verify and clarify the application documents in which program leadership has described the resources of the program and how the program will comply with ACGME requirements.

Preparation for the site visit is critical. A schedule for the day will be developed with identified times for interaction with the program director, program coordinator, faculty, DIO, and/or chair. Participants in the site visit must be on time and available without distraction for the time of their meeting (i.e., not fielding clinical or administrative calls). Preparing your faculty for the site visit is highly recommended. All faculty members need to have access to the submitted application and ACGME requirements. A meeting prior to the site visit is a great idea for overview of the application, highlighting ACGME requirements, review of the expectations for the

site visit, and to allow time for questions/answers. Have each of your faculty ready to speak to their role within the program and develop a tip sheet of ACGME requirements for their preparation.

There will be a detailed list of documents expected to be available for review during the site visit. These documents should be organized for easy access when requested. Also, it is recommended to have on hand any documents or policies labelled as required within the ACGME Psychiatry RC requirements.

At the conclusion of the site visit, the accreditation field representative may provide some feedback; however, they are not the accreditation decision maker. The accreditation field representative writes a site visit report that is used, in conjunction with the information in WebADS, by the Review Committee to make its decision. A few days after the RRC meeting scheduled to review your new program accreditation application, the committee sends an electronic notice indicating the accreditation status. The detailed accreditation decision will be posted in the program's ADS account 60–90 days after the meeting.

Navigating Crises Before the Program Opens

A new program director may experience a deep sigh of relief after surviving the ACGME initial site visit. However, it is advisable not to get too comfortable because there is often, if not universally, more excitement to come. Know that crises in the post initial accreditation stage and first few years are common and may occur even before the first residents start.

One program experienced complete resignation of all hospital-based psychiatrists in the time between initial accreditation and receipt of the first residency class. This led to the urgent development of an entire new parallel teaching faculty who were hired over the next year. Although stressful, and not without hiring challenges, creation of this academic faculty model in a community-based residency was incredibly successful in the long run. It enabled an intentional focus on hiring psychiatrists who had a primary

interest in teaching, provision of non-revenue-based faculty salary models, and a residency department with significant collegiality and trust. This teaching faculty model runs parallel to the RVU-based psychiatry service line, but without the responsibility for managing all psychiatric care that comes through the hospital. An emphasis on education over service has developed, creating an optimal learning environment for residents in the early years of training.

It is not uncommon for a site that provided a significant rotation presence or funding to ultimately play less of a role in the residency program once it starts. One program was developed with 4 full-time equivalent (FTE) funded residency positions at a site with rotations in geriatric, addiction, and inpatient psychiatry in the initial accreditation phase. During the first year of residents joining the program, it became evident that the psychiatrists working at that site had little interest in teaching or working with residents. Although there was a higher-level site leadership excitement about residency involvement, the foundational residency orientation work with psychiatrists working in the clinical settings had not occurred, hampering the learning environment for residents at that site. Site leadership's focus was on trying to staff the department, with less emphasis on hiring faculty who had residency education as an interest or expectation. Residency rotations at this site required significant contraction and have yet to reach the resident FTE rotation funding or involvement initially planned. Getting institutional support for development of alternative rotations and weathering these funding fluctuations and crises ahead of time are an important part of residency development.

Program Director Characteristics Important for New Program Survival and Success!

In a new program, it is vital that the program director seek support on the accreditation journey and during the four-year residency training cycle through to graduation of the first class. Support

and mentorship start at the home institution and expand from there. Identification of local GME or other specialty program faculty mentors is an important first step as those people have first-hand knowledge and experience in the sponsoring institution's training environment. This first mentor could be a seasoned program director from another program, the GME director, associate GME director, chair, or DIO.

Membership and participation in national psychiatry residency and psychiatric education organizations are critical. One of the most important of these is AADPRT. Membership in this organization will enable you to join the Listserv, where many current issues of the day are discussed and resources are shared freely. Membership includes access to the Virtual Training Office, an extensive collection of curricular and program administration tools that are critical in developing those first pieces of the program by making wise use of creative ideas and tools from programs across the country.

We suggest referencing not only this chapter but the quick how-to for developing residency programs created by the AADPRT task force on workforce development in 2020 [17].

The AAP Master Educator Program is an excellent resource for development as an educator, including skills in building a residency curriculum. This program is highly popular and takes 3 years to complete on a rotating cycle. The aim is to develop advanced teaching skills and expertise in educational theory and educational scholarship, necessary components for both faculty and the program director.

The journal *Academic Psychiatry* is a valuable source of new ideas as you develop your program and concrete resources, especially through educational case reports and down-to-earth columns. All authors writing this chapter have used this journal to develop new curricula, rotations, faculty development sessions, and more.

Development of program leadership skills, as a new program director, is critical. We recommend using a variety of internal and external leadership development resources and programs including those within your institution, AADPRT, AAP, your state psychiatric association, state

Table 2.7 Leadership resources

| Books | Podcasts | Websites |
|---|---|---|
| <p><i>Crucial Conversations: Tools for Talking When Stakes Are High</i> by Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler</p> <p><i>Crucial Accountability: Tools for Resolving Violated Expectations, Broken Commitments, and Bad Behavior</i> by Kerry Patterson, Joseph Grenny, Ron McMillan, Al Switzler, and David Maxfield</p> | <p><i>How's Work?</i> by Esther Perel https://howswork.estherperel.com/</p> | <p>AADPRT https://www.aadprt.org/ https://www.aadprt.org/training-directors/td-listserv https://www.aadprt.org/training-directors/virtual-training-office https://www.aadprt.org/training-directors/mentorship-program https://www.aadprt.org/training-directors/newexpanding-residency-program-guide</p> |
| <p><i>Leaders Eat Last: Why Some Teams Pull Together and Others Don't</i> by Simon Sinek</p> | <p><i>Work Life</i> by Adam Grant https://www.adamgrant.net/podcast/</p> | <p>AAP https://www.academicpsychiatry.org/ https://www.academicpsychiatry.org/master-educator/</p> |
| <p><i>No Ego: How Leaders Can Cut the Cost of Workplace Drama, End Entitlement, and Drive Big Results</i> by Cy Wakeman</p> | <p><i>Dare to Lead</i> by Brene Brown https://brenebrown.com/podcast-show/dare-to-lead/</p> | <p>http://www.ihl.org/</p> |
| <p><i>The Speed of Trust: The One Thing That Changes Everything</i> by Stephen M.R. Covey</p> | <p><i>Leadership and Loyalty</i> by Dob Baron https://www.dovbaron.com/</p> | <p>Harvard Business Review Hbr.org</p> |

medical association, the American Association for Physician Leadership, and the American Psychiatric Association (APA). AADPRT and AAP also provide individual mentors who are experienced program directors and education leaders.

If the program director was trained during a time when education and experience in quality improvement and patient safety (QIPS) were not required during residency, they may benefit from taking some online or in-person courses through the Institute for Healthcare Improvement (IHI). In a community residency program, the program director and/or associate program directors often need to be QIPS champions in driving cultural change in residents, faculty, and staff. For more information regarding IHI courses and QIPS training, see Chap. 25.

Lastly, a director of a new program, or new program director, can acquire leadership skills through a range of dynamic resources that include books, audiobooks, and podcasts. Table 2.7 lists resources helpful to the authors of this chapter.

There are a multitude of leadership podcasts that are readily available.

Faculty Development

Faculty development is an integral part of skill building for the faculty team. These sessions are strategic to not only meet ACGME requirements but also serve as key activities to help enhance the clinical and educational knowledge of your faculty. Creating infrastructure and space for faculty development early on is a critical step in the formation of the team. Programs in their nascency need a foundation by which to nurture robust relationships among the faculty and with the program director and associate program director—trust is everything!

It is very helpful for new programs to understand the ACGME annual faculty survey areas and new program application questions and proactively address this content within their faculty development program. This ensures that the pro-

gram meets regulatory requirements and builds faculty expertise. Below are several key faculty development sessions that are critical for building a strong team:

- How to give and receive feedback
- Administering clinical skills verification/clinical skills examination
- Milestones evaluations
- How to manage a struggling learner/corrective action processes
- Adult learning theory
- Curriculum development
- Patient safety and quality improvement
- Supervisory model
- Faculty well-being
- Implicit bias/responding to microaggressions

It is very possible that a new program may have eager faculty who are ready to teach but who have not yet developed a strong competency as an educator. Understanding individual faculty members' strengths and areas for opportunity with a needs assessment will help determine topics to emphasize. Many faculty members have had limited to no training as educators in residency or as an attending, so faculty development sessions are crucial. For a detailed discussion of developing a faculty development program, please see Chap. 23.

It is also important to note that the time before residents come will be a great opportunity for faculty to grow as a unit. Looking at the team development principles [18], including initial forming and storming periods, will allow the team to develop a common set of expectations and purpose. Allowing faculty time and space to understand and work through this process prior to residents coming will help the program iron out any major kinks before go-time.

Another important item to consider is who takes ownership of the faculty development program. While the residency program director should always have oversight of the content being delivered, empowering other faculty members to lead or co-lead development sessions will be of great utility. It not only eases the burden upon the

program director, but it also helps to empower and create shared leadership among the different team members. During that forming and storming phase of team development, you may find that a shared leadership approach will help keep faculty members engaged and maintain initial eagerness. Consider balancing content-focused faculty development to improve faculty medical knowledge, with skill development sessions critical to the role of a faculty member (e.g., how to provide feedback, how to teach on a busy clinical service, curriculum development best practices).

Pay close attention to what other residency programs or departments are doing at the local institution as there may be opportunities for collaboration or utilization of existing sessions and materials for the new residency team. Several institutions have put significant effort into creating educational sessions about topics such as zero suicide and diversity, equity, and inclusion (DEI). Partnering with the developers of these sessions would be a great way to tap into existing threads of knowledge. Do not be timid about reaching out to other programs for what has worked well for them. AADPRT and AAP offer great platforms to share resources and the opportunity to collaborate with others on faculty development sessions between institutions. Program websites may be another useful place to find resources and free access to institutional grand rounds, seminars, and other educational sessions.

Faculty development in scholarly activity is a common area of weakness in a new program, especially those not sponsored by a large academic medical center with rich research resources. It is very important to review ACGME program, faculty, and resident scholarship expectations prior to starting a new program, as foundational work will need to take place to set the stage for success in this area.

Programmatic scholarly activities should align with institutional and program missions. For example, if a new program wants to focus on the development of clinicians and educators and is remote from a major academic medical center, types of scholarly activity might include quality

improvement and patient safety initiatives or creation of curricula, evaluation tools, or electronic educational materials, rather than research or peer-reviewed publications or grants. However, a successful scholarship in these areas will require faculty development in QIPS and in models of curriculum development such as Kerns' six-step model [19]. Providing this foundation for even a few faculty champions can lead to a broader dissemination of this knowledge, attitude, and skill set as they start to mentor residents and demonstrate that scholarly work is "doable."

Adequate financial resources and faculty protected time need to be dedicated to scholarly activity. Faculty, as resident mentors in a new program, may themselves be lacking in knowledge and skills in this area, so development work needs to occur before residents are first received in the program. This includes a basic needs assessment to determine what areas of expertise exist in the faculty and what significant barriers need to be overcome.

Dissemination of scholarly work needs to occur, and faculty must be educated about ways in which to do this. Regularly reviewing ACGME Common Program Requirements in the area of scholarship is recommended, as these have changed considerably over the past 10 years and allow for a much greater program flexibility in achieving competence in this area.

Example

One new community program had no expertise in scholarly activity and recognized that most faculty joining the program had little interest in scholarly activities such as research and peer-reviewed publications. The needs assessment identified that the program had two faculty members motivated to drive this area forward and a couple more with publication experience. Faculty development early on in residency development focused on basic needs; an initial focus on quality improvement and patient safety education and initiatives was chosen, with those faculty members most

enthusiastic and driven to improve scholarly work, first beginning to develop posters and workshops at regional and then national conferences. Mentorship was sought from program director peers, with experience in scholarly work. As confidence grew, the senior faculty mentored other junior faculty and then branched out into other areas such as national professional and educational committee work, editorial boards, and even chapters in medical textbooks! This program went from a position of receiving two citations in scholarly activity in the first year of the program to receiving commendations in meeting ACGME requirements in this area several years in a row. Starting with a few champions led to a full faculty and resident program participation in ACGME-defined scholarly activities within just 4 years.

When it comes to building a residency program, recognize that it is first and foremost important to educate the educators. Creating a platform that empowers learning will only help to shape the future learning and growth that you do with residents and other learners. There is no need to re-invent the wheel; be resourceful and work as a team!

Curriculum Development

Curriculum planning can be one of the most daunting portions of starting a new residency program. New residency programs have to meet multiple requirements, including ACGME Psychiatry Residency requirements, ACGME Core Program requirements, and preparation for American Board of Psychiatry and Neurology Board certification among others. Aligning the curriculum to the residency's learning objectives is critical but often poses several practical problems including identifying curricular content resources or experts that may not be available at the sponsoring institution.

Residency curriculum development is discussed in detail in Chap. 11. In the development of a curriculum for a new program, it is tempting to piece together the puzzle as you progress which risks losing sight of the overall program objectives. The first step of any well-thought-out curriculum is to understand what content needs to be covered. A needs assessment is imperative and must include consideration of ACGME accreditation requirements. There are several noteworthy resources that will aid a program in success. As noted above, the AADPRT Virtual Training Office has a plethora of shared resources for programs. AAP materials from workshops and shared curricula also provide a valuable resource for any new program getting started. It is also a great idea to check out APA and ACGME for resources they may post on their websites. The Association for American Medical Education (AAMC) MedEdPortal®, Education Resources Information Center (ERIC) Database, National Neuroscience Curriculum Initiative (NNCI), and Severe Mental Illness (SMI) Adviser are resources commonly used in both new academic programs and community programs searching for expert content. Online educational content is a wonderful way to diversify teaching options and provide flexible learning environments for residents who are on rotation at remote sites or working from home.

Hiring faculty with different areas of expertise is an important way to diversify content over time in a new program. Know that you will have content deficits, and these require transparent identification through ACGME survey results, milestone performance of the initial resident cohort, and discussions in the Clinical Competency and Program Evaluation committees. Content area deficits can be addressed by asking faculty in other regional programs who have expertise in these areas to teach either in person or remotely, by collaborating with other programs to co-teach didactics and by using national curricular resources. Reaching out to existing regional programs can be very helpful in aligning seminar teaching at times that are mutually convenient and can occur on digital platforms. Regional academic programs may have

faculty who may be motivated to teach at a new program as a way to enhance academic promotion application.

Milestone attainment and progression are important structural considerations for setting up one's curriculum [20, 21]. It is important to be thinking from a wide-angle lens about how the program is evaluating and helping residents progress along in their training and how the curriculum teaches milestones. Some paradigms to consider include looped curricula and layered learning. Looped curricula are designed so that learners are exposed to the same material two or more times in order to enhance effectiveness and skills acquisition. Layered learning involves having senior residents teaching junior residents in a model that allows junior residents to learn knowledge and skills while enhancing senior residents' development of teaching skills. A by-product of both looped and layered learning is cross residency year relationship building.

Before creating materials for the curriculum, spend time creating goals and objectives for each portion. This will allow for a structured evaluation process while making sure each portion aligns with the vision and requirements of the program. A varied pedagogy should be utilized, prioritizing adult learning theory, learner engagement, and room for discussion. Varied methodologies can help achieve this including polls, utilization of video clips, case examples, role playing, flipped classroom, and peer learning. It is important to put the learner in the center of education and have them actively engaged in the process.

A significant pitfall to be wary of with curriculum development is that inevitably things will go differently than expected. Whether there is faculty attrition, change in requirements or needs, changing learning styles, or a worldwide pandemic that requires an entire virtual learning shift almost overnight, it will be important for program leadership to keep a pulse on the curriculum at large. Be ready to be nimble to address gaps and changes in the existing curriculum. A great example is efforts related to diversity, equity, and inclusion (DEI). A lot of programs and institutions did not have DEI curricula or

these topics were relegated to small portions of didactic sessions. Thinking of how to adapt and continually evolve the existing curriculum to fit the program's needs is a skill set of a visionary leader.

Curriculum evaluation and ongoing improvement are underrated and underutilized parts of the process. Evaluation should span the entire process and is a cyclical and iterative process. Ensure that your program has methods for both formative evaluation (assessing opportunities for growth such as resident engagement during a didactic) and summative evaluation (assessing outcomes from the curriculum such as board certification rates). Make sure to include all partners in curriculum evaluation as you will need buy-in from all in order to push the vision and mission of the curriculum forward.

Marketing Your Program and Initial Residency Recruitment

Resident recruitment is discussed in detail in Chap. 6. Here, we focus on marketing and recruitment issues for new programs or tracks.

Marketing a new program in an intentional way and with a clear strategy is a challenge. Being a new program does not need to mean getting the lowest caliber residency candidates; rather, there can be an opportunity to recruit residents who are trailblazers, interested in helping to shape and develop the program with their voice and efforts. Tapping into this energy by framing this as an opportunity can lead to the recruitment of quality residents who are actively engaged, motivated, and committed to the success of their program. Recruiting residents to a new program has some additional advantages over recruiting to some established programs. New programs do not have the challenges of a history of citations, unsubstantiated negative online reviews, or disgruntled residents. A new residency training program typically has energy and enthusiasm. The organization and community highly value psychiatry as demonstrated by the development of the psychiatry residency training program.

The time and effort spent recruiting new residents also will have a significant impact on the caliber of residents the program matches. High caliber residents, in turn, will have a significant impact on faculty recruitment and retention and on staff, organization, and community satisfaction. Recruiting high caliber residents will have the future benefit of likely recruiting more high caliber residents. Medical students routinely use the quality and morale of the residents as a gauge of the quality of the residency program.

Initiating resident recruitment should begin as soon as possible. It is advisable to start formal recruitment as soon as the program gains initial accreditation to inform medical school applicants of the program's existence. Recruitment expenses should be built into the budget for developing the residency training program. The newly appointed program director should be prepared to present, meet, and travel routinely as part of their position. The program director will be influential in the recruitment process.

One of the most common ways to recruit residents is to host medical student rotations [22]. Medical student rotations can begin prior to initial accreditation of the program, so this can be a starting foundation before official recruitment begins. It is strongly recommended to develop a relationship with one or several medical schools to provide core psychiatry rotations. Medical schools may be open to developing a formal affiliation and/or financial arrangement if you participate as a core psychiatry rotation site. The development of a core rotation can be a tremendous benefit to recruitment into the residency training program. It is recommended that the arrangement to become a core rotation site does not exclude offering elective rotations to additional external medical students. It is advised to host medical students as broadly as possible with a focus on regional medical students.

Attempts should be made to be flexible with medical student rotations. Consideration should be given to providing specialty experiences of interest to the medical student candidate. It is extremely important to allow students access to faculty who are passionate about education.

Inspiring faculty members who teach with passion will be a tremendous recruitment resource. Attempts should be made to highlight the unique, innovative, or specialty areas within the program, department, and organization.

Website design, recruitment fairs, social media, regional outreach, and utilizing existing recruitment resources within your institution are also essential in spreading the word about your new program. Being mindful of the mission and vision of your program, you can market your program accordingly to match with the best “fit” of residents for the program.

Residency website design elements to consider include content, aesthetics, and ease of navigation [23]. Consider content to include items listed below.

Residency Website Design Elements

| |
|--|
| Program mission and goals |
| Welcome from the program director (and chair, as applicable) |
| History of the development of the program |
| Unique program features |
| City/location information |
| Faculty biographies |
| Resident biographies and “day in the life” |
| Curriculum including elective opportunities |
| Clinical sites |
| Rotation schedule |
| Well-being resources |
| Diversity, equity, and inclusion |
| Salary and benefits |
| Application process |
| Medical student rotation application process |
| Contact information |
| Links to social media accounts |

The aesthetic of the website is also important. A uniform feel and look to the website are necessary to sustain visual interest. Videos (short in duration, quality video recording) and pictures help to evoke a “feel” of the program that written material may not effectively communicate. Also consider how the website translates to both computer and mobile device viewing since many applicants will utilize both avenues to reach your residency website. Navigation of the site should be clear and easy

to follow. Make sure links and videos are functional, and consider adding a search tool for ease of convenience for applicants.

Recruitment fairs are a great means to market your new program. Contact PsychSIGN@ (Psychiatry Student Interest Group Network) leadership to inquire about participation in national and regional fairs. The Student National Medical Association (SNMA) is also an important resource for recruitment of underrepresented minorities to residency programs. AADPRT recruitment fair participation can enable you to join programs from the same geographical region, thereby improving the likelihood that those students attending have a real interest in applying to your new program. In the era of virtual recruitment, participation in regional recruitment fairs that allow medical student access to a range of programs they may have an interest in is a wise idea.

Contacting medical schools in the state and nearby to determine if there are any recruitment fairs or opportunities to meet with psychiatry student interest groups within their schools can be an effective way to reach out to your region. Create a one-page flyer about your program that can be emailed to deans of medical schools in your region with a request for distribution. A concurrent offer of providing a lecture or meeting with the medical student interest group to discuss the potential for psychiatry clerkship and elective opportunities with your faculty and future residents may also be helpful.

Social media is being more and more commonly used by programs for recruitment. Consider the use of platforms such as Instagram, Twitter, LinkedIn, and Doximity to market your program. It will be essential to have the right residency personnel leading social media initiatives to create engaging and frequent posts while adhering to all institutional guidelines for marketing on social media. You can also consider blogging on frequented medical student websites (e.g., Student Doctor Network, Reddit, Doximity) for a creative means of promoting your program.

Successful residency training programs participate in the Electronic Residency Application Service (ERAS), National Residency Matching

Program (NRMP), and Fellowship and Residency Electronic Interactive Database (FREIDA). These programs allow medical students to view and apply to the available psychiatry residency training programs. These organizations are essential for successful recruitment of high caliber residents. It is important to be aware of the deadlines for these programs, such as deadlines for registering for ERAS and the NRMP for the recruitment year and the rank order list deadline for the Match.

Residency recruitment interviews vary considerably from program to program; however, there are some common elements. The prospective candidate should be given an orientation about the general mission, history, and structure of the organization and the program. The resident candidate should have the opportunity to meet program leadership and residents. Candidates typically value meeting with the chief resident. For the initial recruitment interviews when there are not yet residents in the program, you will need to be creative in your approach for the interview days. Be mindful to ensure ample time to interact with faculty to demonstrate their commitment and investment in the program and residency education. Your DIO may also be able to provide time for interaction from an institutional lens of supporting the residency program. If there are residents in other programs within your institution, consider asking for their time to engage with applicants during interview day or an informal dinner or virtual meet and greet the night before the interview day. If the interviews are in person and will run throughout the day, it is a nice gesture to make breakfast, lunch, and/or dinner available to the candidate. Most programs do not pay for travel and hotel costs, so marketing your new program as being able to support this significant recruitment expense can be successful in encouraging applicants to interview at a site they may initially pass over. There are specific resident candidate interview rules and regulations set forth by the NRMP. These policies are outlined in the Match Code of Conduct policy on the NRMP website [24]. The Match Code of Conduct outlines the rules and regulations that must be followed to maintain integrity of the Match process. The interview process should be

well planned, coordinated, organized, and practiced. This is the program's best opportunity to demonstrate its strengths and opportunities available for candidates. Residents commonly evaluate programs based on the quality of the interview experience.

Finally, tap into your organization's recruitment/human resources department for their expertise and guidance. The recruitment department may need education about how recruitment of residents, including the Match process, differs from routine recruitment of physicians for clinical work. However, they can likely assist in providing ideas for outreach, creating visually appealing marketing materials, and helping with residency "swag" that can be distributed at recruitment fairs or used during interview days (such as logoed mugs/pens/water bottles, etc.). Of note, an important consideration is to be aware of any local/state laws or ethical guidelines around giving applicants gifts. The recruitment department may also be helpful in connecting you with the institution's marketing department and local media outlets to disseminate journalistic articles about your new program, increasing your visibility to a wider audience. In this way, when applicants research your program on the web, they will see how the local community has responded to and welcomed the initiation of a new residency training program.

Summary

In summary, new program development has been on the rise over the past 5 years, and we hope to have provided a set of practical tips and resources that can help in the successful creation of future programs and tracks and supporting existing new programs. Performing an initial needs assessment is critical to creation of a rationale for new program development. Determining the best funding model available in your region is important for long-term success.

You want a residency program that can withstand the rigors of time. Having the forethought to think about wise creation of a "cap" will be critical in enabling both future residency expansion and fellowship development. Location and

institutional sponsor's mission and values guide what direction your program should take and what your specific mission and goals should focus on. Collaboration both within your organization and with community partners is vital for success. A well-organized and well-funded faculty model is necessary, with different models described in this chapter.

Preparing the ACGME application for initial accreditation takes time, and you will want to connect with national and regional program directors who have recently had success in accreditation. Connecting with AADPRT workforce task force members can help you in your search for a mentor. Even when through the initial accreditation process, expect change, and be flexible in adapting to crises. A successful program director is resilient and uses the multitude of resources available to them. Faculty development is necessary in any new program, whether academic or community based, with those resources potentially available within your institution and through AADPRT and AAP. Curriculum development takes considerable time and depending on the location or size of your program may require innovative approaches such as looped curricular models, utilization of online teaching resources, and collaboration with other local programs.

Marketing your program at the outset requires a strategic plan. Pivoting toward the millennial and post-millennial audience is critical for success. Initial residency recruitment sets the stage for future recruitment, so spending time, energy, and money in those first recruitment years is wise. Being aware of the necessary steps in the recruitment cycle is important, and having a skilled program coordinator and good senior GME leadership will help you set your program up for success.

References

1. Accreditation Council for Graduate Medical Education. Number of Accredited Programs by Academic Year. 2021. <https://apps.acgme.org/ads/Public>
2. Weissman S. Selected match results (email communication 3/19/21).
3. Moran M. Psychiatry residency match numbers climb again after unprecedented year in medical education. *Psychiatr News*. 2021;56(5):583–92. <https://doi.org/10.1176/appi.pn.2021.5.27>.
4. Cowley DS, et al. Educating psychiatry residents to practice in smaller communities: a regional residency track model. *Acad Psychiatry*. 2016;40(5):846–9. <https://doi.org/10.1007/s40596-016-0558-3>.
5. Congressional research service. Federal support for graduate medical education: an overview. 2018.
6. Committee on the Governance and Financing of Graduate Medical Education, Board on Health Care Services; Institute of Medicine. In: Eden J, Berwick D, Wilensky G, editors. *Graduate medical education that meets the nation's health needs*. 1st ed. National Academies Press; 2014.
7. Association of American Medical Colleges. Medicare payments for graduate medical education: what every medical student, resident, and advisor needs to know. 2019.
8. Accreditation Council for Graduate Medical Education. ACGME common program requirements (residency). common program requirements. 2021. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency_2022.pdf
9. Accreditation Council for Graduate Medical Education. Mission, vision, and values. 2021. <https://www.acgme.org/About-Us/Overview/Mission-Vision-and-Values/>
10. Association of American Medical Colleges. Table C6: physician retention in state of residency training, by state. 2018. <https://www.aamc.org/data-reports/students-residents/interactive-data/table-c6-physician-retention-state-residency-training-state>
11. Pheister M, Cowley D, Sanders W, Keeble T, Lu F, Pershern L, Wolf K, Walaszek A, Aggarwal R. Growing the psychiatry workforce through expansion or creation of residencies and fellowships: the results of a survey by the AADPRT Workforce Task Force. *Acad Psychiatry*. 2021; <https://doi.org/10.1007/s40596-021-01509-9>.
12. Keeble T, Sanders W, Cowley D. Struggling with faculty recruitment and retention? Let us help you! Workshop presented at American Association of Directors of Psychiatry Residency Training. Virtual Workshop. 2021.
13. de Golia SG, Cagande CC, Ahn MS, Cullins LM, Walaszek A, Cowley DS. Faculty development for teaching faculty in psychiatry: where we are and what we need. *Acad Psychiatry*. 2018;43(2):184–90. <https://doi.org/10.1007/s40596-018-0916-4>.
14. Lord JA, Mourtzanos E, McLaren K, Murray SB, Kimmel RJ, Cowley DS. A peer mentoring group for junior clinician educators: four years' experience. *Acad Med*. 2012;87(3):378–83.
15. Shanafelt TD, et al. Career fit and burnout among academic faculty. *Arch Intern Med*. 2009;169(10):990–5.

16. Accreditation Council for Graduate Medical Education. Program requirements for graduate medical education in psychiatry. 2021. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/400_Psychiatry_2021.pdf?ver=2021-06-15-161510-003
17. American Association for Directors of Psychiatry Residency Training. Creation of a new program or track or expansion of a program: resource guide. AADPRT Workforce Taskforce. 2020. <https://www.aadprt.org/training-directors/newexpanding-residency-program-guide>
18. The culture code: the secrets of highly successful groups. Daniel coyle.
19. Kern DE, Thomas PA, Hughes MT, editors. Curriculum development for medical education: a six-step approach. 2nd ed. JHU Press; 2016.
20. ACGME milestones 2.0 <https://www.acgme.org/globalassets/PDFs/Milestones/PsychiatryMilestones2.0.pdf?ver=2020-03-10-152105-537&ver=2020-03-10-152105-537>
21. Supplemental guide psychiatry milestones 2020: <https://www.acgme.org/globalassets/PDFs/Milestones/PsychiatrySupplementalGuide.pdf?ver=2020-03-10-161139-047&ver=2020-03-10-161139-047>
22. Barajaz M, Turner T. Starting a new residency program: a step-by-step guide for institutions, hospitals, and program directors. *Med Educ Online*. 2016;21(1):32271. <https://doi.org/10.3402/meo.v21.32271>.
23. Chen VW, Hoang D, Garner W. Do websites provide what applicants need? Plastic surgery residency program websites versus applicant self-reported needs. *Plast Reconstr Surg Glob Open*. 2018;6(10):e1900. <https://doi.org/10.1097/GOX.0000000000001900>. PMID: 30534485; PMCID: PMC6250462.
24. National Residency Matching Program. Code of conduct. 2021. <https://www.nrmp.org/communication-code-of-conduct/>



Understanding and Meeting Program Accreditation Requirements

3

Robert J. Boland and Suzanne J. Sampang

Accreditation is the process by which an independent organization assesses a program to ensure that it meets the standards for competence expected of a graduate medical education program. In the United States, all graduate medical education programs – residencies and fellowships – and the institutions that sponsor them are overseen by the Accreditation Council for Graduate Medical Education (ACGME). The ACGME is a private non-profit organization. Established in 1981, it represented a reorganization of the Liaison Committee on Graduate Medical Education. This committee was formed in 1972 by a consortium of medical organizations (including the American Medical Association, the American Board of Medical Specialties, and several medical societies). The impetus was a consensus that there was a need

for a uniform oversight system for medical training [1, 2].

The stated mission of the ACGME is “to improve health care and population health by assessing and enhancing the quality of resident and fellow physicians’ education through advancements in accreditation and education.” Essentially, the ACGME accredits programs. However, it does not oversee the training of individuals – for most specialties, that is the purview of their specialty board. For psychiatry, the role falls to the American Board of Psychiatry and Neurology (ABPN), established earlier (1934) than the ACGME [3]. Although the two organizations have related functions and collaborate at times, their focus is different. Thus, whether an individual has met the standards for board certification in psychiatry is the purview of the ABPN. In contrast, the ACGME limits its focus on whether a residency program meets training standards.

The ACGME publishes the requirements for residency certification, and the requirements for psychiatry and its subspecialties are currently available at <https://www.acgme.org/Specialties/Overview/pfccatid/21/>. The specialty requirements consist of Common Program Requirements, which are universal to all residencies regardless of specialty, and specialty-specific requirements, which are unique to a given specialty. Examples of specialty-specific requirements include the unique curriculum, including clinical rotations and didactics essential to learning a specialty.

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The more general requirements, such as the role of the faculty, the resident appointment process, the evaluation process, and details of the learning and work environment, including duty hour requirements, are part of the Common Program Requirements. The ACGME has, over time, broadened the standard requirements to bring more consistency across specialties so that specialty-specific requirements are limited to only those truly unique and necessary for that specialty. The most recent version of the Common Program Requirements was implemented in 2022; the prior revisions were in 2003, 2011, and 2020. The main revisions were in the areas of resident wellness, patient safety, and minimum dedicated time for program leadership. The attention to well-being is an attempt to address burnout issues among residents and faculty. This change reflects the increasing awareness of the need for wellness curricula in residency programs [4]. All requirements are reviewed regularly and updated as needed. Any change will be published ahead of implementation with an opportunity for public comment.

In addition to program requirements, the ACGME also publishes institutional requirements. These requirements pertain to the sponsoring institutions, which house and support graduate medical education programs. These are often hospitals or universities.

In practice, the accreditation process is conducted by a peer-review process of the various review committees (RCs). Each medical specialty has a designated review committee of volunteer physicians, a resident member, and a public member that oversees the specialty and associated subspecialties. These committees perform a yearly review of each residency program. To do this, they review the required data and materials that each program submits and determine whether they meet the accreditation standards. Ultimately, the RC confers an accreditation status: continued accreditation, continued accreditation with warning, probation, or withdrawal of accreditation.

Residency Administrative Structure

The ACGME requires certain entities and administrative structures at an institutional and residency level.

Institutional Structure

There must be a Designated Institutional Official (DIO) at the institutional level. The DIO directs all graduate medical education at their institution and oversees and administers all of the institution's residency and fellowship programs. This organizational approach is significant as it removes the ultimate authority for education at an institution from the department level to an institutional one. Thus, although a departmental chair and program director have a vested interest in maintaining a quality residency, it is the ultimate responsibility of the institution to support and oversee the program. The DIO also runs the Graduate Medical Educational Committee (GMEC), another ACGME-stipulated entity. This group generally consists of representative program directors who conduct internal reviews and review resident complement changes. They also organize the response to all ACGME institutional reviews, including the Clinical Learning Environment Review (CLER) and the annual institutional review.

The DIO is also responsible for providing necessary resources to the programs. This assistance varies by institution but may include faculty development, hospital credentialing, funding residency meals during call, and centralizing mental health resources for trainees. The DIO also serves as additional support for residents. For example, a resident concerned with their training may not feel comfortable discussing this with department leadership; instead, they can speak with the DIO. In some cases, a DIO may initiate an internal review to investigate complaints, mainly when there are multiple or consistent complaints. When a complaint comes directly to ACGME, it is the DIO's responsibility to respond to the

ACGME, demonstrating a thorough investigation of the complaint. This is done in concert with the program director.

Residency Administration

At the residency program level, the ACGME mandates several positions and structures. The most crucial, of course, is the program director. There may be associate directors as well. However, the ACGME recognizes only one program director, and the position cannot be shared. The ACGME RC reviews and approves all program directors, ensuring sufficient experience and time to lead a residency program successfully. The ACGME stipulates that the institution must provide a minimum amount of salary support for non-clinical time to administrate the program. The exact amounts and wording are listed in the program director section of the program requirements. This number increases depending on the size of the program. This minimum time requirement may be used by the program director only or divided between the program director and one or more associate (or assistant) program directors. The ACGME also lists the specific responsibilities of the program director. For example, the program director must have complete responsibility and authority to decide who should teach and supervise residents among their faculty. Thus, the ACGME gives the program director the authority to approve and remove faculty from the residency.

Equally essential is a program coordinator, who assists the program director in administering the residency. The ACGME also lists the minimum coordinator support required. The exact time requirements and position responsibilities are listed in the program coordinator section of the program requirements. The minimum full-time equivalent for the coordinator specified in the requirements should be devoted entirely to administrative responsibilities for the accredited program. The program should not assign any additional

duties including, but not limited to, supporting non-accredited programs or other departmental administrative responsibilities during this allotted minimal time. Programs are encouraged to allocate time between ACGME-required program administration and other duties required by the institution so that these individuals are not overburdened.

Faculty

The ACGME requires sufficient faculty for a program and lists standards for qualification. They differentiate between core faculty who have a significant role in resident education and supervision and the remaining faculty in the program who might be less involved in education. For example, the faculty member who coordinates the psychotherapy didactic curriculum would be considered core faculty. On the other hand, a faculty member who solely provides clinical supervision to a resident would not be considered core faculty. The decision about what constitutes a “significant role” is left to the program director.

Example: A faculty member is not employed by the university and has a volunteer faculty status. Initially, they did some supervision but did not have a significant role. However, they have become more involved over the past year and are now supervising several residents and running a resident process group. Although the training director frequently used this faculty member as an “unofficial” advisor, they invited the person to join the Program Evaluation Committee more recently. That said, the program director is unsure whether the faculty member spends enough hours to justify being core faculty as they also have a private practice and spend significant time in that non-residency role.

Our advice: The program director should decide whether this faculty member devotes a significant portion of their effort to resident education and administration. This effort should include non-clinical activities related to resident education and program administration. Examples of these non-clinical activities could include interviewing and selecting applicants, providing didactic instruction, mentoring trainees, simulation exercises, completing the annual ACGME faculty survey, and

participating on the program's committees. If the faculty member now functions in this vital role in the program, then they should be considered "core faculty."

Residents

The ACGME sets out the standards and criteria for residents and their responsibilities, including the requirements for domestic and international medical school graduates. In addition, the ACGME approves the number of residents a program can train, known as the resident complement, and must authorize any changes to this number.

Curriculum and Scholarly Requirements

The ACGME sets the standards and requirements for the educational experience in a specialty. These competencies include the knowledge areas to be covered and the required clinical experiences. Among these requirements is the scholarly activity for both faculty and the residents. Although some programs find this a challenge, the ACGME defines scholarly activity broadly, with the goal being more research literacy than independent investigation or productivity. Therefore, residency programs should have ample faculty with scholarly activity to create a learning environment conducive to promoting and mentoring a resident's participation in scholarship.

Committees

The ACGME describes six core competencies universal to all specialties and required for a physician to enter independent practice. These competencies are professionalism, patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, and systems-based practice. In addition, each specialty has identified milestones to achieve the graduation target goal in each area. A residency program must have a Clinical Competency Committee

(CCC), appointed by the program director and composed of faculty members, at least one of whom is core faculty. This committee's responsibility is to review each resident's evaluations at least semi-annually and determine their progress on each milestone sub-competency. The committee then advises the program director whether the resident is on track or not progressing as expected.

A residency program must also have a Program Evaluation Committee (PEC), comprising faculty members, with at least one core faculty member and at least one resident. The PEC helps conduct the Annual Program Evaluation and then submits it to the DIO and distributes it to faculty and residents. In addition, the PEC advises the program director on program oversight. Most importantly, this committee should help the program director identify program strengths, challenges, opportunities, and threats to help determine the areas in need of improvement. Finally, the PEC should identify and utilize metrics to evaluate the effectiveness of their educational program, as enumerated in the program requirements.

Milestones

The ACGME created the milestones as part of their next step toward outcomes-based accreditation. They are based on the six core competencies and focus on educational outcomes rather than processes as measures of success [5, 6]. The first wave of milestones development was in 2009; psychiatry was part of the second wave, beginning in 2011 [7]. The development group was composed of leaders from the American Board of Psychiatry and Neurology (ABPN), the American Association of Directors of Psychiatric Residency Training (AADPRT), the ACGME, and the American Psychiatric Association (APA). After several pilots, the ACGME implemented the milestones in 2014.

The key to the milestones is that the outcomes are specific behaviors, attributes, or other measures. The result was a document that presented the six competencies, with several subcompetencies

for each domain, divided into five stages of progression ranging from a beginning resident level of performance to that of an exceptional resident who is working at a level beyond that expected of a graduating resident. That final level is aspirational, level 5. Level 4 defines the usual graduation targets in each competency. The milestones are a framework for assessing resident development over time. The levels of milestones do not correspond to the post-graduate year of education. The ACGME stresses that program directors should not use the milestones to define residency requirements or as the sole basis of decisions about competency and graduation eligibility.

The milestones, as well as resources to help implement them, are available on the ACGME website: <https://www.acgme.org/Specialties/Milestones/pfcatid/21/Psychiatry/>.

The ACGME intended the milestones as formative evaluations. Rather than assigning achievement grades, the milestones attempt to map the path of resident development in the various competencies and then determine where on that path the resident currently is. Based on the information provided by the CCC, the program director should provide feedback to each resident semi-annually on their progress in training. When utilized as intended, a discussion of a resident's milestone achievement should spark a constructive conversation between the program director and the resident about what competency areas deserve particular focus in the coming months. We can assume that residents will progress at different rates and that different programs may teach different competencies at different times in the residency.

Recently, the ACGME developed the next iteration of the milestones, dubbed milestones 2.0. The psychiatry workgroup used feedback from various stakeholders to revise the milestones, and implemented them in July 2021. Much of the changes represent useful streamlining and clarification [8]. One notable change was the addition of the well-being subcompetency [9]. The concern was that much of the program requirements and milestone subcompetencies relevant to wellness in the previous iteration placed much of the responsibility for well-being on the resident and neglected systemic and cul-

tural issues. The workgroup revised this to reflect both an individual and an organization's shared responsibility toward fostering wellness.

Combined Programs

There are several residency programs within psychiatry that represent collaborations between different disciplines. These include Psychiatry–Internal Medicine, Psychiatry–Family Medicine, Pediatrics–Psychiatry/Child and Adolescent Psychiatry (“triple board”), Psychiatry–Neurology, Neurology–Internal Medicine, and Post Pediatric Portal Program. The ACGME does not oversee these multispecialty programs. Instead, the American Board of Psychiatry and Neurology (ABPN) oversees the accreditation of these programs. This article is concerned with ACGME accreditation and does not discuss the combined certification process. However, in practice, this article is still relevant as the ABPN generally follows the requirements of each RC (i.e., both Psychiatry and Internal Medicine in the case of the Psychiatry–Internal Medicine combined residency) to make accreditation decisions.

Next Accreditation System

In 2013, the ACGME introduced the Next GME Accreditation System [10]. The purpose of this was to move from a process of 10-year site visit evaluations to a continuous accreditation model focused on educational outcomes. The key features of this change were annual reviews in which the RC reviews information submitted by a program, with the option of requiring additional information or scheduling a site visit if indicated.

Accreditation Data System

The residency program director must submit program and resident data annually through the Accreditation Data System (ADS). This data sys-

tem tracks information submitted by the program with additional data collected through the annual resident and faculty surveys. The RCs review all data; however, certain data elements, termed “primary data elements,” represent areas of focus. These include:

1. Program attrition (whether there are significant changes in the faculty or resident roster)
2. Any changes in the program, including sites, curriculum, or program leadership
3. Scholarly activity
4. Board pass rates
5. Resident survey data
6. Faculty survey data
7. Milestones (whether the program has submitted these in a timely fashion)

Types of Reviews

The RC conducts several reviews during their review meetings.

1. **New program application.** All new programs applying for accreditation must complete a core specialty application. In addition, psychiatry residency programs must undergo a site visit before the RC reviews the application. Fellowship programs are not required to undergo a site visit when applying for initial accreditation. The RC website lists the deadlines for submission so that the RC members have ample time to review the application before a meeting. The RC will give citations for areas not in compliance with the program requirements. If the program is approved, the RC will grant them initial accreditation.
2. **Initial accreditation.** Once the ACGME grants a program initial accreditation, the program can recruit and appoint residents to the program. All programs will undergo an initial site visit within 2 years of being granted initial accreditation. Upon reviewing ADS and site visit information, the RC may grant continued accreditation.

3. **Continued accreditation.** Programs with a status of continued accreditation must undergo an annual data review. At this time, the RC may choose to continue or change a program’s accreditation status.

Ultimately, the RC makes an accreditation decision that can be one of the following:

1. **Continued accreditation.** When the RC finds the program in substantial compliance, they will continue the accreditation. Thus, the program remains in good standing.
2. **Continued accreditation with warning.** The RC can continue a program but issue a warning. The purpose would be to warn the program that they have substantial areas of noncompliance and that their accreditation status is in jeopardy.
3. **Probationary accreditation.** The RC puts a program on probation when they determine that it is substantially noncompliant. Before issuing a probation, the RC will first order a site visit to establish the validity of the concerns. Once on probation, the program has 2 years to remedy the concerns.
4. **Withdraw accreditation.** The RC withdraws accreditation when a program fails to remain in compliance. This unfortunate event usually occurs after a probationary period. The program will first undergo a site visit to gain more information before the RC decides to withdraw accreditation.

Site Visits

Full site visits occur at specified times, including during the initial application, within 2 years after the initial accreditation, and at 10-year intervals (discussed later). The site visitor reviews all aspects of the program to confirm compliance with all program requirements. This process will involve interviews with the DIO, department chair, program director, faculty members, and trainees. It may also involve a

review of training files, policies, or program letters of agreement.

The RC can also request site visits at any time. These site visits can be either focused or full. The RC will request a focused site visit when there is a specific area of concern for which the RC needs verification before rendering an accreditation decision. An example might be repeated citations for resident evaluations without improvement. The RC might decide to conduct a focused site visit explicitly looking at the aspects of the program that involve resident evaluations. The RC will opt for a full site visit if there are multiple areas of concern, and the RC believes that they need to examine all aspects of the program.

At the time of this writing (April 2022), the ACGME has suspended all in-person site visits in the wake of the COVID-19 pandemic, except in specific circumstances. Instead, site visits are being conducted remotely via electronic means. If a site visit will be conducted in person, the PD and Sponsoring Institution will be notified in advance. In-person site visits will likely resume in the next year.

Citations

Programs receive a citation if the RC determines that they are not meeting a standard. This decision relies on the ADS information and any site visit data if available. In a citation, the RC will list the specific requirement in violation and why the RC determined that the program was in violation. Program directors must respond to the citation, including how the program mitigates the concern. The RC will review this information during the following year's annual review and determine whether the program has successfully resolved the citation. If the program continues not to meet the ACGME standard, the RC will extend the citation. The RC most commonly issues citations for duty hour violations, evaluations, program director responsibilities, and faculty qualifications. Also, inaccurate information is a frequent cause for citations.

Areas for Improvement (AFI)

AFIs are general concerns that may or may not be linked to a specific program requirement. They allow an RC to alert the program to rising concerns without issuing citations. Unlike citations, programs do not have to issue a written response to an AFI. However, the program should monitor these internally. If an AFI is repeatedly identified, it may subsequently convert to a citation. The most common areas for improvement are specific domains in the resident or faculty survey, board exam performance, and scholarly activity.

Other Possible Actions

In addition to accreditation decisions and issuing citations or AFIs, the RC may take other actions. For example, they can increase or reduce a resident complement. This change usually occurs at the request of the program. However, the RC may become concerned that a program is overextended, such as losing a training site or a large number of faculty. In that case, they may choose to reduce the residency size. Finally, they may also commend a program. The RC uses this action to acknowledge consistent excellent performance, best practices, innovations, or impressive efforts to resolve previous citations.

Communication of the RC Decisions

Within five business days after the RC meeting, the program receives an e-mail notification of the accreditation decision. The RC emails this to the program director, program coordinator, and DIO.

Within 60 days, the RC sends a letter of notification to the program, including the same personnel as the 5-day notice. This document includes full details of the review, including all actions taken and any citations or AFIs. The letter is also posted and available in ADS.

Self-Study

The self-study is the newest addition to the NAS. The ACGME intends it as a formative evaluation for programs, meaning that it is intended to encourage quality improvement through constructive feedback. This process is only possible in a low-stakes review. There should be no consequences to promote an honest appraisal. Before the visit, programs will engage in self-evaluation. The residency stakeholders, including faculty and trainees, should candidly discuss the program's strengths and areas needing improvement. This process works best if it is meaningful, and the residency leadership takes it as an opportunity to take an honest look at the program. This look would include defining the program's aims and considering how well the program meets those aims. This self-study process is an opportunity to review the impact of improvements made to the program over recent years and identify future action items. One year after that process, the self-study group should review the document created, the impact of interventions completed, and the next steps.

In its original conception, the next step would involve meeting with the ACGME for self-study reviews during the 10-year site visit. However, the ACGME later modified this plan and decided to de-link the self-study and the 10-year site visit. In addition, the ACGME is currently developing a process to review and provide feedback to programs that have completed and submitted their self-study. As a result, the ACGME has deferred future self-studies until a sustainable model is in place.

Ten-Year Site Visit

Like the self-study, the ACGME suspended all 10-year accreditation site visits in the wake of the COVID-19 pandemic. Although they planned to resume them in 2021, the site visit deferrals remain as of this writing (April 2022). RCs remain able to request site visits to programs at their discretion.

The purpose of the site visits is to review all data relevant to the accreditation of the residency. To do this, the reviewers verify that the residency meets all accreditation standards and generate a report. The site visitors do not make accreditation decisions. Instead, they submit a report to the RC, who then decides.

In preparation for a site visit, programs should submit all the relevant ADS data and ensure it is up to date and accurate. The interim between the time a program learns their visit date and when it occurs is a time to consider the areas in need of improvement and work to address those areas before the visit. Again, internal reviews will be a valuable source to anticipate potential areas of concern.

Advice for a Residency Seeking New or Continued Accreditation

There is no perfect formula for remaining citation free and in good standing. Humans run RCs, and although they strive for consistency and fairness, programs are reviewed by individuals who do their best to interpret data with inherent limitations and vagaries. That said, we offer some advice based on our experience as program directors and members of our RC:

1. Carefully and periodically review the information you submit, whether the program application or the ADS information. The most common reason for a citation is incomplete or obsolete information. Attention to detail in this area will often prevent future queries from the RC.
2. Keep the faculty CVs up to date. It is often challenging to keep faculty information and rosters up to date, and this should be an ongoing effort throughout the year. When a change occurs, such as a faculty member joining or departing, be sure to update the information rather than wait until the annual update is due. All faculty should be certified in their specialty – for psychiatrists, they must be certified by the ABPN or the American Osteopathic

Board of Neurology and Psychiatry (AOBNP). Keeping faculty board and medical license information is time-consuming. However, all board statuses are available on the ABPN website, so a residency coordinator can periodically check ABPN verifyCERT to keep the board information updated.

3. Many programs find the scholarly activity requirement a challenge. It is important to note that scholarly activity can include more than peer-reviewed publications or grants. Various presentations, non-peer-reviewed publications, professional committee work, curricula design, and quality improvement projects are all legitimate scholarly activities. It may take some education and encouragement to engage the faculty in helping you compile their list of scholarly activities. For the residents, presentations to the faculty or peers are examples of scholarly activities that most residents will do.
4. If you do get a citation, deal with it honestly and transparently. Some citations are simple to fix (a mistake on ADS), but others may be more challenging (inadequate supervision at a site). Use your response to the citation to demonstrate that you take the problem seriously and show how you have initiated a meaningful response.
5. Do not hesitate to contact the RC. Typical calls can double-check whether what you are doing is within standards or whether some innovation would be acceptable. Other times, program directors may call to clarify a citation or discuss a satisfactory response. Members of the RC are not permitted to speak on behalf of the RC. However, both the executive director of the RC and the RC chair can, and often do, give advice and feedback to program directors savvy enough to use them as a resource.

Example: A program director has an idea about an innovative approach to a required rotation. Although the rotation would more than satisfy the spirit of the curriculum requirement, the program director is not sure that it technically meets the requirement as detailed in the program requirement.

Our advice: The program director should contact the executive director of the RC. Their number is available on the ACGME website (each specialty has a page on the ACGME site that lists the roster for each RRC). The director will either respond or connect the program director with the chair of the RC to give the program director a chance to describe the rationale and design of the program entirely. Chances are, if the idea is sound, the chair will either reassure the program director or suggest what changes are needed to keep the program in compliance.

Summary

Meeting the many accreditation requirements can seem daunting, particularly for a new training director. Fortunately, there are many resources. Within an institution, the GMCC and the DIO function as necessary resources to advise a program director and oversee their program. Nationally, the organizations representing training directors – in the case of psychiatry, AADPRT – are a valuable resource for advice and best practices. That the ACGME is another resource, given its regulatory role, may not seem obvious. However, one needs only to review the list of RC members to see that these are, for the most part, dedicated educators who volunteered for their ACGME role to help program directors succeed in their desire to provide the best education possible to the future-generation residents and fellows.

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References

1. Johnson T, John NJ, Lang M, Shelton PG. Accrediting graduate medical education in psychiatry: past, present, and future. *Psychiatry Q.* 2017;88(2):235–47.
2. Joyner BD. An historical review of graduate medical education and a protocol of Accreditation Council for Graduate Medical Education compliance. *J Urol.* 2004;172(1):34–9.

3. Koehler PJ. The four horsemen and the American Board of Psychiatry and Neurology (ABPN). *J Hist Neurosci*. 2018;27(3):292–302.
4. Levy AB, Nahhas RW, Sampang S, Jacobs K, Weston C, Cerny-Suelzer C, et al. Perceptions of residents and their training directors regarding wellness education, program support, and access to depression treatment: the DEPRESS-Ohio Study. *Acad Psychiatry*. 2019;43(5):488–93.
5. Boland RJ, Becker M, Levenson JL, Servis M, Crone CC, Edgar L, et al. The milestones for psychosomatic medicine subspecialty training. *Psychosomatics*. 2015;56(2):153–67.
6. Thomas CR. Educational milestone development for psychiatry. *J Grad Med Educ*. 2014;6(1 Suppl 1):281–3.
7. Sanders K, Servis M, Boland R. The four general competencies. *Acad Psychiatry*. 2014;38(3):268–74.
8. Macaluso M, Kinzie M, Cowley D, Houston LJ, DeJong S, Janssen F, et al. The psychiatry milestones 2.0: how did we get from 1.0 to 2.0 and what can users expect? *Acad Psychiatry*. 2020;44(6):779–84.
9. Houston LJ, DeJong S, Brenner AM, Macaluso M, Kinzie JM, Arbuckle MR, et al. Challenges of assessing resident competency in well-being: development of the psychiatry milestones 2.0 well-being subcompetency. *Acad Med*. 2021;97(3):351–6.
10. Nasca TJ, Philibert I, Brigham T, Flynn TC. The next GME accreditation system—rationale and benefits. *N Engl J Med*. 2012;366(11):1051–6.



Building Your Leadership Team

4

Kari M. Wolf

“Alone we can do so little, together we can do so much.” – Helen Keller

Introduction

Gone are the days when a program director was able to single-handedly run a residency program. The increasing complexity of residency administration—coupled with the increasing clinical demands of academic departments—necessitates a multitude of leaders and a high-functioning leadership team to successfully run a residency program. Yet simply bringing together great people does not, in and of itself, guarantee a thriving team. For a leadership team to be successful, the right people need to be in the right roles within the right environment. This work requires intentionality, skill development, understanding of team dynamics, an aligned mission, and leadership. With these components in place, the leadership team and the residency program will thrive. In other words, “leadership is a team sport.”

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Leadership Team Roles

Two components comprise the program leadership team: leaders for specific program components and the overarching leadership team. Individual leaders for unique aspects of the program—course directors, unit directors, site directors, etc.—understand the piece of the program for which they are responsible. They understand the program leadership’s vision for that piece, but they may not understand how their piece fits into the overall program. In contrast, the leaders who run the overall program understand the regulations governing residency education, the overarching vision for the program, and how all the individual pieces fit together. Both components of the leadership team are very important—though they are important for different reasons.

Some people think about leadership in terms of titles. For listings and definitions of common leadership titles, please see the Glossary of Common Leadership Titles at the end of this chapter. However, the duties associated with a given title can vary tremendously from institution to institution. For example, when considering the title “vice chair of education,” there is no commonly accepted list of job duties associated with the job title across the country. In 2017, Cowley et al. wrote about the variability in psychiatry departments with respect to the time allocation and duties of vice chairs of education, also noting the difficulty across other specialties in defining

the time allocation, roles, and responsibilities of a vice chair of education [1]. For this reason, this discussion will focus on the *roles* that need to be filled rather than the titles themselves.

The leadership team consists of several individuals. Some individuals serve on the leader's inner circle, while others function more independently, fulfilling their assigned roles. While it is important that all roles are fulfilled, it is equally important that the leader has a smaller team who is intimately aware of all (or most) aspects of the residency. This team assists with brainstorming, problem-solving, and advising the program director, who is ultimately responsible for the program. Some members of this team may hold titles (such as associate program director). Regardless of the titles (if any), members of this team must be aligned in their goals and expectations for the residency program so that all members are "rowing in the same direction."

Some roles are required and defined by the Accreditation Council for Graduate Medical Education (ACGME), specifically the program director, program coordinator, core faculty, and the optional associate program director. The current ACGME standards explain the purpose of the program's leadership team: "The program director may establish a leadership team to assist in the accomplishment of program goals. Residency programs can be highly complex. In a complex organization, the leader typically has the ability to delegate authority to others yet remains accountable. The leadership team may include physician and non-physician personnel with varying levels of education, training, and experience" [2].

The ACGME also requires certain program committees. Skills that program leaders should consider when selecting membership for these committees include individuals who understand the goals and expectations for the overarching educational program, how to develop individualized learning plans to help learners advance their skills, how to analyze data and understand it in the larger context of the overall program, and how clinical experiences are run on the front lines (as opposed to how they were designed to run or

what the leadership team expects to be happening during a given clinical experience).

Beyond the institutionally required roles, several other duties must be fulfilled to successfully operate the residency program. In some programs, distinct individuals will serve in each of these roles, while in other programs—particularly smaller programs—many of these duties will be fulfilled by the program director.

The program director has the responsibility to identify people to teach the didactics to the learners. Often, a new program director will inherit faculty who are already teaching the didactics, so the program director will not need to start this process "tabula rasa." The challenge is always ensuring the *right* people are teaching the didactics. Sometimes the faculty teaching the didactic are doing so because they have always taught that didactic. As a program director, it is important to ensure the faculty best positioned to teach are the ones doing the teaching. Depending upon the bandwidth of the program director and the overall size of the faculty and program, it may be beneficial to identify course directors who have the responsibility for selecting which faculty teach specific didactics. When a program director chooses to use course directors to help oversee the didactic curriculum, it is important that these course directors are well versed on the program director's goals for the course and expected teaching methodologies. The program director must set expectations for the course director in communicating those goals and expectations to the didactic instructors, ensuring compliance with these expectations, and communicating back to the program director instances where didactics are falling short of these expectations. There should be clarity in terms of who will provide feedback and coaching to didactic instructors not meeting expectations and how to replace didactic instructors when remediation is unsuccessful at achieving those goals and expectations.

Identifying clinical supervisors is very similar to the process for identifying teachers in the didactic setting. In large departments, there may be numerous faculty to choose from so the pro-

gram director can intentionally match the strongest clinician-educators with the learners. In other programs, there may not be the option to choose the supervisors, and the program director's role becomes one of coaching supervisors to enhance their expertise at teaching.

Additionally, the best teachers may not be available to teach due to assignments or expectations of the department chair or other departmental leadership. For example, in departments with a large faculty compared to the size of the residency program, there may be parallel teaching and non-teaching services. Sometimes the best teacher for that service may be assigned to the non-teaching service. In these circumstances, negotiating with either the faculty themselves or the department chair or division chief becomes a key role for the program director to ensure the best educational experience for the learners. For more on negotiation, see Chap. 5.

In programs where there are multiple clinical sites, it is both helpful and an ACGME requirement to identify an educational leader for each clinical site. This educational site director functions as the point of contact at that site to ensure the educational mission of the program is accomplished. That person also serves as an interface between the program director and all the faculty at that site. Instead of needing to coordinate schedules, expectations, and feedback with each faculty member at a site, the program director can use the educational site director as a funnel for information. It is critically important that the site director understands the program director's expectations for the learning environment, the clinical learning the residents are to receive at that site, the clinical role that residents are expected to have at the site, and how conflicts are to be handled. It is also important that the educational site director feels supported by the program director and residency administration in holding the residents and faculty accountable to their respective expectations. In essence, the site directors function as the program director's "eyes and ears" for the component site they are operating. They are often the first to identify problems with residents, problems with compliance (such as duty hour violations), and problems with fac-

ulty. The program director and educational site director need to have a trusting and respectful relationship with easy-flowing, bidirectional communication.

Educational site leadership is particularly important when the structure, environment, and culture of that site differ greatly from the residency's home institution. For example, Veterans Affairs (VA) facilities, community-based hospitals, and community mental health centers operate under different regulations, different leadership structures, and different funding mechanisms from academic medical centers. Identifying educational site directors who understand the systems in which they operate is imperative so they will be able to adjust and implement any changes needed in the resident experience at that site. It is also important to identify an educational site leader who possesses the leverage to effect change within that institution—something a program director, vice chair of education, or chair who are part of a different institution will likely have more difficulty accomplishing. This leverage may come from formal authority (having the position or title within that institution to make decisions regarding resource allocation, staffing schedules, operations, etc.) or informal authority that comes from being an insider—a member of the team at that site—who can influence decisions and behaviors but doesn't have formal authority. Either way, the educational site leader will likely be able to affect changes that impact the learners' experiences more effectively than an outsider—even an outsider with a title that carries some authority in their home institution.

The program coordinator (sometimes called program administrator) is arguably the second most important role behind the program director in successfully managing a residency program. This person is the face of the department for applicants, for other departments where the residents rotate, for clinical sites, for faculty, and for the residents themselves. But beyond requiring strong interpersonal skills, the program coordinator helps maintain regulatory compliance with every aspect of the program. Having a program coordinator who is meticulous with data collec-

tion and storage is important to ensuring National Resident Matching Program (NRMP), ACGME, and American Board of Psychiatry and Neurology (ABPN) reports and processes are adhered to throughout the residency.

Recruiting new residents is the lifeblood of any residency program (see Chap. 6 for more information on resident recruitment). Given the burgeoning number of residency applicants, the program director may want to appoint a leader or team of individuals for this process. To recruit residents who align with the mission, vision, and values of the residency program, the program director needs to carefully choose who participates in the recruitment process—from choosing which applicants to invite for interviews to interviewing the candidates and creating the rank order list. The people involved in the process need to understand what criteria are important to the program director and the program so candidates can be evaluated accordingly. For example, when trying to recruit residents who will spend a significant amount of their residency involved in research and publications, it does not make sense to have primarily clinical faculty involved in the interview process. In addition, when trying to recruit a diverse residency class, the program director will want to ensure applicants experience a diverse interviewing team and meet diverse members of the program throughout their interview day.

Increased attention has been given to faculty development and the concept that faculty need to continue to improve their clinical, educational, teaching, and research skills. In fact, the ACGME has now shifted the responsibility for faculty development to the program director. That does not mean, however, that the program director themselves must assume this role. Rather, the program director's role is to ensure there is a strong process for ongoing faculty development within the department and that faculty regularly participate in those offerings. Faculty development is a key area for collaboration among the program director, the department chair, and the vice chair of education—individuals who share responsibility for managing the resources necessary to implement faculty development. In programs

where the responsibility for faculty development does not lie with the program director, the program director will partner with the person in charge of faculty development to ensure faculty development includes topics of importance to residency education. One challenge that can be encountered lies in whether the faculty development leader's goals align with the needs of the residency program. Globally, faculty development comprises advancing the careers of faculty by growing their skills in all the mission areas of the department. Viewed through this lens of mission enhancement, faculty development could focus on improving research skills, creating new clinical programs, advancing clinical skills, improving quality improvement, and advancing the educational skills of faculty in the department. Thus, the faculty development leader needs to see themselves as a key member of the residency leadership team who is responsible for both improving educational skills of the faculty collectively and advancing the careers of the faculty in the department. For more on faculty development, see Chap. 23.

Residents require mentorship to navigate through residency and the various career opportunities they face as graduation nears. In the past, many program directors assumed this role for all residents. But as the administrative work associated with running a residency program has increased along with the increased pressure to spend time on other functions within the department (such as clinical care or research), many program directors no longer have the time to personally provide deep, meaningful mentorship to every resident. When this occurs, the program director is left to ensure that residents are receiving mentorship through formal and informal processes. Program directors must also identify residents who are not receiving adequate mentorship and either provide it themselves or create a formalized mentoring relationship with another faculty member for that resident. Identifying a leader who will manage the mentorship of all residents in the program will allow the program director time to devote to other areas of the program. Aspects of mentorship are discussed in more details in Chaps. 19 and 20.

The final role that must be fulfilled is mentorship of the program director. While the entire book is written about how to identify and utilize mentors, this chapter will provide only a brief description. Mentorship can be divided into several categories: knowledge building, skill building, navigating politics, and advice giving. When thinking about the kinds of mentorship the program director needs, it requires reflection about the individual's strengths and areas for improvement. Recognizing one's personal knowledge and skill deficits allows the individual to identify others who can help close those deficits. Often, this can be a vice chair of education, a former program director, a chair, or a Designated Institutional Official (DIO). When utilizing someone within the program director's own department, this person can often assist with mentorship around navigating the politics of the department and institution. However, mentors should not be limited to only those within one's home institution. Professional organizations provide networking opportunities to meet dozens of potential mentors—and many even have formal mentoring programs that members can join. Receiving mentorship from someone who has no opinions framed by the culture of the organization can often yield a more objective perspective. Another important advantage to utilizing a mentor outside one's home institution is to find a "safe" mentor where one's fears and vulnerabilities can be addressed without concern that those vulnerabilities will be shared with supervisors or "competitors" within the department. It is important to remember that no one person can fulfill all of the program director's mentorship needs. Likewise, what is needed from mentorship will evolve as the program director's skills, knowledge, duties, and experiences evolve.

When all of the roles and duties that must be fulfilled to successfully run a residency program have been identified, people need to be identified to fill each of those roles. It is important to understand what roles the chair, institution, or ACGME expect the program director to have (and not delegate to others). Once the roles that the program director *must* serve have been identified, the pro-

gram director will identify who will serve each of the other roles outlined above.

Leadership Skills and Attributes

After identifying key roles for program leadership, it is important to take inventory of the skills the program director and each potential leadership team member brings to the team. The program director must conduct an analysis of the match between the potential leaders and the needs of the program. To do so, the program director will identify the people available to fill the roles, the strengths and weaknesses of each potential team member, the attributes and skills needed for each role, and what is missing from the leadership team being assembled. Equally important, however, is understanding one's own weaknesses and blind spots. Sometimes individuals are very aware of their own weaknesses; sometimes assistance is needed to identify them. Even when an individual is keenly aware of their own weaknesses as a clinician-educator, a new program director may not have reflected upon the skills and limitations they bring to a leadership role. Intentionally seeking out feedback from supervisors, mentors, residents, and faculty themselves is an important way of garnering that information. Of course, insight is only the first step. Being able and willing to put together a plan for maximizing leadership in the program are critical.

In addition to identifying leaders who offset one's own areas of weakness, it is important to identify leaders who bring skills that the program director has not yet fully developed. For example, if one struggles to provide feedback to the faculty to help them improve their clinical teaching, having a member of the leadership team with this strength is important. This team member will both accomplish the goal of ensuring the necessary feedback gets delivered to the faculty member but will also model this skill for the program director to help them build this strength.

Taking inventory of skills brought by other members of the leadership team allows the program director to identify skills that are missing

from the team. When this occurs, it is important to advocate to get that deficit filled. The program director's responsibility becomes convincing the department chair (or the person who manages the financial and personnel resources of the department) why this role is needed. This advocacy is easiest when a clear regulation supports the need. But even in the absence of a regulatory mandate, building the case for how this role improves the residency, improves board pass rates, leads to recruitment of better or more mission-congruent residents, creates an environment where graduates are more likely to stay on as faculty, improves the care for the patients, etc. is imperative in convincing the chair to expend the resources to fulfill the need. Furthermore, proposing a solution—rather than just identifying the problem—often makes it more likely that the Chair will support the program director's request. Examples such as recommending the chair to assign a particular faculty to a key role or asking the chair to negotiate for a percentage of effort from someone located elsewhere in the medical school are often more palatable than asking the chair to hire a new full-time faculty to fulfill the role.

Skill building comprises more than just faculty development. The skills necessary to be a strong leader go beyond the skills necessary to be a good faculty member or even a good educator. For example, all faculty need to be versed in providing difficult feedback to learners. But the educational site director needs to also be versed in giving difficult feedback to other faculty—including those senior to them. Having these kinds of crucial conversations is an important skill for all leaders on the team to develop. The program director needs to rely on other members of the leadership team to have these difficult conversations. Not only does the program director not have the bandwidth to take on all of these conversations, but other team members will benefit from developing this skill as it is transferable to other leadership roles they may assume over the course of their careers.

The leadership team should be balanced based upon members' experience versus their skills or ability. For example, a very junior program director would likely benefit from having seasoned

members of the leadership team who can function rather autonomously. In this situation, however, it is important that the more senior members respect the authority and accountability that the program director has in the operational oversight and setting the strategic direction of the program. In contrast, an experienced program director may choose a less experienced faculty member to serve in a leadership capacity, recognizing that the new leader will need mentoring and coaching to help them become successful in the role. Ideally, the leadership team has a mixture of experienced individuals and new leaders so that there is both a fresh influx of ideas and perspectives but also an ongoing development of talent within the educational program. Keep in mind that as people retire or take on new positions inside or outside the medical school, there will be turnover in the leadership team. It is difficult for a program to lose a large percentage of its key leaders in a short time span so having a mixture of leaders at various phases of leadership development helps offset transitions when they do occur.

Frequently, there is no additional compensation provided to some members of the residency program leadership team. As such, it can be challenging to recruit talented faculty to assume leadership roles within the program. While there is no literature on how to incentivize faculty to assume duties within the residency program administration, there are several studies examining faculty incentives and motivation to teach. In 1997, a survey of psychiatry chairs, program directors, and directors of medical student education showed that multiple factors incentivize faculty to teach—including salary/promotion, status/authority, perks, recognition, and facilitation of new opportunities within the department or school—but that the key is to ensure faculty understand that the incentive is intended as a reward for teaching. That is, while the leaders in the department used these incentives to incentivize teaching, the incentive was only effective if the faculty understood the link between the incentive and their teaching quality and quantity [3].

Faculty motivation to teach is often unique to the faculty member. Faculty members have dif-

ferent priorities that incentivize them to take on leadership roles. For some individuals, the ability to have a title to accompany their role can stimulate them to take on the duty. This may be particularly true for younger faculty members interested in building their curriculum vitae (CV). In academic settings, promotion offers additional prestige and compensation. Being able to use that title in one's promotion portfolio can sometimes serve as enough of a motivator to get the person to assume the role. But other times, the program director may need to create non-monetary incentives to entice the faculty to participate in the leadership of the residency. Weisener et al. studied motivations for teaching and determined that the most impactful combination of motivators included a stipend, seen as a "gesture or symbolic token, rather than to offset the clinical compensation lost by teaching—combined with meaningful, personalized recognition for the work done" [4]. Understanding the individual faculty member's incentives positions the program director to customize the incentives, thereby improving a busy faculty member's willingness to take on the additional work.

Given the challenges associated with limited faculty time and incentives to participate in program leadership, consider identifying talent from within the residency program itself. Many educationally minded residents welcome the opportunity to get involved in residency administration during their training. Involving them on committees or other educational initiatives can help solidify their interest in joining the faculty upon graduation and help them build skills so they are prepared to "hit the ground running" when they become a faculty member. However, overreliance on residents within the leadership team creates instability due to the built-in attrition within residency programs, potentially causing distress among the remaining residents as each cohort graduates. Additionally, residents are typically less experienced and learning themselves.

When selecting people to serve on the leadership team, there are two important domains to consider: task and interpersonal. The task domain involves knowledge and skills associated with the role and has been extensively discussed previ-

ously in this chapter. The interpersonal domain is important as conflict and discord among a team can sometimes be traced back to underdeveloped interpersonal skills and personal characteristics. Sometimes these limitations can be addressed by the actions of the leader by establishing the vision, clearly defining the roles of team members, and managing the conflict caused by differences of opinion. But beyond that, it is widely accepted that team members must have good listening skills, the ability to form strong working relationships with other team members, and the ability to set aside their own personal attitudes for the betterment of the whole [5].

While much is written in the literature about the benefits of team members who are extroverted, conscientious, and agreeable, a 2019 study actually found these personality traits detrimental to high-functioning teams when found in excess (or in detriment). In fact, when these traits are present in excess, they lead to decreased ability to collaborate in teams [6].

Numerous studies have demonstrated the positive impact emotional intelligence has on group effectiveness and teamwork. Emotional intelligence—the ability to perceive, express, and regulate the emotions of oneself and others—enhances team cohesion. Team members with high emotional intelligence more accurately assess other members' reactions and manage their own emotional responses to negative reactions. Furthermore, team members with high emotional intelligence avoid misattributing the motives or intentions of others when negative events occur [7].

Creating High-Functioning Teams

High-functioning teams are comprised of three key components: team organizational structure, individual team member's skills and contributions, and team processes. Micken and Rodger summarize the 18 components that encompass these three elements. Their work identifies organizational structure as the most important of the three components, noting that low-functioning teams are best helped by addressing the organiza-

tional structure rather than the two other components (individual skills and processes). In the context of forming a high-functioning residency leadership team, the program director can address the elements that comprise the organizational structure to improve team functioning. The key elements include (1) defining a clear purpose for the team, (2) setting a culture that transforms shared values into behavioral norms, (3) identifying the tasks for which each team member is held accountable, (4) ensuring clarity of roles without overlap, (5) leadership skills and actions by the team leader, (6) ensuring diversity of skills, interests, and backgrounds in team members, and (7) adequate financial and administrative resources and support to continue growing the skills of the team members and the team as a whole [8].

While the organizational structure of the team is important, many other studies have demonstrated the team dynamics that are important to achieve high-functioning teams. However, most of these team dynamics stem from the organizational structure of the team. For example, the coordination and cohesion of the teams are underscored by the shared purpose and culture of the group and department. Furthermore, the leadership skills of the leader will facilitate the cohesion of the diverse group around that shared purpose and determine the processes under which decisions are made and conflicts are resolved. Other fundamental elements of team dynamics involve the communication across group members, the social relationships developed by team members, and the performance feedback provided to group members [6].

Once the leadership team has been built, the ongoing development of the team is important. This investment should address both individual competencies of team members and the overall functioning of the team. Assessment of the team includes evaluating whether the right skills and roles are represented on the team and whether and how the domains addressed above are functioning. This ongoing assessment will utilize both qualitative and quantitative data to identify where the team is functioning well and where there are opportunities for improvement. It will also provide the program director with data

regarding how the roles of team members should be reconfigured as members of the team develop new skills.

Ongoing assessment of the strengths and weaknesses of the leadership team helps to understand the developmental needs of the leadership team. This assessment will be multifactorial and utilize a multitude of sources for that assessment. Potential sources include quantitative data such as resident performance on rotations, resident evaluations, in-service exams, boards, and surveys and qualitative data from resident evaluations, resident retreats, and feedback from the chief resident. Additionally, the program director may consider conducting periodic 360 evaluations of the leadership team. This information will be helpful with understanding the strengths, weaknesses, and blind spots of various team members. It also provides information about where team members' skills are being underutilized leading to opportunities to reconfigure roles and responsibilities within the leadership team as people develop new skills. This assessment also helps with succession planning because the program director will have a better understanding of the team members' abilities so when one member transitions out of the department, the program director already understands who can take on that responsibility at least in the interim until a permanent leader can be identified.

Ongoing succession planning serves to ensure the stability of the residency program as leadership team members transition away from the team. When the program director has created a high-functioning team where the team members are successful and developing new skills, members of that team will find themselves being recruited away to other leadership positions within the department, within the medical school, or at other institutions. While it is sad to lose a high-functioning team member, these transitions symbolize success at creating an environment where leaders flourish and advance their careers. When a leader has successfully created this environment of growth, people become eager to join the team because they will recognize the developmental opportunities being created, providing

the program director with a steady pipeline of talent. Likewise, when a program director has been successful in creating this environment for the residency leadership team, the leadership skills of the program director will be recognized, leading to new opportunities to advance that leader's career.

It is important to remember that building a leadership team is an iterative process. As the needs of the program evolve, the leadership team must also evolve. Likewise, as the people on the leadership team grow, develop, and transition off the team, the team will need to evolve to meet those changing dynamics. Important in this process is an understanding of the team dynamics that create a high-functioning team.

Team charters serve as a foundation for many high-functioning teams. There are several components that comprise most team charters. First, understanding one's own and other team members' preferences for working in teams helps the team to discuss how to handle the range of approaches to teamwork by establishing group norms. For example, upon joining the team, some members may believe that decisions will be made by majority vote, whereas others may expect consensus. It is also important to know if there are situations where one person is the ultimate decision-maker (e.g., if there is disagreement among the group or an emergent decision must be made). Establishing early on the process for making decisions will minimize misunderstanding and misaligned expectations later on. Other aspects to consider include expectations around participation, communication, meetings, and how conflict is resolved. The second component to building a team charter involves identifying the assets each member brings to the team and understanding the constituency (or, in this case, area of the residency) that each team member represents. Finally, a team charter will include the goals, values, and purpose of the team. Having these elements clearly defined ensures that the team understands the direction the work is heading. The team leader will periodically revisit these goals, values, and purpose to ensure they remain relevant to the work at hand.

When a new program director inherits an existing leadership team, an assessment of the roles, skills, and strengths of those team members still needs to occur. A challenge arises when a mismatch between the existing team and the desired team is identified. To begin navigating this challenge, the new program director must understand whether they have the authority to replace members of the leadership team and the politics of removing someone from their current spot in the leadership of the program. Collaboration with the department chair, vice chair of education, or Designated Institutional Official (DIO) can assist the program director in managing this difficult process.

Conversely, the idea of building a leadership team from scratch may seem appealing. It, too, can be fraught with challenges. Depending upon the structure of the program or department, many of the key roles identified above do not come with designated compensation. As a result, once the people with the necessary skills and desire to fulfill a given role are identified, they may not be willing to take on the extra work or sacrifice their clinical or research income to free up time in their schedule to take on this new work. In these circumstances, the program director needs to identify ways to make the work meaningful for the individual.

The area of team dynamics that is fundamentally different from the organizational structure is that of collaboration. To develop a team with true collaboration requires each team member to develop their own competence, confidence, and commitment—core elements that are necessary for team members to develop respect and trust in each other and the team as a whole [6]. This is work that obviously takes time to develop. And as members come and go from the leadership team, additional patience and time will be required to develop the new equilibrium of the team members.

Although the organizational structure, the team processes, and the individual characteristics of team members are all important, they are not sufficient to develop a high-functioning leadership team. It is important to understand the lead-

ership competencies that are a necessary part of the leadership team. Some of these competencies will be necessary for the program director themselves, while others can be fulfilled by other members of the leadership team.

The Massachusetts Institute of Technology Leadership Center identifies four key leadership capabilities: sensemaking, relating, visioning, and inventing. Sensemaking is the ability to both make sense of the existing landscape and map the future landscape. For example, as a program director, you may be aware of the new regulations that will be coming while continuing to operate under the existing regulations. Team leaders need to continue operating under the current regulations while also preparing others for changes necessary to comply with future regulations. Relating is a leadership quality that allows you to develop relationships to connect with people and organizations. For example, if the program wants to develop a new residency experience with an outside hospital or clinic, the leader will need to build a trusting relationship with people at that new site, understand how the site could benefit from involvement in the residency program, advocate with leaders at both organizations, and connect the appropriate decision-makers. Visioning involves creating and articulating the vision for the team and the program. Ideally, visioning involves storytelling

that combines facts that can persuade people with logical arguments and stories that persuade people with our emotions. Finally, inventing involves creating the systems and structure to transform the vision into reality [9]. Together, these leadership skills will help the leadership team thrive.

Summary

Administration of a residency program has gotten so complex that the role of a program director necessitates a team to accomplish all the roles and responsibilities that must be fulfilled. This chapter covered the roles that need to be filled by the program director’s leadership team, the qualities and characteristics that produce a high-functioning team, and the skills and attributes that are important for leaders. When carefully and thoughtfully assembled and nurtured, the leadership team will embody this quote by Dr. Mary Lou Anderson, “Leaders are called to stand in that lonely place between the no longer and the not yet ... and intentionally make decisions that will bind, forge, move, and create history” [10].

Glossary of Common Leadership Titles

| Title | Alternate Titles | Duties |
|-------------------------------|---|--|
| Program Director ^a | Residency Program Director; Residency Training Director; Fellowship Director; Fellowship Program Director; Fellowship Training Director | At the meta level, the Program Director is responsible for ensuring the educational environment allows residents/fellows to successfully complete all the program requirements and successfully pass the Board Certification exam. Some key responsibilities include: <ul style="list-style-type: none"> Ensuring quality didactics Ensuring quality clinical experiences and supervision across all clinical sites Approving and evaluating faculty Approving local directors for each clinical site Ensuring appropriate documentation is collected and stored at the local level as well as submitting required information to appropriate agencies Creating and implementing policies to ensure compliance with ACGME requirements Selecting, evaluating, promoting, and disciplining residents/fellows |

| Title | Alternate Titles | Duties |
|----------------------------------|--|--|
| Vice Chair of Education | Vice Chair for Education; Associate Chair for Education | Duties vary widely for this role and will be defined by each department who utilizes a Vice Chair of Education. Generally, this person develops, oversees, and advocates for most or all of the educational programs within the department—such as medical student, resident, fellow, allied health professionals, faculty development, continuing medical education (CME), or continuing professional development (CPD). This individual provides mentorship to leaders of each of these educational programs, and educational leaders may even report to the Vice Chair of Education. The role may include oversight and advancement of educational scholarship. They may have fiduciary responsibility for educational programs |
| Associate Program Director | Associate Training Director | This individual(s) assists the Program Director in the administration of the residency/fellowship program. They may have defined duties (such as oversight of the program's didactics) and will often flex responsibilities based upon mutual agreement with the Program Director depending upon the needs of the program at the time |
| Program Coordinator ^a | Program Administrator | Duties can vary based upon division of duties between the Program Director and Program Coordinator. They manage the day-to-day operations of the residency/fellowship. Typically, they collect resident/fellow-specific and program level data and input that data into internal and external data management systems. They assist with resident/fellow schedules and with communication between the program and faculty, clinical sites, and other departments where residents/fellows rotate. They assist with residency recruitment—often by communicating with applicants, scheduling and organizing interviews, and coordinating the development of the rank order list. They are occasionally involved in the selection of which residents/fellows are invited to interview or screened for interview by program leadership. |
| Core Faculty ^a | | These are faculty designated by the Program Director who dedicate a significant amount of time and have a significant role in the educational experience of residents/fellows. The ACGME Psychiatry Residency Program requirements currently require at least five core faculty members associated with the residency program |
| Course Director | | This individual creates the didactic curriculum covering a topic area, which could be broad (Psychotherapy) or more narrow (Interpersonal Psychotherapy). They identify faculty to teach the curriculum and ensure both the curriculum and the teaching methodology aligns with the goals of the program. The role may include providing feedback to the faculty on their teaching evaluations and effectiveness, though this task may also be accomplished by the Program Director or Associate Program Director |
| Clinical Supervisors | | These are faculty who provide supervision to the residents/fellows on their required and elective clinical rotations. These faculty are also responsible for providing feedback to residents/fellows, providing written evaluations of the residents/fellows, and ensuring the residents/fellows receive the appropriate clinical experiences as defined by program leadership |

| Title | Alternate Titles | Duties |
|--|---|--|
| Department Chair | Chairperson, alternatively known as a Chief in some health systems | <p>Most academic institutions have a Department Chair who is responsible for hiring and firing of faculty; oversight of the medical school's missions of education, research, and service; and managing the operational, financial, and personnel resources of the department.</p> <p>In community-based programs, there may be no Department Chair associated with the training programs. Instead, the Department Chair may be a hospital-based role responsible for defining and approving hospital privileges for psychiatrists wishing to provide clinical care within the hospital</p> |
| Division Chief | | <p>Within an academic institution, a Division Chief reports to the Department Chair and is responsible for a defined area of the department—usually delineated by clinical areas or programs. The Division Chief will often be the supervisor for faculty and staff who work in that area and, as such, is responsible for advancing educational, research, and clinical care.</p> <p>In community-based programs, the Division Chief often oversees the clinical area for a specialty or subspecialty, working with hospital or institutional leadership to define what clinical programs are offered, oversee quality assurance programs, and manage the resources related to that clinical area</p> |
| Educational Site Director | Clinical Site Director; Site Director | <p>This individual coordinates with program administration to ensure an optimal learning environment for residents/fellows and that the educational mission of the program is accomplished at a given clinical site. They ensure clinical supervisors comply with expectations and requirements of the residency/fellowship program. They also coordinate with leadership at that clinical site to make changes in structure, organization, expectations, etc. to ensure residents/fellows have a good clinical learning environment and function in compliance with program goals and expectations as well as accreditation requirements. They may assign the clinical supervisors for that site and may also provide feedback to clinical supervisors at the site on their evaluations and effectiveness at meeting program goals, though this task may also be accomplished by the Program Director or Associate Program Director</p> |
| Designated Institutional Official ^a | DIO; Associate/Assistant Dean for Graduate Medical Education (GME); Vice Dean for GME | <p>This individual is responsible for ensuring ACGME institutional, common, and program-specific compliance of the institution, all residency and fellowship programs, and all sites where residents/fellows rotate</p> |
| Chief Resident | | <p>The role of the Chief Resident is to serve as an intermediary between the residents/fellows and the program administration. As such, Chief Residents represent the residents/fellows when interacting with the program administration and represent the program when interacting with the residents/fellows. Some programs may have one Chief Resident at a time while other programs have multiple Chief Residents simultaneously. There is a lot of variability in the specific tasks the Chief Resident is responsible for. Examples include: creating call or rotation schedules; organizing and leading residents on specific clinical services; organizing residency recruitment activities; organizing and running wellness programs; organizing and delivering teaching/instruction to learners (students, residents, fellows); organizing research or quality improvement activities; etc.</p> |

^aACGME required role

References

1. Cowley DS, Lehrmann JA, Dalack GW. The role of the vice chair for education in departments of psychiatry. *Acad Psychiatry*. 2018;42:482–8. <https://doi.org/10.1007/s40596-017-0779-0>.
2. ACGME program requirements for graduate medical education in psychiatry. ACGME-approved focused revision: June 13, 2021; effective July 1, 2021. https://www.acgme.org/globalassets/pfassets/programrequirements/400_psychiatry_2021.pdf
3. Bienenfeld D, Markert R, Rudisill J, Gillig P, Bourgeois JA, Klykylo W, Roman B, Warner B, Kay J. Incentives for teaching psychiatry. *Acad Psychiatry*. 1997;21(2):91–7. <https://doi.org/10.1007/BF03341904>. PMID: 24442846.
4. Wisener KM, Driessen EW, Cuncic C, Hesse CL, Eva KW. Incentives for clinical teachers: on why their complex influences should lead us to proceed with caution. *Med Educ*. 2021;55:614–24. <https://doi.org/10.1111/medu.14422>.
5. Curseu PL, Ilies R, Vigna D, Maricutoiu L, Sava FA. Personality characteristics that are valued in teams: not always “more is better”? *Int J Psychol*. 2019;54(5):638–49. <https://doi.org/10.1002/ijop.12511>.
6. Nancarrow SA, Booth A, Ariss S, Smith T, Enderby P, Roots A. Ten principles of good interdisciplinary team work. *Hum Resour Health*. 2013;11:19. <https://doi.org/10.1186/1478-4491-11-19>. PMID: 23663329; PMCID: PMC3662612.
7. Luo L, Fan H-L. Strengthening the bond and enhancing team performance: emotional intelligence as the social glue. *J Organizational Eff People Perform*. 2017;4(3):182–98. <https://doi.org/10.1108/JOEPP-10-2016-0062>.
8. Mickan S, Rodger S. Characteristics of effective teams: a literature review. *Aust Health Rev*. 2000;23:201–8. <https://doi.org/10.1071/AH000201>.
9. Ancona D. Leadership in an age of uncertainty. Mit Leadership Center: Research Brief. 2005. [online.] Retrieved From: http://web.mit.edu/curhan/www/docs/Articles/15341_Readings/Leadership/Ancona_LeadershipinanAgeofUncertainty-researchbrief.pdf [19 Sept 2021].
10. Forck M. Why safety leadership is hard. *Prof Saf*. 2012;57(10):34–5.

Negotiation Skills as a Program Director

5

Laurel J. Bessey, Charlotte Ladd, and Art Walaszek

Introduction

Negotiation Is a Part of Day-to-Day Life as a Program Director

Negotiation is not a dirty word. Maybe it conjures images of backslapping deals in smoke-filled rooms. Or maybe it evokes memories of unpleasant encounters with used car salesmen. But almost any time when two human beings get together, they negotiate: What topic should they talk about? How far apart should they stand? How long should the encounter continue? How will they decide when to say goodbye? And what if one person has a request from the other person?

We teach our patients to negotiate, to be more assertive in having their needs met, to say no, and to find solutions to conflicts. Negotiation is built right into dialectical behavioral therapy training, for example: it is the “N” in the “DEAR MAN” mnemonic for interpersonal effectiveness [1]. In fact, we can view DEAR MAN as a helpful skill for getting something one needs (see Table 5.1).

Program directors engage in countless negotiations with residents, faculty, administrators, and (at home) their own family members. Topics range from quotidian, say, e.g., setting the agenda

Table 5.1 Interpersonal effectiveness skills

| | |
|-----------|---|
| Describe | Describe the situation objectively and nonjudgmentally. |
| Express | Express your feelings and opinions about the situation, including your rationale. Don't expect others to read your mind. |
| Assert | Assert yourself by clearly asking for what you want or by clearly saying no. |
| Reinforce | Reinforce the person you are talking with by telling them the positive effects of getting what you want and the negative effects of not getting what you want. |
| Mindful | Stay focused on the objective of the interaction. Maintain your position, even if it means being a “broken record.” Ignore distractions and don't respond to attacks. |
| Appear | Appear confident in your posture, vocal tone, eye contact, and body language. |
| Negotiate | Offer and ask for alternate solutions. Be prepared to reduce your request. Be willing to give in order to get. |

The “DEAR MAN” skills taught within dialectical behavioral therapy (DBT) can serve as a summary of one approach to negotiation, especially of the day-to-day variety. Adapted from Linehan (1993)

for a meeting, to complex and consequential, e.g., requesting a resident complement increase. To be effective leaders, program directors benefit from continually honing their negotiation skills.

The fact that program directors must create, foster, and mend relationships with so many people makes negotiating more complicated. Most of our negotiations are not one-and-done like buying a car every 10 years. It is unlikely that we can walk away completely from a negotiation if we

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don't get what we want or if we are unwilling to give the person we are negotiating with what they want. Rather, program directors are continuously and simultaneously maintaining relationships and negotiating – a tricky balance. More on this is in section “[People Involved in a Negotiation](#)”, below.

Negotiation Is a Set of Skills That an Education Leader Can Learn and Practice

Negotiation is an essential skill for healthcare leaders, including program directors. The Institute for Healthcare Improvement (IHI) includes negotiation in its framework for safe, reliable, and effective care and argues that effective negotiation skills are needed, “given the level of complexity in healthcare and the need to make decisions among groups of smart and passionate people who have different points of view” [2].

Effective negotiation entails having certain knowledge, skills, and attitudes. We can improve our skills by practicing, setting goals, getting feedback, and changing our behavior accordingly. We all have personality traits that, depending on the situation, can be helpful or counterproductive. For example, being eager to please others may decrease overt conflict and result in happier negotiating partners and quicker resolution of problems. However, it probably leads to suboptimal outcomes for all, especially for the partner who is eager to please. An important part of improving the skill of negotiation is being aware of and either addressing maladaptive traits prior to negotiating, deploying helpful traits during the negotiation, or enlisting the help of partners with the desired traits. We will discuss negotiation styles in section “[Pre-Planning](#)”.

This chapter will focus on negotiation as it pertains to being a program director – but these skills can be used by anyone negotiating on behalf of a graduate medical education (GME) program (e.g., associate program directors, vice chairs for education, etc.). Program directors should also develop negotiation skills with

respect to their own career development, for example, in negotiating salary and protected time. We refer interested readers to a resource such as Simone et al. [3] or Eisemann et al. [4].

Theories of Negotiation

You find a bicycle you would like to buy using a web-based service. The seller lives across town, and you meet her in a public spot to examine the bicycle. You like the bicycle – and a negotiation ensues. The seller is a stranger, and you are unlikely to meet again. To get the best deal, you could employ a *positional negotiation strategy*. In a positional negotiation, the two parties each stake out positions and then make reciprocal concessions until an agreement is reached, or not. To get their desired outcome, each party uses gambits such as “ask for more than you expect to get” and “never say yes to the first offer” [5]. Positional negotiation may be effective in a limited encounter such as this.

In contrast, *principled negotiation* focuses on underlying interests rather than positions. Imagine two people who each want an orange. There is only one orange left in the kitchen. How should they conduct this negotiation? A positional strategy likely will result in each person getting half an orange. But what if we ask why each person wants an orange? One wants to make orange juice, and the other wants the peel to zest a cake. In a principled negotiation, the two parties would explore each other's interests in the outcome and split the orange a different way [6].

The classic negotiation texts, *Bargaining for Advantage* and *Getting to Yes*, adopt a principled negotiation approach [7, 8]. In this chapter, we will rely most heavily on the former text by Shell [7], with some reference to Fisher et al. [8]. While Fisher et al. is a foundational text, Shell's approach is quite pragmatic and includes the handy bargaining styles assessment tool (see below). Shell organizes negotiation into four steps: preparation, information exchange, explicit bargaining, and commitment. He emphasizes thorough planning and preparation, careful lis-

tening to the other party to understand what they want (as in principled negotiation), and attending to signals the other person sends. Importantly, a successful negotiator demonstrates the following attitudes or “habits of thought” [7, pp. 20–23]:

1. *Being willing to prepare*: Probably not surprising, negotiators who are well prepared are likely to fare better than those who are not.
2. *Setting high expectations*: If you expect more, you will generally get more. A tricky balance is setting expectations high enough to be challenging but realistic enough to promote working relationships.
3. *Listening patiently*: Psychiatrists should be particularly adept at listening to their negotiating partners, asking questions, testing for understanding, and summarizing discussions.
4. *Committing to personal integrity*: Effective and ethical negotiators tell the truth, are reliable and consistent, and espouse values that they can explain and justify. They develop and maintain reputations that they are trustworthy people to negotiate with.

Elements of a Negotiation

Pre-Planning

Though negotiations are a common part of daily life as a program director, not every action will require a negotiation. So, the first step of planning a negotiation is asking: is a negotiation called for in this situation? If the program needs something, you may have to negotiate for it. If someone else is making a request of the program, they may need to negotiate with you to get it. Changes in curriculum, clinical responsibilities, supervision, and resources may require negotiations. Resolving conflicts between residents or among residents and faculty may require negotiations. It may help to craft a problem statement: “I must negotiate with (*person*) to (*solve what problem*)” [7, p. 251]. If it does not make sense to write such a statement, then perhaps you don’t need to negotiate. Section “[Building Relationships with and Motivation in Your Stakeholders](#)” dis-

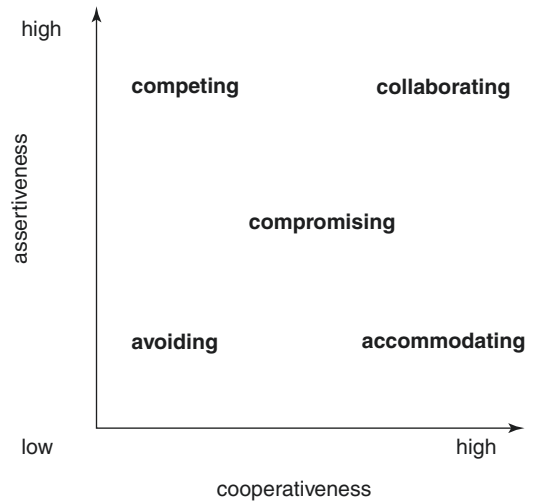


Fig. 5.1 Five negotiation styles. The Thomas–Kilmann model posits five negotiation styles, organized by cooperativeness (which could also be described as focus on the relationship with the negotiating partner) and by assertiveness (focus on one’s own goals). Adapted from Bing-You et al. (2010)

cusses scenarios in which you may not need to negotiate.

To be an effective negotiator, you should be aware of your style of negotiating or managing conflict. The Thomas–Kilmann model posits five styles arrayed along two dimensions: assertiveness or how much a negotiator attempts to satisfy their own concerns and cooperativeness or how much the negotiator works to satisfy the concerns of their negotiating partner (Fig. 5.1) [9]. Shell described the five styles as follows:

- *Accommodating*. People using this style “derive significant satisfaction from solving other people’s problems” [7, p. 243]. They tend to be emotionally attuned to others and can be particularly good at negotiating problems within teams. However, they may overvalue the relationship to their own detriment, which could lead them to feel exploited or resentful.
- *Compromising*. People with this style try to achieve closure quickly, applying a fair or reasonable standard. This approach can be helpful “when time is short, or when the stakes are small” [7, p. 244]. On the other hand, compro-

misers may miss a better solution because they do not fully examine their interests and the interests of their negotiating partners. They may want to slow down and ask more questions.

- *Avoiding*. People using this style “are adept at deferring and dodging the confrontational aspects of negotiation” [7, p. 245]. They use conflict-reducing methods and may be viewed as diplomatic and tactful. This could be a good approach when you are fine with things just as they are. Unfortunately, as psychiatrists know, avoiding stressful situations is unlikely to be effective and may even be counterproductive, e.g., problems simply fester.
- *Collaborating, also known as, problem-solving*. People with this style “enjoy negotiations because they enjoy solving tough problems in engaged, interactive ways” (Shell, 2006; p. 246). In addition, “they are assertively and honestly committed to finding the best solution for everyone.” On the other hand, problem-solvers sometimes needlessly convert simple situations into more complex problems and could annoy others seeking quicker solutions.
- *Competing*. For people with this style, “negotiating presents an opportunity for winning and losing, and they like to win” [7, p. 246]. They may overemphasize an easily measured outcome (e.g., money) at the expense of other outcomes that are equally or more important. And they may be particularly hard on relationships, leaving the “losers” of a negotiation feeling taken, coerced, or abused.

Note that these five styles are not mutually exclusive: people vary in the extent that they identify with and use each style. In other words, the styles are not necessarily fixed – people may be able to flex and use different styles, depending on the situation. The related bargaining styles assessment tool is available in *Bargaining for Advantage* [7, pp. 237–241].

The aforementioned IHI white paper recommends that healthcare teams “commit to using collaborative negotiation whenever possible” [2]. Alas, it appears that the most common negotiat-

ing styles among physicians are compromising and avoiding. In a study of 17 program directors who attended a faculty development retreat, 47% preferred compromising, 18% preferred accommodating, and another 18% preferred avoiding [10]. A study of obstetrics and gynecology residents and faculty found that they identified most strongly with the avoiding, compromising, and accommodating styles and identified least with the collaborating style [11].

These styles have also been referred to as “lose–lose” (avoiding), “win–lose” (competing), “lose–win” (accommodating), “splitting the difference” (compromising), and “win–win” (collaborating) [6]. Robbing and conning others are unethical negotiation styles that should never be used [6].

There can be significant gender and cultural differences in approaches to and expectations around negotiation. The five styles are meant to be a guide, not a universal description of how one should negotiate.

Planning

The more specific your vision of what you want and the more committed you are to that vision, the more likely you are to obtain it. – G. Richard Shell, *Bargaining for Advantage*

Setting a *goal* is critical for a successful negotiation. Shell defines negotiation goals as “things we strive toward that are usually beyond the range of past achievements” [7, pp. 28–29]. Goals motivate people, serving both to foster achievement and to avoid losses. In a negotiation, a goal sets the upper limit for what you will ask for and helps you set your direction.

Negotiators should stay focused on achieving their goals. Prior to beginning a negotiation, consider what you really want – what are your needs and interests [7, pp. 32–39]. Then set goals that are optimistic, feasible, and justifiable. Note that setting modest goals could be psychologically protective (that is, we are less likely to fail if we set low targets) but could result in not accomplishing as much as you could have. It is important that goals be specific so that you can focus on

what is most important. Additionally, “clarity will communicate confidence and resolve” to others. Avoid thinking, “I’ll just go in and see what I can get.” Next, commit to your goal, for example, by visualizing what it would look like to achieve your goal, by writing down your goal, or by talking with other people about your goal. Finally, bring your goals into the negotiation – even if it means carrying them on a piece of paper in your pocket or in a note on your smartphone.

Especially for complex or high-stakes negotiations, we recommend finding advisers or mentors who can help you prepare, strategize, and perhaps even practice the negotiation. In many cases, you will need to work as a team (e.g., with the department chair and department administrator or business officer) to negotiate with others. In these cases, it will be essential to meet with the other members of the team and prepare a strategy for the negotiation together.

You may wish to consider other stakeholders who have a similar interest to yours, since you may be able to form a coalition with them. This has three advantages: there is strength in numbers; this helps to demonstrate “social proof” of your proposal, that is, evidence that other people agree with you; and you may be able to develop alternatives to negotiating.

Finally, what if the negotiation does not succeed? In other words, what is your *best alternative to a negotiated agreement* (BATNA)? We recommend you identify one or more BATNAs. You may even be able to strengthen your BATNA by seeking out other options before you start negotiating [8, pp. 101–102]. By the way, the BATNA is not a dollar amount or a bottom line. It is simply another outcome that would work. This will beg the question: if your BATNA is acceptable, why even negotiate? If you think you can do better than your BATNA, proceed with the negotiation. If the negotiation doesn’t succeed, you still have a backup plan. You may also want to consider what the BATNA is for the person you are negotiating with – this could give you a sense of what to realistically expect.

Let’s say a program director needs someone to take over running the didactics on schizophrenia.

Their first choice is faculty A, who has limited time, and a close second is faculty B, who has expressed interest. When the program director approaches faculty A about taking over the course, the BATNA is faculty B teaching the course. If the negotiation with faculty A doesn’t work out, the program director can go with their BATNA (Keep in mind: if the alternative is acceptable, why not just start with faculty B?). However, if the BATNA is that the course will need to be dropped because there is no one to run it, then the negotiation with faculty A will need to go quite differently.

Execution

We encourage the reader who would like a deep dive into negotiation tactics and the concept of leverage to read the relevant chapters in *Bargaining for Advantage* or *Getting to Yes*. Here we present a summary of the two most likely negotiating scenarios, both of which assume that maintaining the relationship between negotiators is important:

Conflict over stakes is likely low. In this case, the program director is most likely negotiating with colleagues or with other members of the educational team. One of the overarching goals is to treat the person with whom you are negotiating well [7, p. 124]. The program director can adopt an accommodating approach, use problem-solving (discussed in the next paragraph), or compromise. You should start (“open”) the negotiation and be generous in your opening offer. You can use accommodation or a fair compromise when making concessions [7, p. 174]. You should “close quickly and amiably, assuring the other party of your goodwill” [7, p. 185].

We suspect that program directors have had many such negotiations. To continue the example of the schizophrenia didactics above (asking faculty A, with faculty B as an alternative), the program director would open by acknowledging A’s expertise and expressing gratitude that A is considering teaching the course. The program director could then engage in problem-solving to

identify under what circumstances A would teach the course (e.g., faculty A requests that residents identify cases for discussion) and then make reasonable concessions (e.g., ask a chief resident to help the residents in this task) and close quickly.

Conflict over stakes is likely high. This includes situations like mediating disputes among clinical services or between residents and faculty, forming new partnerships, and addressing problems across institutions. The best approach here is problem-solving, with compromise the second best [7, p. 128]. The goal is “to do well, but not at the expense of the relationship.” Program directors with accommodating or avoidant styles may not fare well because they discount their own goals and quickly defer to others’ needs. Rather, good problem-solving requires imagination, patience, and even conflict over each party’s legitimate goals [7, p. 172]. You should not open the negotiation unless you feel you have adequate information about everyone’s interests; open fairly, i.e., with a reasonable offer. You can make big concessions over little issues or little concessions over big issues; you may suggest brainstorming to find other options [7, p. 174]. Finally, when you close the negotiation, you should “leave the other side feeling good, but you must also be careful to achieve your fair share” [7, p. 185].

For example, let’s discuss an approach to a variant of the schizophrenia didactic: faculty A is the only clear choice, and A has expressed concern because she feels that prior residency teaching experiences did not go well, and her feedback was not listened to. It would be critical for the program director to gather information: review A’s past feedback about the course, talk with whomever A provided feedback to, and directly talk with A about her concerns. The program director suggests brainstorming a solution, and A requests protected time to develop the course. The program director and A agree to go together to the department chair with this request. The chair points out that protected time for course development should not be a prerequisite for just one faculty member and proposes a standard of 1 h of prep time for every 4 h of teaching time. A agrees to teach the course.

A few words about communicating during a negotiation: As with any relationship, establishing rapport is essential, not as a trick to get the other person to reveal information but to start to find common ground [7, p. 142]. Once you move into the actual negotiation, ask lots of questions. Skilled negotiators spend about 40% of their time on information gathering: asking questions, testing for understanding, and summarizing [7, p. 148]. This parallels the motivational interviewing OARS skills of open questioning, affirming, reflecting, and summarizing [12]. Program directors can then move on to the opening, negotiating tactics (accommodating, problem-solving, compromise), and closing of the negotiation, as described above.

Finally, what method should you use to communicate: in person, tele-video conferencing, phone call, email, text message, or a blend? In-person and video negotiations are time-consuming and can be emotionally draining but generally provide more information, for example, non-verbal communication [7, pp. 133–135]. Emails and text messages are convenient, may be preferred by people who like to avoid conflict, leave a record of the negotiation, and can help flatten hierarchies but are also prone to impasses, delays, “hitting send too soon,” and being devoid of tone and nuance. For an ongoing negotiation, a blend of these approaches may work well.

People Involved in a Negotiation

Program directors must negotiate with a dizzying list of people. They report to their department chair, perhaps other departmental leaders such as a vice chair for education, and to the Designated Institutional Official (DIO). In turn, depending on the organizational chart, administrative staff, associate program directors, and others involved in residency education report to the program director. Lateral relationships include other faculty within the department, at other clinical sites, and in the community. Program directors can have various relationships with residents: supervisor–employee, teacher–learner, and mentor–

mentee. Program directors must also navigate the challenge of having dual interests, which may be in conflict, for example, advocating for residents' needs and at the same time being a member of the faculty. In some ways, though they may not be directly involved in negotiations, our patients are the ultimate stakeholders because educational decisions have clinical effects.

Negotiating with a stranger is different from negotiating with a friend. A program director's negotiations lie somewhere in between: a working relationship, "the exchange relationships of everyday business life" [7, pp. 57–58]. Working relationships "can be sustained through more explicit conflict over relatively higher stakes" than friendships; and they may depend less on emotional support and more on "explicit reciprocity in a series of exchanges."

Shell proposed the following "rules of reciprocity" when negotiating with someone: be trustworthy and reliable; be fair to those who are fair to you; and let others know if you think they have treated you unfairly [7, p. 61]. Though applicable to any negotiation, these seem particularly salient for the working relationships you will develop and maintain in residency programs.

As psychiatrists, we want to know and understand other people. And that certainly applies to a negotiation and getting to know what the interests are of the person or people with whom you are negotiating. Perhaps there is common ground such that achieving your outcome will also benefit the other person [7, pp. 82–85]. A helpful exercise could be a role reversal wherein you play the person you are negotiating with, and a colleague plays you. Ask yourself, "how might it serve my (i.e., your negotiating partner's) interests to help this person (i.e., you)?" At the same time, you should consider what interests might result in the other party not agreeing to your proposal. In the role-play exercise, spend time asking, "why might I (i.e., your partner) say no?" Consider shared interests such as needing to do what is best for patient care and for recruiting high-quality residents and faculty to the organization.

What Can Be Negotiated

Now that we have presented key elements of the negotiation process and the people involved, we will discuss common issues program directors must negotiate. Whether you are starting a new program or maintaining a well-established program, these items are likely to come up as institutional and Accreditation Council for Graduate Medical Education (ACGME) requirements are updated, as residents' needs change with time, and as the need for well-trained psychiatrists increases.

Funding Residency Positions and Benefits

With the demand for psychiatric services increasing, there is an immense need to expand the number of psychiatry trainees by adding positions to existing programs and starting new psychiatry residency programs. Between 2011 and 2021, the number of psychiatry residency positions increased by 74%. In the 2021 US National Resident Matching Program (NRMP), only three psychiatry residency positions out of 1907 remained unfilled after the main Match [13]. This is evidence that our field is expanding quickly and successfully to try to meet the needs of our growing patient population.

Additionally, during the COVID-19 pandemic, we have seen (and likely will continue to see) an increase in psychiatric need in our current patients and an increased number of patients in need of mental health services. These data, combined with local data regarding access to psychiatry (e.g., number of patients requesting services, wait times for psychiatry, patients turned away from services), make a powerful argument for expanding residencies and fellowships. The American Association of Directors of Psychiatric Residency Training (AADPRT), the American Psychiatric Association (APA), and district branches of the APA may also be able to provide relevant workforce data. Such a needs assessment is an important part of preparing for the negotiation.

After assessing and making an argument for the need for additional residency positions, the planning phase is crucial. You will need to work with departmental leadership to determine goals for the negotiation, including what resources will be needed should you be successful in adding additional residency positions. With departmental leadership on board, you will then want to gain the support of any associate program directors and residency coordinators, as they will support the negotiation and help implement the expansion. You may need to work with faculty and leadership of other clinical sites to expand capacity for trainees. These can be negotiations in and of themselves.

Next, you will need to determine where you would like to try to obtain funding for the extra positions. This will involve knowing the salary and benefit costs for each resident over 4 years. Funding options may include direct funding from your sponsoring institution, grant funding, state funding, or funding from a third party/training site such as the Department of Veterans Affairs (VA). A solid working knowledge of GME financing will serve you well. Once you have determined your desired source of funding and gained departmental support, the next negotiation is with your institution.

When negotiating with your institution or system, you will most likely be working directly with your DIO, GME staff, or other institutional leaders. In addition to making a powerful argument, timing is key for this negotiation. Is the system in a place where they can fund additional residency positions? Or are you proposing an outside funding source and does that source include sufficient funds for salary and benefits? What are the overall goals of the institution and do these align with the expansion? For example, is the institution focusing on mental health service expansion? Are you asking during a time before the yearly budget has been made? Are you asking far enough in advance so that you could include the change in the next Match year? Your department leadership and/or DIO will likely be able to help you get a sense of the institution's overall goals and/or connect you with institu-

tional leadership who can provide further guidance on timing.

Personnel

A key element of any training program is having the appropriate faculty to supervise trainees. You will need several clinical sites with psychiatrists who have the experience, willingness, and educational skills necessary to teach residents. If you don't have enough appropriate faculty, you and/or your chair may need to negotiate for more faculty.

Prior to negotiation, conduct a needs assessment. Are the current practicing psychiatrists at your institution willing and able to teach or required to teach? Is there adequate supervision for the residents in the rotations that are offered or are more faculty needed? If so, which areas of expertise do these faculty have and are there any gaps? What training needs may the institution not be able to provide for residents?

If a need for more faculty is established, you will prepare for the negotiation by determining who you need to negotiate with and what information those stakeholders will need. When negotiating for additional or different teaching faculty positions, consider having the following information available: ACGME Common Program Requirements, noting specifically where any program deficits exist; ACGME survey results; resident evaluations of current faculty members; resident surveys of the program that indicate gaps in training; and detailed examples of any gaps or issues with patient care arising from them. Consider exactly what you are asking for: how many faculty, with what qualifications, at what sites, and with what time devoted to supervising residents?

One place where personnel negotiation is possible is directly with your department of psychiatry, clinic, or hospital. First, gain support of leadership with similar goals to yours, for example, a vice chair of education. This person may be able to help you prepare for negotiation, can be an ally in supporting your goals, and will likely

have an idea of the overall current state and goals of your department. You will then likely have to present the need to department leaders, including the department chair, medical director of a clinic or hospital unit, and other leaders who make hiring decisions for your institution.

If your department cannot meet all teaching requirements, you will need to negotiate with another department within your institution (e.g., neurology) or a third party (e.g., VA, state hospital) that may have faculty with the required expertise. Determine what exactly you need from faculty: supervision of residents, didactic teaching, or something else. Your department or institution leadership may be able to help by making necessary connections with third parties and by determining what needs to be negotiated (e.g., time, salary support, staff support).

Time and Compensation for Faculty

One potential barrier to having available, skilled teaching faculty may be that the faculty members do not have adequate time or incentive to teach or supervise residents. If in a needs assessment you find that you have the appropriate personnel to work with residents, but you are still receiving indicators from resident feedback, evaluations, and program surveys that there is poor-quality teaching or lack of availability of faculty to supervise, time and compensation for teaching may be your issue. To find the root of the problem, the first step would likely be a focus group of faculty members or a faculty survey designed to identify what the issues may be. If, for example, faculty feel they need more professional development surrounding teaching or working with residents, a negotiation may not be needed. However, if faculty are indicating they do not have time to supervise or teach or choose not to participate in these activities due to lack of compensation (either financial or professional benefits), this is a time where negotiation on behalf of your desired teaching faculty could be helpful.

This negotiation will be done directly with your department, sponsoring institution, or affiliated training sites. As always, preparation is key.

Be sure to bring data clearly outlining the issue. Consider working with an ally in leadership who can be supportive of your cause, such as a vice chair for education, who may be able to help you identify in advance any likely barriers to negotiation success. In this negotiation, having specifics of a proposed plan is essential. How much time would you like faculty to devote to teaching or supervising? How do you propose this time be compensated? One potential model is an educational value unit (EVU) system, which measures productivity in activities related to education and can provide a basis for allocating time and/or compensation [15]. If financial compensation is being asked for, where might this funding come from? For example, if time is desired for supervising residents, can clinical services supervised by faculty be billed for and serve as a source for faculty time compensation? Are there non-monetary benefits that could be provided to faculty, such as a clinical adjunct faculty position if you are within a university system? How does this align with the mission of your department and institution (i.e., what is the benefit to your stakeholders)?

If time and compensation negotiations as described above are unsuccessful, you may ultimately need to negotiate with faculty themselves to volunteer their time or spend their time differently. In this negotiation, knowing the faculty members, their goals, and their values will be key in recruiting them to volunteer their time to work with residents or change the way they are interacting with residents. These negotiations would need to occur on an individual basis.

Time and Compensation for Program Leaders and Staff

In addition to having adequate faculty for education, any well-run residency program needs adequate program leadership and staff to help the residency operate smoothly. Although programs are required by ACGME to have a certain full-time equivalent (FTE) allotted based on program size for a program director, associate program director, and program coordinator [14], you may

find that your program could benefit from additional staff to support its functioning. Or you might learn that your position does not, in fact, have the required minimum protected time. This negotiation will be directly with your department and may look very similar to negotiating time and compensation for faculty. However, there are a few key differences to consider in the negotiation. Specific information that may be helpful includes the following:

- What is the overall mission of the department, and how supportive is your department of education?
- What tasks are not getting done adequately or in a timely manner that would benefit from extra support staff or FTE?
- What are the current tasks and roles of each person in the residency leadership, and what is their current FTE allotment for these responsibilities?
- What future goals do you have for your program?
- What is the standard for programs in psychiatry across the country? Comparative data from similar programs can be very helpful here.
- Are there reasonable alternative solutions other than expanding staff FTE?
- In the situation wherein the program is not meeting the minimum ACGME requirements, what are the risks to the program, the department, and the institution? The risks could include problems with accreditation, poor recruitment of residents, and faculty turnover. Are these risks worth the small financial gain derived from the lower FTEs?

After considering these questions, you will be more prepared to communicate the program's support staff needs to department leadership.

Roles and Responsibilities

Another negotiation that will likely come up as a program director is negotiating your own role and responsibilities and those of your staff, faculty, and/or residents. This negotiation may be within your department, a different department,

your hospital system, or a different system depending on what is being negotiated.

The first possible negotiation is the position description, which outlines your roles and responsibilities and the roles and responsibilities of your associate program directors. You should receive and review your own job description prior to accepting your position. You may need to renegotiate your position description after that, and you will likely be involved in writing and/or negotiating the job description for any associate program directors. Every system runs differently. You may be asked to do things outside your program director role depending on your predecessor's activities and responsibilities, your skills and interests, or emerging departmental needs. When negotiating roles and responsibilities, there are a few key questions to ask yourself. Is this a task or responsibility that directly affects the running of a residency program? Was this in my job description initially? Is this something that I have time for? Is there someone else who could take this on?

You and your colleagues will need to consider your BATNAs carefully. If the position description does not match your goals, are you prepared to decline the position? Or if you are already in the position, would you leave it? You and the person you are negotiating with may need to do some creative problem-solving in order to come up with position descriptions that meet your goals and the goals of the department.

To better illustrate some of these points, we will give a few examples of responsibilities in various categories. One example of something directly related to running a residency program would be organizing supervisors for outpatient resident clinics. This directly affects the running of the residency and would reasonably be the responsibility of the program director or their support staff. A task less clearly related to leading the residency would be organizing transfer of resident outpatients at the end of the academic year. While this function affects the residency training, it is also necessary for clinic functioning and could reasonably be seen as something that clinic leadership or operations staff would manage. In this case, you would negotiate this responsibility with the clinic director to strike an

appropriate balance and use of your and their time.

As a leader, you may also be asked to take on responsibilities not directly related to the residency, such as organizing supervising faculty vacation coverage. In this case, you may be identified as someone who is trusted and perhaps has administrative support in your role to do this. It would be reasonable to negotiate out of this role as it does not directly relate to residency education. Alternatively, you could take it on as a “good citizen” of your department if you have the time or negotiate with your department for extra FTE or compensation to take this on.

You may also need to negotiate the roles and responsibilities of your residents. As changes in patient population, systems functioning, and overall work responsibilities occur, the ability of your residents to perform certain tasks may change. For example, at our institution, the number of overnight psychiatry consultation requests increases every year, creating more work for residents on call. At one time, the workload was manageable enough that residents could help arrange disposition for patients in the emergency department (ED). However, over time, this non-educational task became less and less feasible for busy residents. To better balance service and education, program staff had to work with our emergency department and other stakeholders within the system. This required investing a lot of time explaining the role and activities of a psychiatry resident and engaging stakeholders in conversations about improving clinical support staff. After initial compromise, we ultimately succeeded in acquiring social work support in the emergency department, eliminating patient disposition from the residents’ responsibilities. As system needs, educational requirements, and the role of psychiatrists change over time, it makes sense that the roles and responsibilities of our residents may need to shift also. This will not happen without program director support and negotiation.

Clinical Support

A program director may need to negotiate for clinical support staff for residents and supervis-

ing faculty. This may occur either in the hospital or in the clinic and is probably one of the more challenging negotiations you may face as a program director. As with any negotiation, we recommend looking at what the need is and first gaining the support of your department leadership prior to negotiating with others in your hospital or clinic system. Again, we will use an example to illustrate this.

Several years ago, the outpatient faculty in our department successfully lobbied to have nursing support added to the outpatient clinic in order to help with phone calls, electronic messages from patients, refill requests, and paperwork. The faculty found this very helpful. Our residents did not receive this nursing support. This led to their being dissatisfied with the core outpatient psychiatry rotation. Hiring, training, and retaining nurses are expensive and certainly beyond the resources of a residency program. The BATNA for the clinical administration appeared to be quite strong: they could simply continue the status quo if we could not negotiate an agreement. Our residency made the following arguments. First, dissatisfaction with the rotation (as measured by evaluations residents completed) was likely decreasing morale and affecting ACGME survey results. Second, our department was likely losing outstanding faculty recruits. Third, patients whom residents were seeing were getting a different level of care than patients seen by faculty. The institution hired nurses to support residents’ work in our outpatient clinic.

In a hospital setting, depending on resources and culture, your residents and/or faculty may be responsible for things that are not necessarily the role of a psychiatrist or helpful for education such as finding disposition for patients, arranging follow-up for patients, or other such tasks. One way to advocate for your faculty and residents that may free up helpful teaching time for faculty and better manage the workload for all in this situation would be to encourage the hiring of or shift in responsibilities to social workers or case managers for some of these tasks. Depending on the system you work in, this may be very tricky and with many more stakeholders than in the outpatient setting. This negotiation may fall flat if stakeholders are not on board with your proposal,

if funding doesn't exist, or if hiring personnel does not go as planned. However, continued advocacy, some compromise, and slow change can eventually lead to a shift needed for your program.

Resources: Space and Equipment

Program directors may also need to negotiate for space and equipment. Again, this will involve outlining the need, finding out the costs or considerations for space, and presenting a compelling argument to stakeholders that may include your department or clinic. In terms of space, you may need to negotiate for (a) additional office space for staff or residents in a clinic, (b) dedicated places in the hospital for on-call staff to sleep or use as a work room while performing clinical duties, or (c) access to space for wellness such as an on-site workout room or library. With respect to equipment, what do your residents need to perform their work, and do they have access to this? This may include adequate personal protective equipment, computers, desk space, or other telehealth equipment. In looking at space and equipment needs, it is also important to prioritize with each stakeholder what is most important to negotiate for and what may be less important if compromise is needed.

Tips and Challenges

We will conclude our chapter by discussing some of the helpful things we have learned and some of the challenges we have faced in negotiation for a residency program.

Building Relationships with and Motivation in Your Stakeholders

Part of the unwritten role of a program director is to network, engage in, and maintain relationships with others who will assist you in running your program. As discussed above, the relationships

that program directors develop are best thought of as working relationships, somewhere between friends and strangers (Of course, some of these relationships can become friendships!). It may not be apparent when you meet someone that you will need to negotiate with them later. As a rule of thumb, a program director should always be polite, courteous, and professional in encounters with colleagues and others. Additionally, when you know you will be working with or negotiating with someone in your role as program director, it is useful to reach out, introduce yourself, and start building the relationship proactively. If people you need to negotiate with have a positive relationship with you already, they are more likely to listen to you and take the time to help, even in difficult situations.

In addition to building positive relationships with stakeholders, learning about them and their professional motivations is also helpful. By knowing their motivations and priorities prior to negotiations, you can think ahead about how your "ask" or vision may fit with theirs. This ultimately allows you to present a more convincing or mutually beneficial argument and have your proposal taken under consideration. Additionally, if you are planning a negotiation and realize that what you are negotiating for does not align with the motivations of an important stakeholder, you can take time to discuss the issues with them beforehand to enhance their understanding and motivation to help. This is challenging and is not possible in all situations, however. If there is time to build motivation, you can work with your team on a strategy for how best to do so.

Having Allies in High Places

When forming relationships with stakeholders, it can be helpful to figure out who has influence in what arenas, who may be above you hierarchically in terms of leadership, and who has interests that align with your priorities in education and residency training. Developing relationships with people who are higher in leadership and have similar vision, priorities, and goals can be priceless in a successful negotiation. These

“allies in high places” can be important in helping you navigate larger systems that are difficult to understand, figuring out optimal timing of a negotiation, and advocating for you and your negotiation in discussions you are not part of. In academic institutions, “allies in high places” may be a vice chair for education in your department, a medical director of an inpatient unit or clinic where trainees rotate, or a senior faculty member. When possible, depending on the specific negotiation, timing needs, and who you will be negotiating with, it is helpful to talk with these potential allies ahead of time to gain support, feedback, and advice. In addition to offering feedback or an approach that may help you be more successful in your negotiation, they may also themselves talk with decision-makers about the merits of your case. In negotiations where the decision-maker may not be an expert in the area, the decision-maker may also ask you during the negotiation conversation if you spoke with certain people who are more expert or who are advisory to the decision-maker about this ahead of time. Doing so prior to the negotiation can save time and help move decisions forward in a more efficient manner. Additionally, if your negotiation is initially unsuccessful, your ally may be able to advocate for a compromise or recommend resuming negotiations when a more opportune time or context arises that you may not be aware of.

Is a Negotiation Really Necessary?

While many situations require negotiating for change, resources, or time, some things can be accomplished without a full negotiation process. When in the throes of building and maintaining relationships and rapport, it can sometimes be difficult to spot areas where negotiation is not necessary and decisions can be made. Some situations to consider where the program director is the “ultimate decision-maker” and so a negotiation may not be needed include but are not limited to the following: a decision that is low cost/risk and high reward (e.g., changing a form or process to make it more useful, such as a leave

form or residency recruitment process), a change in responsibilities of someone who is under your oversight (e.g., a program coordinator, associate program director, or resident), a change in schedule or timing of rotations that is consistent with ACGME program requirements and does not require additional funding or approval, responding to a direct violation of an existing policy where immediate action is needed or enacting a remediation or disciplinary plan. When making decisions where negotiation is not necessary, it is still helpful to consider who the change involves and how it may affect them prior to acting. When possible, being transparent and providing time for preparation, feedback, or questions will help you maintain relationships even when a decision has already been made and will hopefully help those affected by the decision understand the situation better.

Negotiating as the “Boss”

Residents and faculty routinely make requests of the program director. Our first bit of advice to program directors is to *recognize that you have entered a negotiation*. Then, the same principles discussed in section “[Execution](#)” apply here, with approaches tailored to low-stakes and high-stakes situations. Trust and, to the degree allowable, transparency are critical. Residents will be in the program for up to 4 years and may ultimately become your colleagues; faculty are already your colleagues. Thus, the rules of reciprocity discussed in section “[People Involved in a Negotiation](#)” are especially germane: be trustworthy and reliable; be fair; and let others know if you think they have treated you unfairly.

A word about transparency

As the boss, there are times you will not be able to be fully transparent about a decision or why a change is made, such as sensitive personnel issues. However, if you can be transparent, letting people know explicitly what you are asking for can help prevent confusion. For example, if you are asking for input on a decision, be clear about it so that the other party does not think that they

are deciding. If possible, let who you are negotiating with know what constraints there are surrounding the decision to be made. For example, if a final decision is to be made by another party such as a committee (e.g., program evaluation committee), you should be transparent about this. Note that this can also provide you cover if an unpopular decision must be made. Residents and faculty often have the false impression that you, the program director, have the ability to change everything related to the program. Letting people know what other stakes, stakeholders, and decision-makers are at play when possible can help prevent disappointment when a decision turns out differently than the input they provided. When change and difficult decisions must be made, oftentimes, someone will be disappointed, but being transparent when possible can help others understand where you are coming from and their role in the negotiation.

Knowing Your Priorities and Picking Your Battles

As a program director, you probably have a vision for how to improve your residency program and what direction you would like to see the program grow in the future. Such improvement and direction may require multiple changes that will need to be negotiated over your tenure as program director. Aside from your vision, there will also be the seemingly constant barrage of unanticipated challenges, problem-solving, tasks, and unexpected negotiation that comes with the day-to-day running of a training program. Because your time, program funding, and other resources are limited, you will on occasion need to be flexible in prioritizing negotiations. This could mean delaying a planned negotiation to negotiate for something more urgent, allowing you to focus on what truly matters in a timely fashion. Additionally, by making choices about negotiation, you will be clear to your leaders and stakeholders about what is most important at the time so that they can support you.

In addition to prioritizing what you are negotiating, picking your battles when it comes to

negotiation is important to success. While all negotiations you will pursue for the program are likely very important and seen as essential by you and your staff/trainees, the people you are negotiating with often have many competing priorities to consider outside of training. Knowing when to compromise or pause a negotiation versus when to continue to push for the specific terms you wanted can be one of the more challenging things to determine. Building relationships with and inspiring your stakeholders can help you sort out some of the behind-the-scenes details ahead of time to help you pick your battles wisely. In a position where you will likely need to pursue multiple negotiations over time, it is especially important to maintain rapport with people you will negotiate with frequently. In some cases, this may be more important than getting exactly what you hoped for in the negotiation. By picking which negotiations can be compromised or put aside for some time, you will be seen as collegial and collaborative by others, which can go a long way with future negotiations that may be more important. Additionally, picking your battles is helpful for protecting your time and morale as a program director and allows you to be more effective in your position overall.

Timing and Time Frames

Having a vision for what you would like to improve in your program and having the ability to advocate for these changes are one of the more exciting parts of being in program leadership. We often enter our positions in education with passion and a desire to make things better for our trainees as soon as we can. While it can be tempting to want to make a lot of changes at once or in a short period of time, this is not always in the best interests of yourself and the program. Pursuing multiple negotiations at once may lead to disappointing outcomes and frustration in the process. We have learned that timing of negotiations is key to their success. Whether you are just starting out or have been a program director for some time, we suggest thinking of making changes over a longer time period where possi-

ble. Thinking of changes, vision, and negotiation in a five-year time frame or even longer tends to be more realistic and helpful in the long run. Additionally, managing your expectations in terms of the time needed between successful negotiation and implementation of what was negotiated is important, as many changes take time and planning to implement successfully. If you are realistic and flexible about the time frame, your negotiation is also likely to go more smoothly.

One must also consider the optimal timing for proposing a change and implementing it. For example, trying to negotiate a major residency schedule change too soon before the start of the academic year is more likely to lead to frustration and less likely to lead to the successful change you intend. In this example, planning ahead 1–2 years is more likely to result in successful negotiation or change.

Experienced mentors outside your institution can help in assessing realistic time frames for negotiations and program change. National organizations such as AADPRT or the Association for Academic Psychiatry (AAP) provide such mentorship. Ultimately, negotiation success depends on a lot of factors lining up. However, if you take the time to plan ahead, understand departmental and institutional factors affecting your program or the subject of your negotiation, and strategically time when you present your request, you will have set yourself up in a more favorable position for success.

Following Up on an Unsuccessful Negotiation

Even with the best planned approach and the best intentions, not every negotiation you pursue will be successful. After taking time to let any immediate frustration or other initial emotion pass, it can be helpful to debrief an unsuccessful negotiation with allies or stakeholders soon afterward. These people may be able to help you see different perspectives or reasons why your negotiation may not have been successful this time and also to help you determine what, if any, next steps to

take. For example, if your timing or anticipation of stakeholder motivations were not correct, others can sometimes provide additional information or perspectives so that you may proceed with a different strategy in the future. You may also realize after talking with your team that this is not a negotiation worth pursuing further or that returning to it at a later date may be more successful. You may discover that you need more data or other supporting information to justify an expense or movement forward on an idea. Additionally, some negotiations require time, persistence, and culture change, or taking smaller steps incrementally. After debriefing the negotiation and any new information with others, it is helpful to think of what, if any, your next steps will be. If the negotiation is important and is something that can be continued at a later time, it may be worth following up with your stakeholders on this at a later date when circumstances or priorities may be different. This may be the case especially with larger negotiations such as expansion of a program or addition of support staff. Some things, however, may not be worth further follow-up, and in those cases, it is best to learn what you can from the unsuccessful negotiation process and move on, reminding yourself that even the most experienced and accomplished people have unsuccessful negotiations at times.

Negotiation as Listening and Empathy

We often think of negotiation as having a need or want, making an ask, and talking back and forth with others persuasively with the goal of getting what we want and need. While this may be the general purpose of negotiation, sometimes using a different approach can provide helpful information and help you to be more successful. In any negotiation situation, the parties we are working with will most often have a perspective that is different from our own. To be able to listen to the other person and to imagine yourself in their situation is an important skill of a truly great negotiator – in fact, as we discussed above, Shell considers listening patiently as one of four “hab-

its of thought” of successful negotiators [7, pp. 20–23]. Listening and perspective taking can be especially helpful when negotiating with people under our supervision or on behalf of people in a hierarchically lower position. Especially when negotiating a responsibility change or an issue that directly affects the other person, it is important for them to feel heard and understood, whether or not that will ultimately change the outcome of the negotiation or decision. As discussed earlier in this chapter, active listening and reflecting can be helpful in these cases. This will not only help you grow as a leader, but it will also help build trust and confidence of others in your leadership abilities and interest on their behalf.

An example of this was negotiating when and how residents would return to providing face-to-face care during the COVID-19 pandemic. At the beginning of the pandemic, given lack of adequate personal protective equipment (PPE) and access to testing for the virus, a majority of our residents providing clinical services were switched to telehealth over video. As the pandemic progressed, resources and knowledge improved and the request for face-to-face psychiatric care became stronger from the institution and our patients. Although the transition back to face-to-face services was inevitable, we took the time in a virtual program director meeting to inform and prepare the residents for the upcoming change and elicit their concerns and feedback on the process. During this time, we had to make explicitly clear what we had control over and not (e.g., we could control their requests to ensure supervisors would also be back on site and to make adequate PPE available, but we could not control the exact timing of their return or the behavior of consulting services). By hearing residents’ fears, concerns, and requests, we were able to empathize and validate these concerns, helping the residents feel understood and appreciated. Additionally, some of their requests were able to be taken into consideration to provide a better overall experience for both residents and faculty upon their return to face-to-face care. Listening and explicitly showing appreciation are two things that will never lead you wrong in a negotiation.

Empathy can help you understand the situation of the person you are negotiating with in a different way, which may help you feel better about a decision should a compromise or unsuccessful negotiation take place. When you listen to others, they may also be more open to hearing your perspective on things you feel are vitally important to your program. This can have both current and future benefits to you in your role.

Conclusion

Negotiation is a vital and learnable skill for program directors. In order to sustain and improve the quality of a residency program, all program directors will need to negotiate for faculty time, administrative support, clinical support, and resources. Program directors can become successful negotiators by preparing in advance, setting high but achievable goals, engaging stakeholders, listening carefully to their negotiating partners, and maintaining integrity, trustworthiness, and high ethical standards. Program directors should become aware of their natural and preferred negotiating styles and how these could help or not, depending on the type of negotiation. Because of the importance of building and maintaining relationships in graduate medical education, negotiators should explore underlying concerns and try to identify common goals that, if achieved, will benefit all parties.

Resources

Fisher, Ury & Patton’s *Getting to Yes: Negotiating Agreement Without Giving In*

This is the classic text espousing principled negotiation, first published in 1981. The authors invented the term BATNA, the best alternative to a negotiated agreement, discussed in detail in section “[Planning](#)”. Check out the related Harvard Program on Negotiation: <https://www.pon.harvard.edu/free-reports/>.

Shell’s *Bargaining for Advantage: Negotiation Strategies for Reasonable People*

In this chapter, we rely most heavily on this text, which is readable, pragmatic, and filled with many vivid examples from history and the business world. The book includes a copy of the Bargaining Styles Assessment Tool, which can help you identify your preferred negotiation style(s).

References

1. Linehan MM. Skills training manual for treating borderline personality disorder. New York: The Guilford Press; 1993.
2. Frankel A, Haraden C, Federico F, Lenoci-Edwards J. A framework for safe, reliable, and effective care. White paper. Cambridge, MA: Institute for Healthcare Improvement and Safe & Reliable Healthcare; 2017.
3. Simone AM, Simone M, Block L, LaVine N. Contract negotiation skills: a workshop for women in medicine. *MedEdPORTAL*. 2020;16:10910.
4. Eisemann BS, Wagner RD, Reece EM. Practical negotiation for medical professionals. *Semin Plast Surg*. 2018;32:166–71.
5. Dawson R. Secrets of power negotiation: inside secrets from a master negotiator. 2nd ed. Franklin Lakes, NJ: Career Press; 2001.
6. Clay-Williams R, Johnson A, Lane P, Li Z, Camilleri L, Winata T, Klug M. Collaboration in a competitive healthcare system: negotiation 101 for clinicians. *J Health Organ Manag*. 2018;32:263–78.
7. Shell GR. Bargaining for advantage: negotiation strategies for reasonable people. New York: Penguin; 2006.
8. Fisher R, Ury WL, Patton B. Getting to yes: agreement without giving in. New York: Penguin; 2011.
9. Kilmann RH, Thomas KW. Developing a forced-choice measure of conflict-handling behavior: the “MODE” instrument. *Educ Psychol Meas*. 1977;37:309–25.
10. Bing-You R, Wiltshire W, Skolfield J. Leadership development for program directors. *J Grad Med Educ*. 2010;2:502–4.
11. Ogunyemi D, Tangchitnob E, Mahler Y, Chung C, Alexander C, Korwin D. Conflict styles in a cohort of graduate medical education administrators, residents, and board-certified physicians. *J Grad Med Educ*. 2011;3:176–81.
12. Miller WR, Rollnick S. Motivational interviewing: helping people change. 3rd ed. New York: The Guilford Press; 2013.
13. National Resident Matching Program. Match results statistics, psychiatry – 2021 [Internet]. [Cited 2021 June 19] Available from: https://mk0nrmp3oyqui6wqfm.kinstacdn.com/wp-content/uploads/2021/01/442_MRS_Psychiatry21.pdf
14. Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in psychiatry [Internet]. [Cited 2021 July 15] Available at: <https://www.acgme.org/specialties/program-requirement-and-faqs-and-applications/pfcatid/21/psychiatry/>
15. Mezrich R, Nagy PG. The academic RVU: a system for measuring academic productivity. *J Am Coll Radiol*. 2007;4:471–8.



Recruitment in Graduate Medical Education

6

Jessica G. Kovach, Sandra D. Batsel-Thomas,
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Mission and Vision

Recruitment should always start with the end in mind. Begin by establishing the mission and vision of the program. This will, in turn, allow identification of the attributes and experiences of the ideal resident or fellow. Ideally, mission and vision are established in collaborative departmental discussions. These discussions take time and should occur months (or years) before recruitment begins.

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Questions to consider include

- What is the current culture of the program? Does the program wish to change this, and if so, how and why?
- What are the values and strengths of the program?
- What are the targeted areas for growth and future programmatic goals?
- What programmatic attributes are unique?
- Why would an applicant choose to train in the program?
- Are there opportunities that would attract applicants with certain career goals?
- What characteristics would enable a resident or fellow to thrive in your program?
- What is the program/department doing to recruit and support a diverse workforce?

New programs and existing programs looking to revamp recruitment will find this an exciting opportunity to identify a clear vision for the future of the program. Identification of qualities that make an applicant an ideal fit for the program will provide a framework for many of the recruitment steps ahead.

Outreach and Pre-application Recruitment

Recruitment starts well before a program director starts reviewing applications. Once you have fleshed out your mission and vision and used that to determine the qualities that will make an applicant an ideal fit for your program, it is time to think about how to get the attention of applicants with those qualities and encourage them to apply to your program. In this process, every program should consider the following questions:

- Where do prospective target applicants obtain their information about programs?
- What information should programs highlight and promote?
- How do other residency programs get noticed?

As the readers of this book will surely be aware, public health and safety during the COVID-19 pandemic triggered transitions to the entire learning environment. The pandemic accelerated remote learning, increased crowd-sourcing of educational materials, and expedited the introduction to telehealth as part of the clinical experience [1, 2]. The use of social media, which was easily accessible before the pandemic, became even more prominent [3, 4]. While word of mouth and traditional reputation continue to be important, students today rely heavily on Internet-based sources to select where they apply and eventually how to rank programs [5]. Common sources of information utilized by applicants today include directory and ranking sites like Doximity, Residency Navigator, The American Medical Association (AMA) Residency and Fellowship database – the Fellowship and Residency Electronic Interactive Database (FREIDA™) Online, Texas Seeking Transparency in Application to Residency (TexasSTAR) site, the Association of American Medical Colleges (AAMC) Residency Explorer, in addition to discussion-based sites like Reddit and Student Doctor Network.

Prior to the pandemic, many programs seemed to lag in their use of social media. However, following 2020, most programs strategically

expanded visibility and outreach in new forms to supplement traditional in-person experiences like away rotations and traditional on-campus interviews. Social media is becoming the common solution for recruitment and outreach. The current target group of applicants is Millennials [6]. This generation is comprised of individuals born in the early 1980s to mid-1990s. This cohort highly utilizes social media and likely spends more hours on it each day than the faculty recruiting them. This trend is unlikely to change. Therefore, it should be an essential recruitment tool as future applicants are already there.

There are a few tenets in developing a social media strategy for recruitment. First, social media exists to raise visibility and increase connection. “Selling” a program well can assist decisions around potential fit for an applicant preinterview. Second, social media provides an accessible forum for the unique aspects of a program that cannot always be captured in a more static institutional website. There are opportunities to showcase some of the personality and culture that exist in the program. The familiarity and ready incorporation of multimedia through pictures and videos can provide a better glimpse into a program. Third, social movements and reform have found a home within social media. As such, programs can use social media to highlight programs’ progress with inclusion, diversity, equity, and antiracism. Finally, for new, community, and smaller programs, social media may help level the playing field in reaching potential applicants. Newer programs will find that reputation and operational history greatly influence peer perception and ranking sites. In the absence of information, students and future applicants may overly rely on these sources. Likewise, discussion threads can easily contain outdated information or misinformation. A regularly tended social media account will allow the program to better shape the narrative in a way that is timely and responsive to interest.

Program directors with personal experience with social media may find maintenance of a social media account to be second nature. However, program directors who are not as familiar with the details of social media should engage

a faculty member or chief resident to monitor and update the program's social media presence. The program's current residents are an important resource since they will likely have a more current idea than faculty of what applicants will find attractive on social media sites and which social sites will provide the most traffic. However, the appropriateness of social media posts should always be monitored by the program in some form. Parent institutions will have media policies in some format, and these should be reviewed. Some institutions have a centralized way to monitor and approve all posts. Program directors are encouraged to explore the social media posts of other programs to familiarize themselves with typical posts.

A less-flexible means of showcasing the program is the department and program website. Websites continue to be important and should be updated at least once per year, if not more often. Important information is usually housed on program websites about overall program structure. The program mission statement should be featured prominently on the website. Other common content on websites includes a list of graduate job and fellowship placements, the work of diversity and inclusion committees, well-being resources and efforts, welcome letters from program directors and chief residents, and "day in the life" sections that highlight the experiences of current residents. Programs may choose to embed videos or link directly to their social media accounts. Applicants are particularly appreciative when programs include transparency about recruitment on their websites. This may include directly stating what the program looks for in applicants, any score cutoffs used, number of positions and interviews, and anticipated dates for release of interview offers. Program directors should explore the websites of other programs and check on the maintenance of their own program site regularly.

The loss of the in-person interview day during the 2020–21 recruitment cycle forced programs to consider proximal experiences, delivered virtually. Residency fairs, typically conducted at major conferences, were converted to online and often promoted through social media. Program

Directors may consider hosting virtual open houses or participating in virtual recruitment fairs hosted by other organizations such as AADPRT, the Psychiatry Student Interest Group Network (PsychSIGN), the Student National Medical Association (SNMA), or other specialty organizations. If the program is associated with a medical school, the program director could consider coordinating with the local Psychiatry Interest Group to help foster interest in the field and their own program.

Programs may consider starting even earlier in the pipeline by engaging with or even developing a pipeline program to promote interest in psychiatry in high school and college students. For more information on pipeline programs, please see Chap. 7.

Logistics of Recruitment

What is needed to run a successful recruitment season? Breaking this question into more manageable pieces will keep it from becoming overwhelming. What resources are needed to recruit, select, and interview applicants for my program? This is meant to be a broad overview, and the authors will go into more detail elsewhere in the chapter.

- (a) Advertising – Consider how the program is showcased to interested applicants. Is the website up to date? Does the website include videos of clinical sites? Remember institutional/hospital systems may need to provide permission to film videos and/or add content to a program website. Review the Outreach and Social Media section of this chapter.
- (b) Screening of applicants – Establish who will screen applications and how much time will be needed to do so. Determine if a coordinator will complete the bulk of this work, if it will be done by the program director and associate program directors, or if it will be done by a committee. The number of person-hours necessary will be determined by the depth of the screening process as well as the number of applications screened. This can

vary anywhere from 4 hours to over 160 hours per program.

- (c) Invitations to interview – Once applicants have been selected for interview, how much of the coordinator’s time will be necessary to notify applicants and schedule interviews? What software and/or web-based programs will coordinators be using to keep track of applicants and interview spots? While some programs use only ERAS, others have chosen in recent years to pay for scheduling programs that advertise a smoother process.
- (d) Interview day – Time, space, technology, and cost must be considered. How many days per week will you be interviewing and how many faculty and residents will interview each applicant? Consider resident time necessary for tours and any informal interactions with applicants. Coordinators, faculty, and trainees will all need time to be present for interview season. Space must be considered and reserved. Will all interviews occur in the same space, or will applicants need to be shuttled across the clinical campuses? For virtual interviews, technology will be required and a backup process for technology failures must be in place.

Nuts and Bolts: Resources Needed for Successful Recruitment

Electronic Residency Application Service (ERAS) and the National Resident Matching Program® (NRMP)

Each program or residency track must be registered with both ERAS and the NRMP. The NRMP, known commonly as “The Match®,” is a private, nonprofit organization used by the majority of residency applicants and residency programs to Match® applicants to residency positions. The NRMP uses “a computerized mathematical algorithm to align the preferences of applicants with the preferences of program directors in order to produce the best possible outcome for filling training positions available at U.S. teaching hospitals.” More information can

be found on the NRMP website: <http://www.nrmp.org>. ERAS is a service provided by the AAMC that allows medical students to centralize their applications to residency programs. ERAS also allows programs to screen applications, select applicants for interviews, schedule interviews, and create a rank list. Program directors must review policy and timeline information on the ERAS and NRMP websites as there are changes periodically.

Each residency program or separately matching track within a program (Research, Integrated Child and Adolescent, Rural Psychiatry, etc.) must be registered uniquely with both ERAS and the NRMP. Each year program directors of registered programs receive an email from ERAS Account Maintenance (EAM) with a login ID and password for annual registration. Following registration, programs can add information, including a website link, about the program. Later in the chapter, we will provide more details on how to use ERAS to screen and review applications.

Each year program directors must also log in to NRMP to certify that the program will use the Match®. The NRMP allows both programs and applicants to enter a Rank Order List (ROL) of choices. Program directors can enter this list manually or download the list from ERAS for entry into the NRMP. Administrative staff or associate program directors (APDs) can enter a list into the NRMP system, but the Program Director is the only individual who can certify the list.

Programs filling postgraduate year (PGY) 1 positions must follow the “All in Policy” [7]. This policy states that “any program registering for the Main Residency Match® must register and attempt to fill all positions through the Match® or another national matching plan(7).” After registering with NRMP each year, program directors must also decide if they will use the Match® Week Supplemental Offer and Acceptance Program (SOAP) to fill any positions that do not fill in the Match®. Programs that opt out of participating in SOAP cannot make offers for any unfilled position until after the SOAP process has concluded. Most programs elect to utilize the

SOAP if necessary. Any program that uses the Match® for PGY1 positions is restricted from filling any unfilled positions outside of the Match® until after the Supplemental Offer and Acceptance Program (SOAP) has concluded.

Some but not all psychiatry fellowship training programs participate in the Match®. At the time of writing this chapter, psychiatry fellowships are not bound by the “All in Policy.” Program directors must review the NRMP policies each year as there are significant consequences for violating the Match® agreement, including but not limited to not being able to participate in the Match® in subsequent years.

Calendars for both the residency and fellowship application and the Match® processes can be found on the ERAS and NRMP websites. Program directors must familiarize themselves annually with important dates from these calendars.

The Roles of the Program Coordinator and the Graduate Medical Education (GME) Office

The degree of institutional guidance, resources, and integration for each step of the recruitment process will vary between institutions. At most institutions, a centralized GME office provides guidance, resources, and some standardization and oversight of the residency recruitment process. Psychiatry program directors should familiarize themselves with the recruitment expectations, policies, and resources provided by their institution.

Program directors should establish early in the recruitment process if their program’s recruitment goals align with those of the institution. If not, consideration should be given to why the misalignment exists and if such divergence is appropriate. Appropriate reasons may be specific to the specialty of psychiatry or to a geographic region where the psychiatry program is primarily located. Program directors may find that the metrics used to measure their recruitment success within the parent institution may not align with what makes a resident successful in their indi-

vidual program. Anecdotally, internal scorecards may include average USMLE score, international medical graduate (IMG) vs. US graduate, how far into the Match® list each program goes to fill, or number of underrepresented minorities matched. The authors of this chapter do not recommend allowing any single metric to drive recruitment; however, we find it helpful to be aware of parent institution’s expectations and measurements of “success” so that program directors can be prepared, if they do not meet these metrics, to explain the deviation from expectations. It may also be important to discuss any discrepancies with the departmental chair, who may also be held accountable by the institution for meeting institutional expectations.

Centralized GME resources can greatly reduce the burden of recruitment on an individual department. Wherever possible, program directors should utilize these resources. Examples include website design and upgrades, institutional social media accounts, training for coordinators and program directors on aspects of recruitment, virtual or in-person recruitment events promoting diversity and inclusion, online promotional materials such as video tours, and discounted travel resources.

One of the most important people in the residency recruitment process is the program coordinator (note that some institutions title this position “administrator”). The coordinator is usually the first person with whom applicants interact. Leading up to the interview day, the coordinator will be in contact with applicants via phone or email. Friendly and professional interactions make for good first impressions. Based on these early interactions, applicants may start to develop presumptions about the personality and organization of the program. The coordinator’s interactions with the applicants are ultimately viewed as a reflection of the program.

The program coordinator can and should be helping with all parts of the recruitment process. For example, the coordinator should be involved in developing and maintaining web content. Depending on a coordinator’s level of competence and experience, maintaining social media accounts and website may also be part of their role. Coordinator participation in candidate

screening varies between programs. In some programs, the coordinator is not involved in the screening process at all. In others, the coordinator may complete nearly the entire process and only present “on the fence” applications to the program director or their designee. Despite this delegation, the program director is ultimately responsible for all aspects of resident recruitment. If the coordinator is completing screening, they should be intimately familiar with the program’s recruitment goals, knowledgeable about which application items merit attention, and knowledgeable about relevant hiring practices. Following the screening process, the coordinator usually extends interview invites, schedules the interviews, distributes schedules to applicants and interviewers, and sends programmatic information and promotional materials to applicants. The coordinator should help plan for, organize, and operationalize the recruitment day. After the interview day, the coordinator should help in collating and collecting evaluation data about the applicants. Finally, most coordinators help with ensuring that all data needed for the ranking process are organized for the program directors. While coordinators do not typically interview applicants, they often know what type of residents fit well with the program, including the existing residents, and should be encouraged to provide input on interpersonal concerns outside of the formal interview. The importance of a highly skilled program coordinator cannot be overemphasized.

Screening and Strategy for Application Review

With the increased interest in psychiatry among US medical students and the increase in the number of medical students and graduates participating in the Match®, matching into psychiatry has become more competitive than it has been in the past. The number of US seniors matching into psychiatry has increased from 640 in 2011 to 1205 in 2021 [8]. US medical students, on average, have applied to an increasing number of pro-

grams over the last several years. US allopathic students have increased from applying to an average of 31.77 programs in 2016 to an average of 52.77 in 2021. US osteopathic students have similarly increased from applying to an average of 36.39 in 2016 to an average of 74.77 programs in 2021 [9]. As a result, psychiatry programs have seen a dramatic increase in the number of applications from US allopathic and osteopathic seniors they receive each year for the Match®. In 2016, the average program received 222.88 applications from US allopathic students and 75.61 from osteopathic students. By the 2021 Match®, those numbers had increased to an average of 347.64 applications from US allopathic students and 179.79 from US osteopathic students [9]. The increase in applications has made effectively and efficiently screening applicants more challenging for programs.

There are many screening strategies, and no one strategy is most effective for every program. When deciding on a strategy for screening applications, program directors should return to the mission of the program to help decide what attributes, skills, and life experiences qualify applicants to best meet the goals and mission of the residency program. It may be helpful to take a global look at the current residents and assess the strengths and weaknesses that could be addressed in recruitment or targeting of specific qualities. Some programs may look for applicants with ties to the region as their mission is to train psychiatrists who want to stay and practice in their region. Another program may prefer applicants that are bilingual if a large proportion of their patient population are immigrants. Programs with fellowships or specialty tracks (Child, Research, Rural, etc.) may want to prioritize applicants with expressed interest in those areas. Applicable attributes and experiences will vary greatly between programs. Past successes in recruitment may not always translate to future success, and recruitment priorities should be revisited each season.

For many, if not the majority of, programs, starting with applicants that have ties to the geographical region in which the program is

located is a reasonable place to start as many studies show that the majority of US applicants ultimately match in the geographic region in which they completed their medical school. A study of all US graduating allopathic seniors participating in the 2011–2015 main residency Match® in all specialties found that 63% of applicants matched at programs within the same region as their medical school, ranging from 58% in the Midwest to 69% in the West [10]. Multiple studies of specific subspecialties, including plastic surgery, otolaryngology, and orthopedic surgery, showed similar results with 48–60% of applicants matching into a program in the same geographic region as their medical school [11–13].

ERAS allows filtering of a wide variety of attributes [medical school state, awards, United States Medical Licensing Exam (USMLE) or Comprehensive Osteopathic Medical Licensing Examination (COMLEX) scores, number of publications, etc.]. However, many of the metrics that are easily filterable, such as grades, standardized test scores, and honor society selection, are heavily influenced by gender, racial, and ethnic biases [14–17]. Important applicant attributes, including previous life experiences, clinical skills, and leadership experience, may not be adequately identified with ERAS filters and require a more time-intensive review. Heavy reliance on metrics alone decreases the time necessary to screen applications but will also likely decrease the diversity of the applicants selected for interview and will cause programs to miss highly qualified applicants with important life experiences, leadership skills, and resilience.

Evaluation of Application Components

The USMLE was originally developed and validated for licensing purposes. The numeric score associated with the USMLE has become a focus of applicants and program directors alike in recent years. According to the USMLE Invitational Conference on USMLE Scoring

(InCUS) [18], standardized test scores best predict other standardized test scores and not clinical performance. USMLE scores have been linked across specialties to performance on in-training exams and risk of failing specialty board exams [19–23]. However, the overemphasis and misuse of these scores, along with the corresponding limitations in diversity when a numeric test is overemphasized, led USMLE to eliminate numeric scoring for Step 1 as of January 26, 2022. The impact of this change on recruitment remains to be seen. The COMLEX Level 1 examination will follow suit and change to pass/fail reporting as of May 1, 2022.

Comparing grades across institutions can also be fraught with difficulties. While some schools give only a minority of students Honors on their psychiatry rotation, others may give as many as 70% an Honors grade. Racial/ethnic disparities have been demonstrated in both clinical clerkship grades and Alpha Omega Alpha (AOA) membership [14, 16].

The Medical Student Performance Evaluation (MSPE) is designed to be a summative method of communicating medical student performance and unique attributes to program directors. One study of one residency program over 20 years found that negative statements in the MSPE predicted problematic resident behavior [24]. However, a study across specialties found that less than half of program directors trusted the information contained in the MSPE [25]. Program directors generally suspect that dean's offices may try to minimize student difficulties in medical school in order to improve their students' chances of a successful Match®. Letters of recommendation have similar difficulties, and lack of standardization between writers makes them complicated to interpret [26]. Some specialties are working to address this problem by implementing standardized letters of recommendation, but it is too soon to fully assess the effectiveness of these attempts [27, 28].

Because of the perception of decreasing amounts of objective data about applicants and the increasing number of applications, some pro-

gram directors have sought other means of evaluating potential applicants. Situational judgment tests (SJTs) are intended to evaluate applicant skills such as collaboration, equity, problem solving, professionalism, empathy, and self-awareness. SJT questions ask applicants what they would do in a given situation and why. SJTs are used in graduate medical education as well as other job fields as a mechanism for selecting applicants. Early studies in US graduate medical education programs demonstrated potential validity in predicting resident performance [29]. A study of the use of SJT in recruitment in seven surgery residencies found that the percentage of underrepresented in medicine (URiM) applicants recommended increased [30]. While SJTs may have an important place in evaluating potential applicants, the full utility of these tests is yet to be determined.

At the time of writing this chapter, no one factor can predict resident success at a given institution, and no one factor can predict the quality of psychiatrist an applicant will become. Program directors should not overly rely on one factor in the assessment of applications but are encouraged to use a holistic review process in their assessment of applicants.

Holistic Review

The AAMC defines holistic review as “mission-aligned admissions or selection processes that take into consideration applicants’ experiences, attributes, and academic metrics as well as the value an applicant would contribute to learning, practice, and teaching. Holistic Review allows admissions committees to consider the ‘whole’ applicant, rather than disproportionately focusing on any one factor” [31]. Studies of holistic review processes in pediatrics, general surgery, and internal medicine residencies demonstrate that the diversity of the groups of applicants interviewed, ranked, and matched increased [32–34]. The AAMC offers helpful videos and tools to help programs develop a holistic review process tailored for the needs of the program [31].

Scheduling and Extending Interview Offers

Traditionally, psychiatry residencies have extended approximately 10 interview invitations for every PGY1 slot available. However, this ratio may be influenced by the number and quality of psychiatry applicants, the program’s academic profile, and local competition. Interviewing more applicants requires more resources. Interviewing too few applicants risks not filling in the Match®. Some programs extend all of their offers at once, and others extend offers in batches as they work through their review process. It is useful to prepare a waitlist of qualified applicants to invite for an interview in the event of a cancellation.

Coordinators usually extend interview offers through ERAS or other for-profit interview scheduling platforms with a brief and friendly message. Programs should never extend more interview offers than interview slots available as this creates undue stress for applicants. Provide applicants a set amount of time (for instance, 2–7 days) to accept the interview offer before rescinding it. Applicants appreciate having a choice of interview dates from which to choose. Listing dates that interview offers will be extended on the program website decreases applicant anxiety and generally is appreciated by applicants.

Dates for interviews typically run from October through February. Many applicants and schools will intentionally schedule flexible interview time from November through January. Most programs determine interview dates far in advance. Programs that utilize longer screening processes may not be prepared to start interviews until November. During in-person interview seasons, geography may determine interview dates. Programs in northern areas may consider travel delays caused by winter weather and choose dates earlier in the season for this reason, while programs in resort areas may choose to avoid dates that are expensive for applicant travel. Thanksgiving, Christmas, New Year’s, and other holidays are typically avoided for interviews.

Annual program director responsibilities such as semiannual resident reviews, semiannual reporting of Milestones, or Program Evaluation Committee meetings may also influence program choice of interview dates. Programs must finish interviews with enough time to create and submit the ROL, which is typically due in late February.

Preparing the Team for Interview Day

Preparing the faculty and residents for interview days is an essential step in recruitment. This is an opportunity to make sure all parties involved are on the same page regarding the process. Program directors must review the NRMP website annually for any updates or changes to policies and procedures. NRMP rules and regulations about communications with applicants must be discussed with every person an applicant interacts with on interview day. Violations of these rules often lead to harsh judgment by applicants in addition to formal Match® violations, citations, and sanctions.

Residents, staff, and faculty will play key roles in recruitment. They should be prepared with departmental expectations and answers to common questions so that they can provide information to applicants and can represent the program accurately. In addition to a season overview, the program mission statement and recruitment goals should be reviewed. It may also be helpful to ensure everyone involved in screening or interviewing applicants has had training in unconscious bias.

The importance of resident involvement in recruitment cannot be underscored enough. Chief residents play an especially pivotal role. Chief residents often organize and plan the social activities, recruit other residents to meet with applicants, and give tours. Chiefs and other residents may be communicating with future applicants before, during, and after interviews. Many applicants really want to hear what their immediate experience in your program will be and therefore appreciate when PGY1s are directly involved in recruitment season.

Interview Day

In 2020 and 2021, the interview season is being conducted in a virtual/online setting as a response to the ongoing COVID-19 pandemic and the need to minimize the spread of this disease. At the time of writing this chapter, it is unclear if future interview seasons will be restricted to virtual. Therefore, this section will speak about a face-to-face interview day, a virtual day, and what a hybrid interview day could possibly look like.

There are some elements to all days that will be similar. Most programs begin with introductions by the program director and interviews with 2–3 key faculty members. Informal time with residents is typically built into the schedule – either before, after, or during the interview day – and may consist of social hours, or a walking or virtual tour of the campus. In addition, there may be opportunities for candidates to meet with faculty who share an interest in topics applicants are interested in (i.e., psychotherapy, teaching, health equity).

On a face-to-face interview day, many programs host a dinner with residents the night before the interview day. For the 2020–21 virtual interview seasons, some programs translated their traditional model directly to an online format, and some chose to have their resident social hour the same day or evening as the interview.

Hybrid models pose additional dilemmas. Some programs may keep the formal aspects (meeting faculty, interviews) as a virtual experience and offer applicants opportunities to be present on campus for tours and meetings with residents/fellows. Programs also may consider having some faculty interviews conducted by virtual means during a face-to-face day to allow for faculty in more distant sites/locations to be involved in recruitment.

Requiring and/or allowing in-person interview elements in a hybrid format should be carefully considered. The benefits of in-person interaction may seem obvious. Applicants may very much want to meet a potential future employer and colleagues in-person, and programs may feel they are better able to demonstrate their strengths and

assess goodness of fit in-person. However, in-person interviews also pose logistical challenges such as expense and time for medical students. Since medical students come to school with varying levels of resources, in-person interviews may limit opportunities for students with fewer resources. Additionally, students may wonder if “optional” in-person elements of the interview are truly optional or if they would be judged harshly for not attending [35]. There is very little literature looking at whether applicants who are interviewed in-person are at an advantage over applicants interviewed virtually. Much of the early literature is concerned about management of biases that could be introduced into the process of virtual interviewing [32, 36]. One small study in an anesthesia program that offered both in-person and virtual interview prior to the pandemic did find that the interview type did not affect the likelihood of a candidate being ranked or matched to their program, but it is not clear that finding will be generalizable and much more research needs to be done [37].

Interview Techniques and Assessment

Most programs take a conversational approach to the interview day. Faculty usually ask applicants questions about the candidate’s path to psychiatry and their hopes for a future career. Other common questions include discussion of an interesting patient or aspect of psychiatric care, and personal or professional interests (the hobbies section of an application is a rich place for discussion). Interviewers usually try to assess for predetermined areas of focus that have been established by the program.

Some programs may ask more behavioral-based interview questions or other versions of structured interview questions. These are questions where applicants are asked to provide examples of how they have handled work-related situations. Examples of this can include asking an applicant to describe a challenge with a colleague and how they addressed it, or to talk about a time in their life when they had to balance com-

peting demands. The AAMC’s guide – Best Practices for Conducting Residency Program Interviews – provides guidance for creating these questions [38]. Proponents of behavioral interviewing argue that learning about past experiences and behaviors can help predict future performance but acknowledged that there was not enough data to speak to whether this type of interview could predict future clinical performance [39, 40]. There are some who have noted that a more structured interview did not differ greatly from faculty gestalt, and yet others noted that while there was an improvement in interrater agreement, these efforts required time to be set aside to train the interviews [41, 42]. As programs move toward more transparency, it may be appropriate to inform applicants when standardized interview questions are used.

Most programs create their own interview scoring rubric based on qualities and attributes that align with their program’s mission and personality. Examples of items to consider include interpersonal skills, research experience, leadership experience, academic performance, psychological mindedness, experience with a specific patient population, and demonstrated ability to overcome obstacles. Programs that opt to use behavioral-based interviewing techniques will create rubrics for these questions as well. Structured interview questions and rubrics can be tailored to the values and vision of the program.

Options for distribution of the rubric include paper forms, editable electronic forms, survey software, or links to editable spreadsheets into which scores can be entered. Privately owned residency interviewing scheduling services, which are relatively new at the time of writing this chapter, also may allow rubrics to be built-in so that interviewers can complete them in that system. Remember, interviewers are typically busy faculty members. A simple process to return data will likely be the most useful and successful.

Some programs also find it helpful to have all interviewers meet at the conclusion of the interview day to discuss their experience with applicants, while others prefer to utilize only written feedback from interviewers.

Second Looks and Post-interview Communication

The NRMP Match® Code of Conduct for programs requires that programs limit post-interview communication to the exchange of clarifying information and requires that they not solicit or require post-interview communication for the purpose of influencing applicants' ranking preferences. Program leadership should ensure that all faculty and residents involved in recruitment do not send misleading information to applicants about ranking intentions or preferences. Program directors and other individuals involved in recruitment will likely get multiple thank-you cards or letters and "letters of intent" where an applicant will state their intent to rank the program anywhere from first to "at the top of their list" or "highly." It is important to think carefully about how you respond to these, if you respond at all, as it is a gray area regarding what could be interpreted as intending to influence the applicants' ranking preferences. One study published in 2021 reported that 18.6% of senior medical students surveyed reported feeling assured by a program that they would match there but did not despite ranking that program first [43]. Many program directors will make a clear statement on the interview day that they will not initiate post-interview communication and will not respond to post-interview communication unless there is a specific question asked or clarification requested, and that any post-interview communication received will not affect the program's rank list. This is a reasonable approach to help reduce anxiety applicants may feel about whether they should send a thank-you note or "letter of intent" and if they do not get a response from any post-interview communication they send.

Some programs offer second looks either in-person (pre-pandemic) or virtual to allow applicants to learn more about the city, program, or specific components of the program. Some are hosted by the institution, and they may be geared toward underrepresented minority applicants or applicants to specific specialty tracks (Research, Rural, Child, etc.). These events can offer benefits by allowing applicants to gather more infor-

mation about the program or institution but may be logistically challenging to attend and applicants may wonder if they will be negatively impacted if they do not attend. These second looks are allowed, but it is important to ensure that they are not required. Therefore, attendance is not taken, and attendance does not affect the rank list.

Rank Order List (ROL)

Program directors should consider at the start of the interview season how the Rank Order List (ROL) will be created. How will the program numerically rank the many applicants you will interview? Most programs pre-establish areas to assign a numerical score to help create a rank list. Unique applicant experiences and attributes that contribute to the programmatic mission and vision, scores given by interviewers, and academic metrics are examples of items that may be given numerical weight. This list, however, should be unique to each program and aligned with the program's vision of future residents.

Some programs create smaller lists throughout the season to help organize while others wait until the end to put together the entire list. Because of the risks involved if a ROL is discussed or "leaked," most programs limit the number of individuals who have access to the list. If a program chooses to include people other than the APDs and PD in the ranking process, it will usually be only a small committee of key faculty educators. Reminders about confidentiality should be made at each ranking meeting. All recruitment content, applicant information, and processes are sensitive. Resident involvement in ranking is privileged and requires a high level of responsibility. Knowledge of an applicant's place on the program's ROL may inadvertently affect expectations for future performance, self-esteem, and interpersonal interactions in the program. Faculty or residents who know applicants from their own school could also be biased in future interactions with the student especially as they have ongoing clinical rotations at the school. Any temptation to reveal or tip off the applicant's

location on the ROL should be firmly resisted. This would be an NRMP violation.

Programs are strictly prohibited from asking an applicant about their ROL or revealing details of the program's ranking of the applicant as this could be seen as an attempt to coerce the applicant to move the program up on their list. Moving an applicant up or down on a program's ROL because the applicant has voluntarily declared the program their first choice offers little to no advantage to the program and is not advisable. Some applicants will try to influence programs by messaging programs that they are the top choice.

Once a program's ROL is entered into NRMP, it must be certified by the program director or designated institutional official (DIO). If it is not certified, the program will not match applicants in the NRMP. Program directors may uncertify the list, edit the list, then recertify as many times as they would like prior to the ROL deadline.

Match® Week

At the end of the long recruitment process is Match® Week! Hopefully, this will be a happy time and program directors will only need to announce the exciting news of a successful Match® to the department at the end of the week and reach out to welcome new residents or fellows. However, if a program did not fill all of its spots in the Match®, the program will most likely participate in the SOAP to fill unfilled positions.

A detailed annual calendar of Match® Week is available on the NRMP website. Please reference it as details may change year to year. Typically, on Monday of Match® Week the program director and coordinator will receive an email from the NRMP announcing how many of the program's positions were filled in the main Match®. Program directors who filled completely can relax until Thursday when the list of matched applicants is emailed. Until Friday at noon Eastern time, the names of matched residents cannot be released. Most programs keep the location of matched applicants on the ROL highly confidential. Even if a program is filled with applicants low on the

list, it is recommended to announce results enthusiastically and limit the number of people who are aware of how "low" on the list the program matched. No resident wants to show up on day 1 to learn that they were ranked last on a program's Match® list.

Programs that did not fill in the main Match® and opted into the SOAP will have a busy week. It would be prudent for the program director and other key people involved in recruitment to block time in their schedule during the first half of Match® Week in case they need to review applications in SOAP or interview SOAP applicants. Anyone who may be involved in the SOAP process should know what will be expected of them and the process the program will follow if they need to participate in SOAP. Typically, there are three rounds in the SOAP process, but in 2021 an extra round was added. SOAP typically concludes Thursday afternoon of Match® Week. Programs that participated in the Match® and have unfilled positions are not allowed to make any offers to applicants outside of the SOAP process, regardless of whether the applicant participated in the Match® or is SOAP eligible, until after SOAP concludes. The NRMP website contains helpful videos and guides for programs [44] that should be reviewed carefully by programs participating in SOAP. After the conclusion of SOAP, unmatched applicants and programs may reach out to each other.

While programs are bound by NRMP rules to utilize the Match® process for PGY1 spots (if their institution participates), off-cycle recruitment and most non-PGY1 spots are filled outside of the Match® process. Please see the Special Topics section in this chapter for more details.

Special Topics

Conflict of Interest

In an ideal world, there would never be conflicts of interest in recruitment. However, humans are imperfect and life happens! Early identification of potential or perceived conflicts of interest is important. Potential conflicts should always be

discussed with the institutional GME office. Typically, a GME office can provide guidelines, support, and advice. It will be important to check to see if your GME office has a written conflict of interest policy in regards to recruitment. One common example is the application of a spouse or family member of a current resident or faculty member. GME offices usually will pay particular attention anticipated supervisory relationships in these situations.

Transfers Between Programs

A unique group of applicants are those with previous residency experiences. Residents with previous experience can apply to positions through the NRMP or can apply for positions that are available outside of the Match®. Applicants may switch specialties for a variety of reasons.

Previous residency experience may bring great strength to a program. One of the most important questions to consider is why a resident is seeking to transfer. Typical reasons include that the applicant did not match into psychiatry initially, changed their mind about the current specialty, or that the applicant did not find that their current program provides the level of education or the quality of work environment that they expected. Sometimes a resident will find themselves in an environment where they are unable to meet the program's expectations. In these cases, it is important to consider what your program will provide differently so that the resident can succeed. Finally, geography and personal life may dictate that a resident must move.

One logistical consideration is years of GME Medicare funding per resident. The Medicare direct funding cap is set to the number of years of the specialty the physician first matched into, up to 5 years. For example, a resident who has completed an intern year in internal medicine only has two remaining years eligible for full funding, but a resident who completed an intern year in neurosurgery will have four remaining years of full Medicare funding. Applicants with previous residency experience may bring valuable clinical

experience, but program directors should check with the institutional GME office for guidance around financial limitations.

If an applicant is transferring from another GME program (either within psychiatry or from a different specialty), program directors should request letters of recommendation from attending physicians with whom the resident has directly worked. It is similarly important to talk with the prior program director to find out if there were performance/disciplinary issues and to determine how much credit they received or will be receiving for their prior training. The American Board of Psychiatry and Neurology (ABPN) should be contacted to approve any credit being given for prior training. Often, only some of the previous program's work can apply to the current program. Credit for previous rotations or work should be transparent and agreed upon prior to transfer. Finally, the expected dates for starting and graduation from the accepting program should also be clearly communicated to the applicant.

Once a transferring resident has been accepted into the program, an official record of rotations the resident has completed, Milestone attainment, rotation evaluations, clinical skills verifications (CSVs), and supervisor evaluations should always be obtained from the prior program. If the resident is transferring between psychiatry programs, be sure that the original program documented resident rotations and education in the ABPN PreCert system and released the resident from their program in that system.

Positions Outside of the Match®

Program directors who believe they have an open spot in the program outside of the Match® should check with their GME office to establish that the spot is indeed open, funding is available to support the resident through the completion of training, and they are able to extend a position or offer if a suitable applicant is found. This could happen if you have a resident leave the program for any reason. Programs may also be able to accept a transfer if they have residents leaving after the PGY3 year for a Child and Adolescent Psychiatry

fellowship and are therefore not at their full ACGME-approved complement. Because the demand for psychiatry program spots is high, advertising for these open spots is typically informal via the AADPRT program directors' listserv and quickly results in inquiries from many interested applicants. Program directors should request and screen the same materials that they do in the Match® process. When accepting a transferring resident, the GME office will be important in credentialing and orienting the new resident.

Closing Programs

For the residents of a closing program, the process is usually very stressful. The closing of a program is typically an unpleasant surprise for residents who had pictured themselves completing a full residency in one location. Most young physicians have never experienced termination of employment and never dreamed they would experience this. They may even question if they will ever be able to complete their residency training and attain their career goals. While the residents may receive good advice from a closing program or institution, the advice may also come from sources whose interests are no longer fully aligned with the educational interests of the residents. Residents are encouraged to seek advice in this process from the dean's office of the medical school where they completed their medical degree or from others who have experienced this process.

The Accreditation Council for Graduate Medical Education (ACGME) policies relevant to closures fall under Section 21.00 ACGME Policy and Procedures to Address Extraordinary Circumstances. Closing programs must "assist the residents and/or fellows in permanent transfers to other ACGME-accredited programs in which they can continue their education" [45]. The ACGME has, historically, advocated for groups of displaced residents [46]. However, in prior closures the ACGME has been very clear that "the ACGME is not directly involved in resident or fellow placement or decisions related to funding" [46].

When a residency program closes, the sponsoring institution must notify ACGME. Medicare funding does not immediately follow the displaced residents, but usually the sponsoring institution will choose to, under Medicare regulations 42 CFR 413.7, transfer the temporary "cap" that includes direct and indirect funding to the receiving program [47]. This temporary cap transfer expires when the displaced resident finishes their training. Since displaced residents usually come with their Medicare funding for the remainder of their residency, they are usually able to find accepting programs.

If the institution is closing (as opposed to only the residency program), the long-term funding for these spots is usually open for application through CMS as well. The long-term distribution of these spots is determined by Section 5506 of the Affordable Care Act: Preservation of Resident Cap Positions from Closed Hospitals [48]. Institutions that accepted residents or complete programs from the closing program have historically been given higher preference for the long-term funding. Because of the complexity of this process, program directors are highly recommended to discuss this with their GME office and sponsoring institution.

If a program is closing and a program director at another program is considering accepting the orphaned residents, there are important steps to take. First, the accepting program director should assess if the accepting program has the resources needed to support and educate these residents. Are there enough of the required rotations, supervisors, and physical spaces? What else will be necessary to accommodate extra residents? Will accepting orphaned residents help or detract from the education of the program's current residents? Including residents and faculty in the process will help ensure optimal team dynamics as new residents merge into an existing program. The rationale for accepting orphaned residents should be clearly communicated to faculty and residents. The results of this process should be communicated to the institutional GME office as GME approval is necessary for this process.

Next, the program director must establish if the program's currently approved ACGME

complement enables the program to accept the orphaned residents. If not, a temporary request for increase in complement specifically to accommodate the residents must be filed with the ACGME. Historically, the ACGME's Psychiatry Review Committee has moved very quickly to approve these requests for temporary complement increase in order to help the orphaned residents.

Program directors considering accepting orphaned residents should next request the materials usually used to evaluate applicants, and then should conduct interviews. While interviews can be conducted before obtaining ACGME-approved complement increase, offers cannot be extended until that complement increase has been assured. Usually the DIOs of the accepting and closing programs will discuss formal release date and start date for the residents. Orphaned residents are typically under high amounts of stress during this process. In addition, the process of being offered spots under time pressure outside of a Match® process is unsettling for those who have not experienced it.

When an entire hospital closes (as opposed to an individual program), the process can be very chaotic. Once a hospital announces that it is closing, the hospital services and clinical programs that support residency education may terminate quicker than anticipated. For instance, lab equipment, which hospitals typically rent instead of purchase, may quickly be recalled by the owners to prevent it from being part of bankruptcy court proceedings. In one recent example, a bankrupt hospital failed to pay its malpractice premium, and tail malpractice coverage for all of its physicians was uncertain for some months. If a program is accepting residents, it is advisable to obtain the residents' educational records and to have ABPN PreCert completed as quickly as possible because after the hospital closes these records may not be accessible.

Following credentialing, onboarding, and orientation, new residents can be accepted to the program!

For more information, please refer to Chap. 22, which gives a detailed description of managing program closure.

Separate Match® Tracks

Many programs have created specialized tracks within their program that applicants apply to and match into separately from the categorical program. Examples of these specialized tracks include Research tracks, Integrated Child and Adolescent Psychiatry tracks, and Rural Psychiatry tracks, among others. The following unique considerations apply:

1. A unique NRMP number must be obtained for a separately matching track.
2. A separate track must be set up in your ERAS Account Maintenance system for the categorical program.
3. Programs can decide if some or all of the track positions revert to categorical positions if the track does not fill, rather than going to SOAP [49].
4. ERAS filters allow program directors to view applicants that applied only to a specialized track or applicants that applied to both the specialized track and the categorical program. Programs should decide in advance if applicants who apply to both the categorical program and the specialized track will interview for both on 1 day or will need to complete separate interview days.

Combined Training Programs

Combined psychiatry residency training options include internal medicine/psychiatry, family medicine/psychiatry, neurology/psychiatry, and pediatrics/psychiatry/child and adolescent psychiatry (Triple Board). These options are approved and monitored by the ABPN Alternative Pathways Oversight Committee, and therefore, programs need to consult with the ABPN before creating a combined program. The following additional considerations apply:

1. Communication between the combined program leadership and the leadership of both of the categorical programs will be essential for a successful recruitment season.

2. Like new categorical programs, new combined training programs require program directors and the institutional GME office to work together to complete a new program form in NRMP to obtain a unique NRMP number.
3. When setting up a combined program in the ERAS Account Maintenance system, programs can choose if some or all of the combined positions revert to either of the categorical programs if they do not fill, rather than going to SOAP. This may be a consideration if either program has donated an approved position to the combined program
4. Categorical and combined programs should work together to decide in advance the structure of the interview day, how applicants will interact with faculty and residents from each program, how the costs of the recruitment process will be shared, and if applicants can interview together on one day for both categorical and combined programs.
5. Within ERAS, there will be separate ERAS accounts for the combined and categorical programs. Filters enable programs to identify applicants who apply to both the combined program and one of the categorical programs.

Summary and Key Points

Recruitment of high-quality trainees that are a good fit for culture of the program is one of the most important and rewarding tasks of a residency or fellowship program director. This starts with looking at the mission and vision of the program to identify attributes or experiences that would make an applicant a good fit for the program. This process requires a well-trained team, including the program coordinator, other faculty, and residents/fellows. Program directors should familiarize themselves with and utilize available resources for navigating recruitment interviews and the Match® process, including online and institutional resources. Development of internal practices should be done thoughtfully and in alignment with the mission and vision of the pro-

gram. Internal processes may need to be flexible and regularly synchronized to align and comply with changing regulations. Thoughtful pre-recruitment outreach through social media, website updates, and recruitment fairs followed by holistically reviewing applications and a well-planned interview day will pave the way to a successful recruitment season.

References

1. Dedeilia A, Sotiropoulos MG, Hanrahan JG, Janga D, Dedeilias P, Sideris M. Medical and surgical education challenges and innovations in the COVID-19 era: a systematic review. *In Vivo*. 2020;34(3 Suppl):1603–11. <https://doi.org/10.21873/invivo.11950>.
2. Koster MA. Crowdsourcing in a pandemic: pearls and pitfalls from the trainee experience. *J Grad Med Educ*. 2021;13(2):164–6. <https://doi.org/10.4300/JGME-D-20-00446.1>. Epub 2021 Mar 15.
3. Bram JT, Jia L, Huffman W, Ahn J. Orthopaedic surgery residency program social media presence during the COVID-19 pandemic. *JB JS Open Access*. 2021;6(4):e21.00073. <https://doi.org/10.2106/JBJS.OA.21.00073>.
4. Goshtasbi K, Tsutsumi K, Berger MH, Kuan EC, Tjoa T, Haidar YM. Otolaryngology residency programs' rising social media presence during the COVID-19 pandemic. *Laryngoscope*. 2021;131(5):E1457–9. <https://doi.org/10.1002/lary.29299>. Epub 2020 Dec 10.
5. Sterling M, Leung P, Wright D, Bship T. The use of social medial in graduate medical education: a systematic review. *Acad Med*. 2017;92(7):1043–56. <https://doi.org/10.1097/ACM.0000000000001617>.
6. Gonzalez-Terul A, Campos-Pelaez M, Fortea-Cabo G. Information behavior of the millennial generation: a scoping review of medical residents and their use of social media. *Health Info Libr J*. 38:5–31. <https://doi.org/10.1111/hir.12306>.
7. NRMP All In Policy. <https://www.nrmp.org/all-in-policy/main-residency-match/>. Accessed 22 Dec 2021.
8. NRMP Report Archives. <https://www.nrmp.org/report-archives/>. Accessed 8 Aug 2021; NRMP SOAP Programs. <https://www.nrmp.org/match-week-soap-programs/>. Accessed 1 Aug 2021.
9. AAMC ERAS Statistics. <https://www.aamc.org/data-reports/interactive-data/eras-statistics-data>. Accessed 8 Aug 2021.
10. Shappell CN, Farnan JM, McConville JF, Martin SK. Geographic trends for United States allopathic seniors participating in the residency match: a descriptive analysis. *J Gen Intern Med*. 2019;34(2):179–81. <https://doi.org/10.1007/s11606-018-4686-1>. PMID: 30276657; PMCID: PMC6374265.

11. Silvestre J, Lin IC, Serletti JM, Chang B. Geographic trends in the plastic surgery match. *J Surg Educ.* 2016;73(2):270–4. <https://doi.org/10.1016/j.jsurg.2015.10.015>. Epub 2016 Jan 13.
12. Johnson AP, Svider PF, Folbe AJ, Raza SN, Shkoukani M, Eloy JA, Zuliani G. An evaluation of geographic trends in the otolaryngology residency match: home is where the heart is. *JAMA Otolaryngol Head Neck Surg.* 2015;141(5):424–8. <https://doi.org/10.1001/jamaoto.2015.0219>.
13. Cox RM, Sobel AD, Biercevicz A, Ebersson CP, Mulcahey MK. Geographic trends in the orthopedic surgery residency match. *J Grad Med Educ.* 2018;10(4):423–8. <https://doi.org/10.4300/jgme-d-17-00633.1>.
14. Low D, Pollack SW, Liao ZC, et al. Racial/ethnic disparities in clinical grading in medical school. *Teach Learn Med.* 2019;31:487–96.
15. McDade W, Vela MB, Sánchez JP. Anticipating the impact of the USMLE step 1 pass/fail scoring decision on underrepresented-in-medicine students. *Acad Med.* 2020;95:1318–21.
16. Boatright D, Ross D, O'Connor P, Moore E, Nunez-Smith M. Racial disparities in medical student membership in the Alpha Omega Alpha honor society. *JAMA Intern Med.* 2017;177:659665.
17. Lynch G, Holloway T, Muller D, Palermo AG. Suspending student selections to Alpha Omega Alpha honor medical society: how one school is navigating the intersection of equity and wellness. *Acad Med.* 2020;95:700–3.
18. USMLE InCUS. United States Medical Licensing Examination | Invitational Conference on USMLE Scoring. https://www.usmle.org/sites/default/files/2021-08/incus_summary_report.pdf. Accessed 1 Aug 2021.
19. Rayamajhi S, et al. Do USMLE steps, and ITE score predict the American Board of Internal Medicine Certifying Exam results? *BMC Med Educ.* 2020;20(1):79.
20. Elkbuli A, et al. USMLE scores and clinical rotation role in predicting ABSITE performance among surgery interns. *J Surg Res.* 2020;247:8–13.
21. Puscas L, Chang C, Lee H, Diaz R, Miller R. USMLE and otolaryngology: predicting board performance. *Otolaryngol Head Neck Surg.* 2017;156(6):1130–5.
22. Swanson D, et al. Relationship between performance on part I of the American Board of Orthopaedic Surgery Certifying Examination and Scores on USMLE Steps 1 and 2. *Acad Med.* 2009;84(10 Suppl):S21–4.
23. Miller B, et al. US Medical Licensing Exam scores and performance on the Psychiatry Resident In-Training Examination. *Acad Psychiatry.* 2014;38(5):627–31.
24. Brenner A, Mathai S, Jain S, Mohl P. Can we predict “problem residents”? *Acad Med.* 2010;85(7):1147–51.
25. Bird J, et al. Review of the Medical Student Performance Evaluation: analysis of the end-users’ perspective across the specialties. *Med Educ Online.* 2021;26(1):1876315.
26. In Pierre CE, Weber GM, Abramowicz AE. Attitudes towards and impact of letters of recommendation for anesthesiology residency applicants. *Med Educ Online.* 2021;26(1):1924599. <https://doi.org/10.1080/10872981.2021.1924599>.
27. Feldman MJ, Ortiz AV, Roth SG, Dambrino RJ, Yengo-Kahn AM, Chitale RV, Chambless LB. An examination of standardized letters of recommendation rating scales among neurosurgical residency candidates during the 2020-2021 application cycle. *Neurosurgery.* 2021:nyab346. <https://doi.org/10.1093/neuros/nyab346>. Epub ahead of print. PMID: 34624075.
28. Love JN, Doty CI, Smith JL, Deiorio NM, Jordan J, Van Meter MW, Edens MA, Hegarty CB. The emergency medicine group standardized letter of evaluation as a workplace-based assessment: the validity is in the detail. *West J Emerg Med.* 2020;21(3):600–9. <https://doi.org/10.5811/westjem.2020.3.45077>.
29. Cullen MJ, et al. Improving our ability to predict resident applicant performance: validity evidence for a situational judgment test. *Teach Learn Med.* 2020. <https://doi.org/10.1080/10401334.2020.1760104>.
30. Gardner AK, Cavanaugh KJ, Willis RE, Dunking BJ. Can better selection tools help us achieve our diversity goals in postgraduate medical education? Comparing use of USMLE step 1 scores and situational judgment tests at 7 surgical residencies. *Acad Med.* 2020;95:751–7. <https://doi.org/10.1097/ACM.0000000000003092>.
31. AAMC: Holistic review. <https://www.aamc.org/services/member-capacity-building/holistic-review>. Accessed 8 Aug 2021.
32. Marbin J, Rosenbluth G, Brim R, Cruz E, Martinez A, McNamara M. Improving diversity in pediatric residency selection: using an equity framework to implement holistic review. *J Grad Med Educ.* 2021;13(2):195–200. <https://doi.org/10.4300/JGME-D-20-01024.1>. Epub 2021 Feb 25.
33. Nehemiah A, Roberts SE, Song Y, Kelz RR, Butler PD, Morris JB, Aarons CB. Looking beyond the numbers: increasing diversity and inclusion through holistic review in general surgery recruitment. *J Surg Educ.* 2021;78(3):763–9. <https://doi.org/10.1016/j.jsurg.2020.08.048>. Epub 2020 Sept 17.
34. Aibana O, Swails JL, Flores RJ, Love L. Bridging the gap: holistic review to increase diversity in graduate medical education. *Acad Med.* 2019;94(8):1137–41. <https://doi.org/10.1097/ACM.0000000000002779>.
35. Shreffler J, Platt M, Thé S, Huecker M. Planning virtual residency interviews as a result of COVID-19: insight from residency applicants and physicians conducting interviews. *Postgraduate medical journal, postgradmedj-2020-139182*. Advance online publication. 2021. <https://doi.org/10.1136/postgradmedj-2020-139182>.
36. Otugo O, Alvarez A, Brown I, Landry A. Bias in recruitment: a focus on virtual interviews and holistic review to advance diversity. *AEM Educ Train.* 2021;5(S1):S135–9.

37. Arthur ME, Aggarwal N, Lewis S, Odo N. Rank and match outcomes of in-person and virtual anesthesiology residency interviews. *J Educ Perioper Med.* 2021;23(3):E664. https://doi.org/10.46374/volxxiii_issue3_arthur.
38. AAMC Best Practices for Conducting Residency Program Interviews. <https://www.aamc.org/media/44746/download>. Accessed 1 Aug 2021.
39. Tatem G, Kokas M, Smith CL, DiGiovine B. A feasibility assessment of behavioral-based interviewing to improve candidate selection for a pulmonary and critical care medicine fellowship program. *Ann Am Thorac Soc.* 2017;14(4):576–83. <https://doi.org/10.1513/AnnalsATS.201611-940OC>.
40. Breitkopf DM, Vaughan LE, Hopkins MR. Correlation of behavioral interviewing performance with obstetrics and gynecology residency applicant characteristics☆?>. *J Surg Educ.* 2016;73(6):954–8. <https://doi.org/10.1016/j.jsurg.2016.05.015>.
41. Gardner AK, D’Onofrio BC, Dunkin BJ. Can we get faculty interviewers on the same page? An examination of a structured interview course for surgeons. *J Surg Educ.* 2018;75(1):72–7. <https://doi.org/10.1016/j.jsurg.2017.06.006>.
42. Hughes RH, Kleinschmidt S, Sheng AY. Using structured interviews to reduce bias in emergency medicine residency recruitment: worth a second look. *AEM Educ Train.* 2021;5(Suppl 1):S130–4. <https://doi.org/10.1002/aet2.10562>.
43. Jena AB, Arora VM, Hauer KE, Durning S, Borges N, Oriol N, Elnicki DM, Fagan MJ, Harrell HE, Torre D, Prochaska M, Meltzer DO, Reddy S. The prevalence and nature of postinterview communications between residency programs and applicants during the match. *Acad Med.* 2012;87(10):1434–42. <https://doi.org/10.1097/ACM.0b013e31826772a6>.
44. National Resident Matching Program. n.d. Match results. NRMP. Retrieved January 28, 2022, from <https://www.nrmp.org/programs-institutions/match-week-soap/>.
45. ACGME Policies and Procedures (2020) Accreditation Council for Graduate Medical Education. https://www.acgme.org/Portals/0/PDFs/ab_ACGMEPoliciesProcedures.pdf. Accessed 31 July 2021.
46. White S (2019) Hahnemann University Hospital Closure. ACGME News. <https://www.acgme.org/Newsroom/Newsroom-Details/ArticleID/9496/Hahnemann-University-Hospital-Closure-However>. Accessed 31 July 2021.
47. Code of Federal Regulations Title 42- Public Health, section 413.79 Direct GME payments: determination of the weighted number of FTE residents.
48. Direct Graduate Medical Education (DGME 2020). CMS. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/DGME>. Accessed 31 July 2021.
49. NRMP Creating Reversions. <https://www.nrmp.org/creating-reversions-residency-programs/>. Accessed 22 Dec 2021.



Promoting Diversity, Equity, and Inclusion

7

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Introduction

The US population continues to increase its diversity at a steady pace. During the last decade, the White population decreased almost by 10%, while the Latinx and Asian American populations increased by 6.1% and 2%, respectively [1]. Other factors such as gender, sexual orientation, language, education, age, physical differences, and socioeconomic status contribute to one's identity and diversity. Population estimates from July 1, 2021 show that our nation continues to

grow more diverse in regard to race. Those that identified as White alone accounted for 60.1% of the population, Black or African American 13.4%, American Indian and Alaska Native 1.3%, Asian alone 5.9%, and Hispanic or Latino 18.5% [2]. Many identify as multiracial. Estimates predict that by 2050 we will be a nation of all minorities. Efforts toward matching our physician population to the country makeup and cultural competency/humility development are essential to improve clinical outcomes. Clinical innovation and improved outcomes in medicine are better achieved with a diverse team [3]. A clinician's lack of understanding of important cultural attitudes and customs can result in poor patient compliance and therefore outcomes [4]. Analysis demonstrates a positive association between health-care cultural competency education and patient clinical outcomes [5].

The Accreditation Council for Graduate Medical Education (ACGME) is charged with creating and establishing general standards and competencies for postgraduate medical education. It has developed six core competencies to guide graduate medical education (GME), program accreditation, and ongoing learning. The general core competencies are patient care, medical knowledge, professionalism, interpersonal and communication skills, practice-based learning and improvement, and systems-based practice [6]. These common program standards developed by the ACGME are then modified as indicated by

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the specialty-specific review committee (RC). The RC is comprised of a group of volunteer specialty experts from the field and provides peer evaluation of specialty and subspecialty training programs, including residencies and fellowships. The RC is charged with using the core competencies and developing specific practices within their specialty to ensure adequate training for their residents. According to the ACGME website (<https://www.acgme.org/what-we-do/accreditation/>), “In academic year 2020–2021, there were approximately 862 ACGME-accredited institutions sponsoring approximately 12,420 residency and fellowship programs in 182 specialties and subspecialties. Accreditation is achieved through a voluntary process of evaluation and review based on published accreditation standards. ACGME accreditation provides assurance that a Sponsoring Institution or program meets the quality standards (Institutional and Program Requirements) of the specialty or subspecialty practice(s).” These accreditation standards now include criteria developed by the ACGME department of Diversity, Equity, and Inclusion (DEI), launched in 2019 [7]. This department supports the ACGME Board and Administration toward the critical goals of increasing diversity and equity in medicine and eliminating health-care disparities in the United States.

One of their first efforts in outreach included the establishment of the Barbara Ross-Lee, DO Diversity, Equity, and Inclusion Award in honor of Dr. Ross-Lee’s career and her contributions to graduate medical education and health policy. The award honors ACGME-accredited Sponsoring Institutions and programs, as well as specialty organizations, working to diversify the underrepresented physician workforce and create inclusive workplaces that foster humane, civil, and equitable environments. In 1993, Dr. Ross-Lee became the first African American female dean of a US medical school when she accepted the position at Ohio University’s Heritage College of Osteopathic Medicine. She is currently the president-elect of the American Osteopathic Foundation. The award was first bestowed on four recipients in recognition of

exemplary projects in the areas of diversity, equity, and inclusion. Awardees included

- American Academy of Ophthalmology (Specialty Organization).
- Children’s National, Pediatric Residency Program (Program).
- Seattle Children’s Hospital, University of Washington Pediatric Residency Program (Program).
- State University of New York (SUNY) Downstate Health Science (Sponsoring Institution).

The DEI department also oversees such initiatives as ACGME Equity Matters™. This initiative mirrors the goals of the department. It also contains areas addressing outreach with the medical community, curriculum support and examples for residency programs, and updates and a newsroom with traditional media and social media updates for current news in this area.

The Association of American Medical Colleges (AAMC) has in some ways become a leader within the medical world for the integration of diversity, inclusion, culture, and equity. AAMC implemented a chief diversity officer role who has considerable presence with the presentation of policies, coalition work with other stakeholders, and active advocacy for diversity, inclusion, and equity within the physician workforce. The AAMC has put forth definitions to provide a foundation and allow for consistency, and these definitions are frequently referenced within psychiatry [8]. These definitions include

- Diversity is a core value that embodies inclusiveness, mutual respect, and multiple perspectives and serves as a catalyst for change, resulting in health equity. In this context, we are mindful of all aspects of human differences such as socioeconomic status, race, ethnicity, language, nationality, sex, gender identity, sexual orientation, religion, geography, disability, and age.
- Inclusion is a core element for successfully achieving diversity. Inclusion is achieved by

nurturing the climate and culture of the institution through professional development, education, policy, and practice. The objective is to create a climate that fosters belonging, respect, and value for all and encourages engagement and connection throughout the institution and community.

- Culture is what instills the values and beliefs of an institution.
- Climate is the perceptions, attitudes, and behaviors reflecting the beliefs and values (the culture) of an institution.

Current Data

According to data kept by the American Association of Medical Colleges (AAMC), diversity has been improving in our medical school classes over the past several years. In 2019, the number of female students exceeded the number of male students, and this trend has continued into 2021. Racial diversity has shifted also. In 2016, 6.5% of the enrolled students identified as Black. In 2020–2021, that had grown to 7.6%. This is a change and trend to be proud of, but probably not enough [9].

In a 2020 study, a randomized controlled trial (RCT) looked at patient satisfaction as a function of race concordance between patient and physician. It showed that higher patient satisfaction survey scores were associated with racial/ethnic concordance between patients and their physicians. This, among other studies, shows that efforts to improve physician workforce diversity are important. Delivery of health care in a culturally mindful manner between racially/ethnically discordant patient–physician combinations is also essential [10].

Many of the past efforts and curricula to address these disparities in medical education have focused on cultural competency. Medical schools and residencies have developed departments, positions, and training materials to improve our physicians' and physicians-in-trainings' knowledge about cultural differences and how to best address these in clinical practice.

However, as our awareness of these differences and our sensitivity to the broadening scope of cultural awareness grows, a newer learning framework is necessary. Trinh et al., in a 2020 article in *Psychiatric Clinics of North America*, speak on this with the concept of cultural humility.

Awareness of the limitations of knowledge-based cultural competence has resulted in a shift toward attitude-based cultural humility. This approach “incorporates a health provider’s commitment and active engagement in a lifelong practice of self-evaluation and self-critique within the context of the patient–provider (or health professional) relationship through patient-oriented interviewing and care.” Cultural humility is not an achieved destination, but rather a lifelong endeavor. Cultural humility emphasizes cross-cultural communication, and sustained dedication is required to build therapeutic relationships between patient and provider [11].

Developing attitudinal skills and competency in the area of cultural humility will help the physician within the community have the tools to address cultural issues through a framework of lifelong learning, not restricted to a particular cultural conceptualization. It expands our abilities to help our patients no matter how they might define themselves in our diverse communities.

With these trends and data in mind, medical educators have renewed efforts in recruitment of diverse and culturally competent matriculates into medical schools. Medical school and residency faculty also have disparities. According to data kept by the AAMC, in 2018, medical school faculty continued to be predominantly White (63.9%) and male (58.6%) overall, and especially so at the professor and associate professor ranks. This is consistent with past reports and demonstrates persistent underrepresentation of certain racial and ethnic minority groups and women in medical school faculty positions. The physician workforce faces similar challenges. According to the same AAMC report, most active physicians were White (56.2%) and male (64.1%). However, among the youngest cohort of active physicians (34 years of age and younger), women outnumbered men.

bered men in most racial and ethnic groups. This reflects the growing number of women gaining entrance to medical school as previously mentioned. About 30–40% of physicians practiced primary care across all groups, including 41.5% of American Indian or Alaska Native physicians, 41.4% of Black or African American physicians, 36.7% of Hispanic physicians (alone or with any race), and 30.6% of White physicians [12].

DEI in Faculty and Program Director Recruitment and Retention

Faculty recruitment and retention is essential to all medical departments associated with graduate and undergraduate medical education. But what does faculty recruitment and retention mean in this era of diversity, equity, and inclusion? Professional organizations, medical schools, and residency and fellowship educational programs have incorporated diversity, equity, and inclusion (DEI) into accreditation standards, mission statements, and policies [13–15]. Guidelines and toolkits have been created by the American Medical Association (AMA) for use in diversifying the medical workforce [16]. There is hope and pessimism that organized medicine will sustain changes necessary for equity and inclusion for underrepresented in medicine (URM), other minority, and women faculty [17, 18].

Viewed through the lens of DEI, the faculty of medical schools in the United States should reflect the racial/ethnic makeup of our population. The AAMC and others have reported on the disparities in the number of URM individuals in academic medicine [19]. According to the AAMC, in December 2020 there were 184,682 unduplicated full-time faculty in US medical schools [20]. The race/ethnicity of these faculty is represented in Fig. 7.1.

Inequities of physician salary between women and men continue to exist [21]. The AAMC reported from their 2020 Faculty Salary Survey a difference in median compensation between men and women at every rank across a majority of

specialties and departments. The report found that across the clinical science disciplines women earned 67–77 cents per \$1 earned by men [22].

In this section, aspects of faculty and program director (PD) recruitment and retention pertaining to DEI will be explored in a novel approach, primarily through vignettes based on anecdotal life experiences designed for illustration. The vignettes will inform those looking to equalize opportunity and benefits and diversify their workforce. Suggestions on how to intervene utilizing the vignettes are made.

Challenges to Diverse Faculty Recruitment

For some potential academic faculty hires, the low numbers of URM faculty in academic medicine and the salary gap between women and men physicians play a role in their decision to decline a faculty position after residency or fellowship.

Vignette 1

A female African American child and adolescent psychiatrist declined a faculty position after being offered a salary that was below her expected minimum salary. She had made inquiries about salaries of men and women on the faculty and found there was a \$20,000–\$30,000 salary difference favoring the men. There were no African American faculty in the department to consult. She was unable to negotiate the salary to what she had set as her minimum after researching the literature and her personal inquiries. She understood as a minority and a woman, if you settled for a low salary in your first position post-fellowship, the salary difference would not be made up. The salary inequity between men and women is as relevant today as it was 30 years ago.

Identified issues Inequity, lack of resources, and lack of leadership champion for DEI.

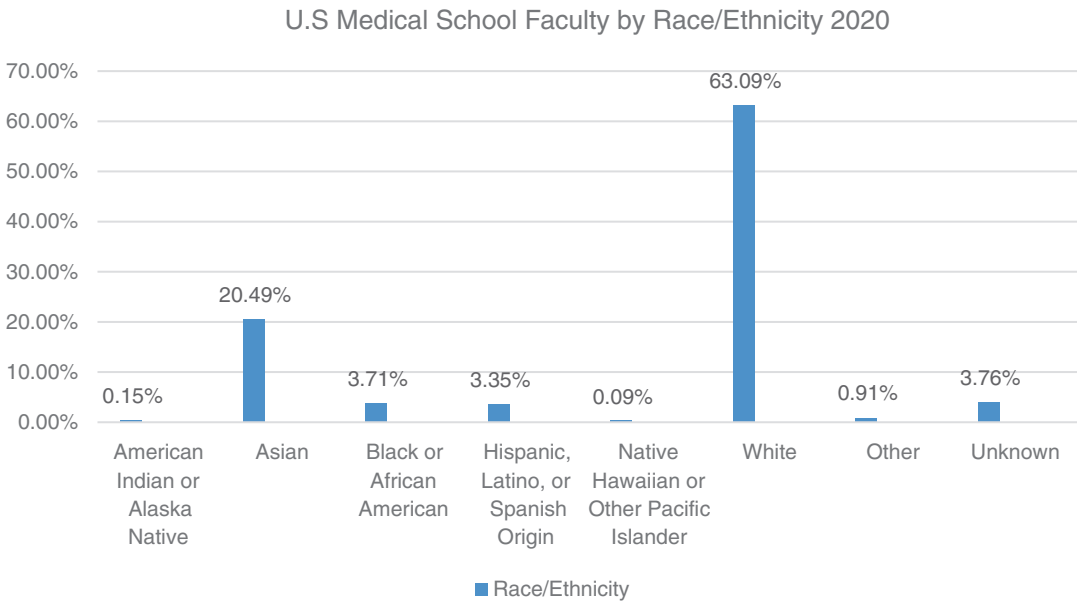


Fig. 7.1 Percentage of US medical school faculty by race/ethnicity in 2020. (Data from AAMC, December 2020. Respondents who reported more than one race/ethnicity were excluded from this dataset)

Vignette 1: Recommendations

How might psychiatry and other departments in medicine use their data on diversity and salary equity, even if the data is not at their targeted goals, to increase their recruitment of URM faculty and assure equity in salaries? Departments should show their statistics compared to national and regional data, trends toward goals, their alignment of mission statements and policies that will achieve their goals, and efforts for inclusion. This information can creatively be displayed in quick fact sheets and brochures used in recruitment interviews. Interviews could showcase why the department wants them and how they can be a part of positive change.

Challenges for Program Director Retention

Self-reflection is crucial for understanding and change. Departments must identify and target barriers from within their department and their

institution to build the DEI culture and identity that will promote a diverse and equitable faculty. Barriers that will interfere with URM faculty recruitment and retention are undermining the authority of minority faculty; providing poor resources; and appointing URM, other minority, and women faculty to leadership roles without the authority or power the roles traditionally have. When URM residents and fellows witness and hear about examples of these barriers that URM faculty experience, it reinforces that academia is not a place for them. This semblance of noninclusion disrupts the faculty recruitment pipeline from within the department and institution.

Vignette 2

A White American woman, the first woman to be appointed program director (PD) in her psychiatry department, started to make changes to improve equity for URM, other minority, and women residents. Her inherited associate pro-

gram directors (APDs) were men. They were resistant to changes and her authority as PD. They made comments and remarks to residents that disparaged and questioned her leadership skills. Over time, some residents started questioning and challenging her authority.

Identified issues Undermining authority of PD, lack of leadership support, lack of leadership preparation for unique circumstances that may occur promoting a woman to a position of power over men, and creation of a hostile environment.

Vignette 3

The first woman and African American PD of a psychiatry fellowship asked her fellows why they did not come to her regarding a situation. The fellows responded they were confused about who was in charge and made the decisions. Despite having a transition plan for changing PD leadership, the full authority and power were not easily relinquished by men in leadership.

Identified issues Undermining role and authority of PD, lack of leadership support, and lack of leadership preparation for unique circumstances that may occur promoting a minority woman to a position of power.

Vignette 4

A URM woman psychiatry fellowship PD was not included in clinical contract negotiations involving the fellows. She was expected to implement plans without full knowledge of contract obligations. There were times when her decisions regarding the education program conflicted with contract obligations, creating confusion and sowing doubt about her leadership skills. She also did not have the same control or authority over her budget as the other psychiatry PDs who were White men.

Identified issues Inequity of authority and power of PDs, microaggression, URM leadership role delegated as an administrator role, and implicit bias.

Vignettes 2–4: Recommendations

Leadership can mitigate similar situations to those described in vignettes 2–4 by having an open mind, the ability to hear and validate URM, other minority, and women faculty concerns, and a willingness to have difficult conversations with all their staff. Leadership should anticipate potential barriers to the success of URM and women physicians appointed to faculty and in leadership roles. Frequent meetings between a faculty member and their supervisor specifically to address these challenges should be scheduled. This would assist in building a relationship of trust and providing a safe space to have difficult conversations. Action plans would be developed in these meetings and progress of goals tracked. URM, other minority, and women faculty newly appointed to leadership roles should be provided robust mandatory training in leadership skills from learning about finances and budgets, expected responsibilities, delegating, giving and receiving feedback, active listening skills, effective communication, having difficult conversations, time management, defining their vision, setting short-term and long-term goals, implicit bias, microaggressions, and other identified skills important in being successful in their role. Leadership should identify and immediately address subtle and direct comments undermining URM, other minority, and women faculty. Leadership should be aware of how their behaviors and actions with URM, other minority, and women faculty can be perceived as undermining their authority. It may be a leader's intent to assist the faculty member, but it may not be perceived nor received as being helpful by the faculty member or others.

Challenges for Program Director Professional Development

As part of the ACGME Common Program Core Requirements, program directors “have the authority to approve faculty members for participation in the residency/fellowship education program at all sites.” “The PD has the responsibility to ensure that all who educate residents/fellows effectively role model the Core Competencies” [23]. If the PD does not have another leadership role over faculty in the department, there can be challenges in addressing faculty bias.

Vignette 5

The leadership of a psychiatry department hired a new faculty member. The URM PD was not involved in the hiring interviews. The new faculty member would be working with residents at some clinical sites. As the residency program increased recruitment of African American residents, there were comments made among residents regarding this faculty member asking more questions in patient checkouts and being perceived to have more expectations of their performance in comparison to non-URM residents. The faculty member’s pattern of interactions with URM residents was observed to also occur with African American medical students. The faculty member was the sole supervisor in these clinics.

Identified issues Microaggression, implicit bias, lack of inclusion of PD in faculty hiring, and undermining role of PD in clinical education of trainees.

Vignette 5: Recommendations

Leadership can play a significant role in URM PDs’ success in addressing faculty behaviors based in bias. Leadership must be clear in policies and actions that the PD, regardless of race/

ethnicity, has the authority to directly address faculty patterns of behavior that indicate bias. All PDs must be trained in identifying microaggressions, implicit bias, and having difficult conversations. Adequate resources, financial and time, must be allocated to ensure proficiency of PD leadership skills. If despite adequate training the PD is unable to resolve the issue with the faculty, leadership must be willing to support and mediate without undermining the authority of the PD. This means leaders above the PD must be adequately trained in leadership skills, identifying implicit bias, microaggressions, and having difficult conversations. These steps will enhance successful outcomes between PD and faculty regardless of whether the race/ethnicity, gender, sexual orientation, etc., of the two are the same or different.

Department leadership should include their PD in the faculty interview and recruitment process when it intersects with resident education. Departments should develop an interview plan that includes standardized questions and discussions regarding expectations of DEI from the department and the interviewee. Most academic institutions now have DEI offices to assist with recruitment and retention efforts of URM, other minority, and women medical students, residents, and faculty. Department leadership should enlist their expertise in developing realistic strategic plans for DEI. Utilize internal work groups that include a representative from the DEI office in developing questions for interviewing that promote DEI. Work groups can also assist in identifying ideal characteristics of faculty who are able to promote DEI. These work groups should be short term. They should change membership each time they are formed to ensure diversity of ideas. The PD should be considered part of the department leadership team and included in leadership team meetings. Protected time should also be allocated for a PD to attend. If the PD is not part of the leadership team meetings, how can they be perceived as leaders with authority and power among their colleagues and trainees?

Challenges for Diverse Faculty in Leadership Support and Career Advancement

Barriers to retention of URM faculty include inability to reach adequate numbers of URM faculty, lack of resources and coordinated programmatic efforts, lack of a leadership champion, isolation, racism, lack of mentorship, and fewer opportunities for promotion [24–26]. URM, other minority, and women faculty may feel the need to mentor others in navigating difficult circumstances that are unique to them. The faculty's goal is to improve mentee success. This worthy endeavor, even if voluntary, can become part of "the minority tax." Rodriguez et al., in a 2015 article, describe the minority tax as "the burden of extra responsibilities placed on minority faculty in the name of diversity" [27].

Vignette 6

A URM faculty volunteer mentor for medical students participated in dismissal appeal meetings. Participation was requested primarily by URM students. The different levels of the appeal process were all chaired by White men and women. URM students observed that the URM faculty member was subjected to microaggressions during meetings, including being excluded from introductions. URM students expressed concerns about retaliation against the URM faculty for assisting them in the process.

Identified issues Microaggression and potential negative impact of DEI endeavors on career advancement and promotion.

Vignette 7

URM faculty observed White men being promoted to leadership roles without being given the opportunity to apply for the positions themselves.

Identified issues Limited opportunities for URM faculty career advancement, White privilege, and lack of transparency in promotions.

Vignette 8

URM faculty became aware of leadership planning to recruit a recent White male graduate with the intent of appointing him as the future PD. A mid-level career URM faculty had expressed interest in becoming a PD. This opportunity had not been announced to the URM faculty.

Identified issues Racism, White privilege, and lack of transparency in promotions.

Vignettes 6–8: Recommendations

Leadership can decrease the number of similar occurrences described in the three preceding vignettes by continuously examining their faculty recruitment, retention, and promotion data and altering their strategic plan as inequities are identified. Collaborate with the institution's DEI office to identify and modify plans that disrupt promoting a culture of diversity, equity, and inclusion. New residency programs and academic departments should allocate appropriate resources to develop an environment of diversity, equity, and inclusion prior to recruitment of faculty and trainees.

Vignettes 6–8 not only demonstrate barriers for faculty staying in academics but also why it is necessary to build a culture of DEI from the top down. Without the top leaders of academic departments and medical schools championing diversity, equity, and inclusion in policies, resources, and intentional behaviors, increasing the numbers of URM faculty will not happen.

Professional Development

Adequate time and resources should be allocated to effectively educate staff, residents, and faculty

in understanding the richness and challenges of diversity, equity, and inclusion.

Vignette 9

All faculty, including leadership, residents, and staff of a psychiatry department, were required to participate in annual training on microaggressions for 1 hour. There was an average of more than 30 people in each group. The groups were sorted by title of faculty with leadership roles, faculty, staff, and trainees to minimize the power differential within each group.

Identified issues Lack of commitment to make sustainable changes toward DEI and failure to commit appropriate resources.

Vignette 9: Recommendations

Diluting training on topics such as implicit bias, microaggressions, and having difficult conversations has the appearance of “checking a box.” Departments should allocate appropriate resources that include time and money to make sustainable change. Increase in time for trainings can be all at one training or distributed in shorter time increments across the academic year. Discussion groups should be small enough to make sessions meaningful. People may need time to reflect and process new information and ideas as they impact them and their life experience with DEI. Facilitators of DEI education should be skilled and experienced in mediating conflicting and confrontational reactions that may occur. Departments that are significantly below their goals of achieving DEI are strongly encouraged to invest in outside consultants. It shows commitment and intent to achieve equity and create opportunities for all.

Vignette Utilization for Ongoing DEI Learning

The vignettes used in this section can be utilized for DEI education of department leaders, faculty,

staff, and trainees. It is recommended that facilitators at a minimum be trained in microaggressions, implicit bias, allyship, and crucial conversations. A second junior facilitator, early career faculty or trainee, should be considered as this offers mentorship, training, and experience for the junior facilitator, and the junior facilitator offers a diverse viewpoint. This opportunity may increase the positive impact on the pipeline to academia via recruitment and retention. The objectives of the DEI education sessions would be to analyze a vignette by identifying DEI issues and designing a plan of improvement with pathways to success for residency programs, divisions, and departments. The personal attributes in the vignettes can be changed to reflect different issues of URM, other minority, and women faculty and PDs.

Role of the American Association of Directors of Psychiatric Residency Training (AADPRT)

AADPRT plays a significant role in education and mentoring of PDs and program coordinators (PCs). At its annual meeting, there are many training opportunities for PDs and PCs, including training opportunities related to recruitment, DEI, and faculty development. AADPRT’s committees offer an opportunity to create educational experiences that can be disseminated broadly to programs and their departments. Additionally, AADPRT has the potential to be a leader in advocacy efforts for programs, PDs, and DEI through its relationship with other organizations, including the ACGME and the American Association of Chairs of Departments of Psychiatry (AACDP).

It is hoped that the organization will continue to invest more resources in these efforts in the future. The benefits to URM, other minority, women, and non-URM faculty, leaders, trainees, and coordinators would be well worth the investment. AADPRT has the potential to have a direct effect on the pipeline of URM students to academia and recruitment and retention of URM faculty, staff, and trainees. Other benefits would likely include increased productivity, increase in

perceived value to the department and institution, less perception of a hostile environment, and less burnout.

Issues of Diversity in Training in Resident and Fellow Recruitment (Review of Applications, Preparing Faculty, Unconscious Bias, Scoring)

There is a clear need to increase the diversity and representation of groups that are underrepresented in medicine. Medical organizations such as the American Medical Association (AMA), the AAMC, and the National Medical Association (NMA) have been addressing this need [28]. As mentioned in the recruitment chapter (Chap. 6), residency programs should begin their recruitment efforts by developing a pipeline to recruit in high school and undergraduate programs, with particular attention to diverse populations. Organizations such as the Student National Medical Association (SNMA) also support such pipelines beginning in elementary school if possible. SNMA provides a number of resources for URM students, including their Pipeline Mentoring Institute (<https://snma.org/page/programspipeline>). The APA has its own pipeline program for interested undergraduate college students, the Workforce Inclusion Pipeline Program (<https://www.psychiatry.org/residents-medical-students/medical-students/medical-student-programs/workforce-inclusion-pipeline>). Programs interested in building their own pipeline program may benefit from interfacing with existing local pipeline programs. For example, an existing program local to the Midwest is Southern Illinois University's Physician Pipeline Preparatory Program, or P4 (<https://www.siu.edu/diversity/p4-physician-pipeline-preparatory-program>). In addition, participation in recruitment fairs that pay special attention to students from underrepresented groups in medicine such as the Latino Medical Student Association (LMSA), SNMA, and others is beneficial to URM student recruitment.

During the recruitment season, there are several opportunities for programs to address diversity, equity, and inclusion, starting with a holistic review that moves away from the traditional metrics and focuses on individual attributes. The AAMC defines holistic review as “mission-aligned admissions or selection processes that take into consideration applicants' experiences, attributes, and academic metrics as well as the value an applicant would contribute to learning, practice, and teaching” [28]. Please refer to Chap. 6 for more information on holistic review.

In addition, the interview process allows program directors and faculty to examine and discuss unconscious biases that may contribute to disparities in the assessment of training candidates. The AAMC in their best practices for conducting residency program interviews recommends that interviewers become aware of their own unconscious bias and rating errors. Their guide emphasizes the importance of objective measures, including the use of behavioral or situational questions [28]. Tools such as the Implicit Association Test may be useful for identifying implicit biases held by faculty [29].

Minority Tax

While many academic institutions and medical organizations have increased their diversity, equity, and inclusion (DEI) efforts, often trainees and faculty from underrepresented groups are recruited to lead committees, outreach events, and mentor students. These additional tasks and time spent are commonly referred to as the “minority tax” [27]. Diversity-related initiatives are often not compensated or valued equally to other academic work when considering faculty for promotion and career advancement. In addition, with a limited number of faculty from URM groups, the same people are assigned to multiple committees, taking time away from other professional pursuits. It is important to ensure that members of the majority groups also participate in DEI-related work and that DEI efforts are recognized as important in the promotions process.

Supporting Trainees of Color: Education and Mentorship

As we aim to increase the number of underrepresented minority trainees in psychiatry residency training programs, faculty educators must become culturally and structurally aware of factors that impact the trainee's learning environment. In addition, teaching faculty should be educated on the fundamental inequities within our educational system to ensure the academic success of each trainee. Our medical education, specifically psychiatric education, should include a historical background of how our system has contributed to current mental health inequalities. The curriculum should consist of culturally diverse material, enabling all learners to view mental health concepts and psychiatric illness from various angles. As educators, we can adjust our curricula to become more inclusive of all cultures and challenge the current narrative based on systemic racism. We can incorporate lessons that challenge the oppression experienced by different racial and ethnic groups and how this relates to our current mental health culture, including diagnosis and treatment choices. As educators and supervisors, we can provide safe spaces to talk about race and culture, allowing for a more sophisticated understanding of mental illness.

We should aim to have a diverse training community, inviting faculty members with diverse backgrounds, culturally and from different disciplines, to be involved in our learning environment. We can invite guest faculty and case conference discussants who represent different identities and teach from different historical perspectives. We can introduce the trainee's experience into the classroom, allowing them to share their lives and honoring their background and culture. As educators, we can invite community partners, peers, and patients to become a part of the learning community, giving trainees a broader view of the impact of social structures on mental illness. Allowing community partners and patients to train our residents provides a richer discussion about inequality in mental health care, social determinants of health, and how structures

in their communities impact health outcomes. Involvement from different community stakeholders and patients will allow the residents to understand better our shared responsibility in shifting inequality and advocating for change.

Educators should reflect on who they are and understand their own experience with race and diversity. They should establish cultural self-awareness and understand their own unconscious biases. GME programs can provide opportunities for all faculty, supervisors, and anyone involved in the training community to become more aware of their own unconscious bias. Professional development for faculty on implicit bias will help us provide better educational and supervisory experiences to our residents and provide better care to our patients and communities. As faculty, we need to understand our responses and know when and why these biases emerge in our day-to-day interactions. This same level of self-awareness needs to be developed by all trainees to create a safe learning environment for collaboration and increase a sense of belonging and allyship within the program. Educators should be aware that each resident had a different life experience, and intersectionality may come into play. Residents and faculty may experience forms of discrimination and oppression other than race when they belong to multiple groups simultaneously. We need to consider other factors that impact inclusion and diversity, including gender, class, disability, language, sexual orientation, among others. Our learning environments should be inclusive of multiple identities.

As mentors, we can empower and intentionally strengthen our trainees' identities. We can connect trainees to inspiring role models, alumni, or faculty who have successfully graduated from our programs. Mentors can create a culture of inclusivity and help with identity development, providing a safe learning community for residents of color and from underrepresented backgrounds. Providing mentors allows for a stronger sense of belonging in our field. We have different forms of mentorship in a training community, formal and informal mentors. It is essential to train all faculty to become aware of our responses

and beliefs as day-to-day interactions substantially impact our trainees' development and identity. We need to educate all our faculty to deliver culturally aware mentorship, where mentors are knowledgeable of their own culturally shaped biases, beliefs, perceptions, and judgments and become aware of differences between themselves and their mentees.

To ensure diversity in the mentor group, we can invite faculty from other GME programs in our academic institutions or collaborate with nearby training programs to expand our network of mentors, especially in areas of the country where this might be a limitation. We can create mentorship relationships between residencies in our hospitals or reach out to faculty at the medical school level to increase our diversity pool. As mentors, we can encourage our residents to join national organizations with specific subgroups dedicated to diversity, equity, and inclusion, encouraging the development of communities for underrepresented minorities. With the development of telehealth, it has become easier to create mentoring relationships and stay connected with people who are not close by. The ability to use video conferencing platforms now provides a new opportunity for our training programs to increase faculty diversity in our teaching, supervisory, and mentorship environment. We can invite diverse speakers and faculty to participate in academic programming, including lectures, grand rounds, and case conferences. We can provide opportunities for residents to meet diverse faculty, even when those faculty are not directly involved in our programs.

In addition to mentoring, we can also support our underrepresented minority residents through sponsorship. Sponsorship is an effective strategy to smash glass ceilings in academic environments. The high performance of people of color and other minority groups often goes unrecognized within our organizations. While mentorship provides a supportive environment for personal and professional growth and development, sponsorship focuses on increasing visibility, credibility, and professional networks of talented individuals, in our case, trainees. In addition, sponsorship will target career advance-

ment using the sponsor's knowledge of the institution and system. As a faculty and residency training community, we can work on sponsoring our residents, offering and searching for opportunities to help them succeed and increase their visibility within and outside our training institution. Sponsorship could include

- Inviting them to present at local and national conferences.
- Asking them to participate in department-level or national-level collaborations.
- Recommending them for other positions or opportunities that allow them to become more visible in the field.

Another way of supporting residents of color in their training communities is to provide confidential ways to report any witnessed or experienced racism or discrimination. We should provide safe spaces for these real-life experiences to be discussed and explored, allowing opportunities to discuss how these experiences impact our trainees and our learning environment as a whole. Sharing these experiences allows for cultivating a culture of empathy and fosters inclusion. When issues are reported, it is our administrative responsibility to address these concerns locally as a department, but at times also at the hospital level, providing feedback to all in our learning community to eliminate discriminatory experiences, including microaggressions.

As training programs, we have a responsibility to prioritize diversity, equity, and inclusion. By educating our faculty on biases and becoming more culturally and structurally humble, we create a culture of empathy and support for all trainees, patients, and staff. Creating safe spaces to have these critical discussions and address any concerning behaviors provides opportunities for stronger allyship among all residents and faculty. By increasing the voice of residents of color and underrepresented minorities, we have a chance to change the narrative, help recruit and retain trainees and staff of color, create supportive environments, and eventually help address health-care inequities.

Culturally Sensitive Supervision and Training

Supervision can be defined as the formal provision, by approved supervisors, of a relationship-based education and training that is work focused and that manages, supports, develops, and evaluates the work of colleagues [30, 31]. When discussing issues of diversity, equity, and inclusion (DEI), cultural humility is a key component in supervision. Cultural humility is “a willingness and ability to listen and learn from patients” [32]. This stance of cultural humility builds cultural competence by promoting ongoing self-evaluation, engaging with power imbalances, and fostering a collaborative approach to treatment [33]. Furthermore, when supervisors attend to issues related to diversity, supervisees report that they experience increased satisfaction with supervision [34]. The events that transpired in the year 2020, such as the disparities in the COVID pandemic, the murders of George Floyd, Breonna Taylor, and other Black people at the hands of the police, and the massive protests that ensued, highlighted the effects of structural racism and inequalities in our society. Many psychiatric organizations like AADPRT, the American Psychiatric Association (APA), and the American Academy of Child and Adolescent Psychiatry (AACAP) focused their efforts on incorporating these conversations into our clinical and educational programs.

In this section, we discuss some of the key components of a supervisory relationship attentive to diversity, equity, and inclusion. We also present recommendations to address the challenges of including DEI in supervision.

Components of a Safe Supervisory Space

Dr. De Golia [34], in the book *Supervision in Psychiatric Practice*, examined the process of supervision by breaking it down into four phases: preparatory, introductory, working, and termination. The preparatory phase includes knowing the context of supervision and antici-

pating roles and limitations. Incorporating DEI into this phase of supervision would ensure that supervisors begin the process of self-assessment, acknowledging their biases, understanding and identifying microaggressions, and learning about racism in health care. Some tools to examine their biases are the Implicit Association Test [29] and the ADDRESSING (age, developmental disabilities, other disabilities, religion, ethnic and racial identity, socioeconomic status and sexual orientation, indigenous heritage, national origin, and gender) cultural self-assessment tool [35].

During the introductory phase, the supervisor works on building alliance, setting the frame, and establishing goals. From the DEI perspective, this stage would include conversations between the supervisor and supervisee to understand each other’s backgrounds and expectations. The supervisor would set a supportive, safe space, highlighting their welcoming stance to conversations about race, ethnicity, power, and other sociocultural issues. Discussing evidence from the literature about the role culture and race play in all aspects of health care can offset the vulnerability a trainee may experience in the supervisory relationship [36]. The impact of structural racism, health-care disparities, social determinants of health, and bias should be evaluated when discussing a patient’s presentation. In the third phase of supervision, the working phase, the supervisor provides oversight, mentorship, teaching, and feedback, including topics related to DEI. Throughout the supervision, the supervisor should serve as a model of cultural humility, showing curiosity regarding the role of culture, gender, power, ability, and other attributes in the patient’s presentation, and the supervision. Similarly, they should show willingness to learn from the supervisee and take a stance of reflection, humility, and working with the otherness [37]. In encouraging the supervisee to learn more about the patient’s experience related to race and cultural identity, structured tools such as the DSM-5 cultural formulation interview can guide the trainee on how to ask questions regarding self-identification, cultural conceptualization of distress, cultural features of vulnerability and

resilience, and cultural features of the relationship between the patient and the clinician [38].

Lastly, during the termination phase, the supervisor prepares the supervisee for transition, engages and invites self-reflection, and provides a summative evaluation. As part of the self-reflection, the supervisor may explore the way the supervisory relationship unfolded and how issues related to DEI were handled and discussed.

DEI Challenges in Supervision

Avoidance

Both supervisor and supervisee may hesitate to include issues of diversity, equity, and culture in supervision due to fear of discomfort or saying something unintentionally offensive [33]. Supervisors may fear that they have a lack of knowledge related to the specific cultural or racial factors playing a role in the patient's presentation. In such situations, the supervisor should acknowledge their limitation and consider seeking out consultation from a colleague [36].

Mistreatment

When a supervisee experiences mistreatment by a patient, subtle or overt, the supervisor should help the trainee process and ensure their safety first. If the supervisor is in the room when this happens, they should address it directly, addressing the therapeutic needs of the patient and the resident at the moment, and supporting the people affected [39]. If the mistreatment is identified in indirect supervision, supervisees should be encouraged to maintain boundaries with the patient and provide support [36]. It is important that the supervisor understands existing policies in their institution regarding appropriate treatment of learners and follows any protocols in place to report the incident as needed. In turn, when it is the trainee who may be showing implicit bias or microaggressions against the patient, the supervisor's role is to bring this to the

surface in a supportive way, highlighting how common unconscious bias is in all people [36].

Countertransference

The supervisor should be attentive to the issues of ethno-transference and countertransference that arise both within the patient and trainee, as well as in their supervisory relationship. Issues such as idealization of the therapist and/or supervisor, overcompliance, mistrust, or denial of cultural differences can be present [40].

Power Differential

Independent of the race, ethnicity, or minority status of the supervisor and supervisee, trainees are in a vulnerable position within this dyad. The power differential in this relationship threatens the trainees' ability to own mistakes and be vulnerable. Given the power difference between supervisor and supervisee, it is incumbent on the supervisor to open up the dialogue and anticipate barriers [41]. Furthermore, the attitude each person in this relationship has toward power is shaped by their own cultural background and values.

Implementing Diversity, Equity, Inclusion, and Justice (DEIJ) Clinical Training to Provide Culturally Competent Care and Combat Health-Care Disparities

Cultural competency describes the ability of a system to provide care to patients with diverse values, beliefs, and behaviors. In developing cultural competence, clinicians are instructed to tailor care to meet the patient's social, cultural, and linguistic needs. It is well known that underrepresented minority patients encounter more barriers to care, a higher incidence of chronic disease, lower quality of care, and higher mortality rates [42]. By teaching our psychiatry residents to provide culturally competent mental health care, we

have an opportunity to improve health-care access, improve psychiatric outcomes, and eliminate mental health-care disparities. In addition, with increased cultural competence, racial and ethnic health-care disparities are reduced, and equity of care improves.

As residency training programs, it is our responsibility to educate future psychiatrists in both structural and cultural competencies. Structural competency typically involves health outcomes within systems [43]. Cultural competence helps the early learner understand the complex intersection between mental health and other social, cultural, and structural factors impacting care. Education in this area includes increasing awareness of conscious biases and understanding implicit, unconscious biases. Trainees and faculty need to ensure that associations or attitudes do not alter perceptions, behaviors, interactions, or decision-making regarding patient care. Helping our trainees identify these biases, stereotypes, and prejudices will help reduce the impact of these perceptions on the care we deliver. Cultural competence trainings also help in increasing the opportunity for our psychiatry trainees to provide compassionate, patient-centered care and develop a more trustworthy relationship with patients.

Residency training programs should incorporate curricula addressing cultural competence while also moving toward a critical thinking framework that encourages continued growth and development in this area. The continuous process of understanding cultures and encouragement of self-reflection and lifelong learning leads to cultural humility. All residency training programs should discuss with their residents the impact of systemic racism as a root cause of illness and health-care inequities. The racism prevalent in our health-care system continues to negatively impact the quality of care patients receive, which, in turn, influences the level of trust that patients have in us as clinicians. Being culturally competent and developing cultural humility will allow clinicians to understand better what impacts patients' lives and symptoms. It also strengthens the therapeutic alliance and increases the likelihood of trust in the relationship, which will help

adequately address mental health concerns. In addition to learning about the needs of racial and ethnic minority patients, we need to teach our clinicians to communicate in culturally competent ways. We should be mindful of not exacerbating stigmas that might lead to further barriers to care, difficulties in engagement, or delay in finding adequate treatment. Our residents need to understand how social determinants of health influence the health outcomes of underserved populations and the importance of advocating for our patients.

In addition to incorporating trainings in implicit bias and moving toward cultural competence, we need to assess these sessions' impact on residents' knowledge and skills. It is crucial to evaluate the knowledge and skill acquired via the training to modify our teaching approach and improve our curricula. Focusing on patient-centered care, we should also assess the patient's perception of the trainee's cultural competence and how this has impacted their clinical care. Is the resident perceived as culturally competent by the patients? Is the resident's cultural competence affecting the patient's care? Have the knowledge and skills acquired impacted engagement, trust, and mental health? Several residency training programs have incorporated creative ways to improve cultural competence. In addition to lectures and seminars, training programs have included case conferences, live patient interactions, and building a better understanding of the community they are practicing in as part of the educational structure to achieve cultural humility. Some training programs have community tours and engage patient advocates and peer counselors to help trainees better understand the community they serve, with its challenges and resources.

In addition to addressing cultural competence at the residency level, departmental leadership and all staff need to be involved in cultural competency initiatives. Hospitals and care systems must prepare their clinicians and staff to interact with patients of diverse backgrounds [44], increase patient engagement and education, and help eliminate racial and ethnic disparities in care. Hospital leadership and care systems must understand the benefits of cultural competence for the diverse patients and communities they

serve. Effective educational programs and training for hospital staff should include a cultural assessment, multiple training methods, ongoing teaching, and measurement and tracking [44]. Culturally competent health-care organizations have improved patient outcomes, increased respect, trust, and mutual understanding from patients, and increased participation from the local community [44]. As psychiatrists, we need to address the mental health-care needs of a racially and culturally diverse population.

Departmental leaders must be firmly committed to addressing and educating their workforce, not just the psychiatry residents. As academic leaders, we should revise the core mission and values of our training programs and the department to embrace the concept of cultural competency. Prioritizing cultural humility as part of our mission will ensure that the delivery of culturally and linguistically appropriate care is ingrained within the department and possibly the academic institution. Cultural competency should be an institutional initiative linked to the organization's strategic mission. We can achieve cultural competence through changes in policies, learning and changing structures within the organization, and addressing individual attitudes, behaviors, and systems. Successful implementation of cultural competency requires an organizational commitment toward addressing these complicated topics as a system. Cultural humility will then become a priority for all clinicians and hospital employees.

It is crucial to consider the challenges we might face as we implement cultural competency training in our institutions. First, evaluate and remind trainees and staff of the impact of cultural competence on patient satisfaction and patient outcomes. Second, assess your education's impact on these aspects of care as a motivator to continue to engage clinicians and trainees in these training sessions. Third, consider including patients, peer advocates, community collaborators, and community resources in the educational sessions, so trainees and staff can better understand the impact the community has on mental illness. Finally, involve the department and the

academic institution in making cultural competence and development of cultural humility a priority with a commitment to move toward health equity.

Summary

“Trainees, patients, and supervisors bring many different cultural systems into play when engaged with one another in therapeutic and educational experiences” [41]. Because of this, there has been more recognition of the need to include issues related to cultural identity in psychiatric training. The Accreditation Council for Graduate Medical Education (ACGME) expects psychiatry residents to demonstrate competence in addressing sociocultural, economic, ethnic, gender, religious, sexual orientation, and family factors in medical knowledge, patient care, and interpersonal communication [23]. Similarly, cultural psychiatry literature describes the importance of the intersection between provider and patient cultural identities, interethnic and intraethnic transference and countertransference [40], and cultural issues of the clinician–patient relationship. In order to provide culturally competent care and teach trainees to do the same, training programs and institutions must ensure the faculty that serve as educators, mentors, and supervisors are properly trained to address the issues that arise in their work with trainees.

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References

1. Bureau, US Census. Modified race data 2010. *Census.gov*, 8 Oct 2021. <https://www.census.gov/data/datasets/2010/demo/popest/modified-race-data-2010.html>. Accessed 10 Jan 2022.
2. Census Bureau, United States. United States Census Bureau QuickFacts. <https://www.census.gov/quickfacts/fact/table/US/PST045221>. Accessed 10 Jan 2022.
3. Hong L, Page SE. Groups of diverse problem solvers can outperform groups of high-ability problem solvers. *Proc Natl Acad Sci*. 2004;101(46):16385–9.

4. Giger JN, Davidhizar R. The Giger and Davidhizar transcultural assessment model. *J Transcult Nurs.* 2002;13:185–8.
5. Horvat L, Horey D, Romios P, Kis-Rigo J, editors. Cultural competence education for health professionals. *Cochrane Database Syst Rev.* 2014;(5):CD009405.
6. Holmboe ES, Iobst WF. Assessment guide, 2020 Accreditation Council for Graduate Medical Education (ACGME).
7. Accreditation Council for Graduate Medical Education. Department of diversity, equity, and inclusion updates. ACGME. <https://www.acgme.org/what-we-do/diversity-equity-and-inclusion/departments-of-diversity-equity-and-inclusion-updates/>. Accessed 10 Jan 2022.
8. Association of American Medical Colleges. Assessing institutional culture and climate. Webcast supplemental guide. 2013. <https://www.aamc.org/download/335956/data/cultureclimatewebcastguide.pdf>. Accessed 11 Jan 2022.
9. Association of American Medical Colleges. Table B-3: total U.S. MD-granting medical school enrollment by race/ethnicity (alone) and sex, 2017–2018 through 2021–2022. <https://www.aamc.org/media/6116/download>. Accessed 10 Jan 2022.
10. Takeshita J, Wang S, Loren AW, Mitra N, Shults J, Shin DB, Sawinski DL. Association of racial/ethnic and gender concordance between patients and physicians with patient experience ratings. 2020;3(11):e2024583. <https://doi.org/10.1001/jamanetworkopen.2020.24583>.
11. Trinh N-H, Jahan AB, Chen JA. Moving from cultural competence to cultural humility in psychiatric education. *Psychiatr Clin N Am.* 2021;44:149–57.
12. Association of American Medical Colleges. Diversity in medicine: facts and figures 2019. AAMC. <https://www.aamc.org/data-reports/workforce/report/diversity-medicine-facts-and-figures-2019>. Accessed on 10 Jan 2022.
13. Association of American Medical Colleges. Equity, diversity, & inclusion. AAMC. <https://www.aamc.org/what-we-do/equity-diversity-inclusion>. Accessed on 10 Jan 2022.
14. Liaison Committee on Medical Education. Standards, publications, & notification forms: LCME. LCME RSS2. <https://lcme.org/publications/#Standards>. Accessed on 10 Jan 2022.
15. American Psychiatric Association. Diversity & health equity. <https://www.psychiatry.org/psychiatrists/cultural-competency>. Accessed on 10 Jan 2022.
16. American Medical Association. Policy finder. AMA. <https://policysearch.ama-assn.org/policyfinder/search/diversity/relevant/1/>. Accessed on 10 Jan 2022.
17. Sudak DM, Stewart AJ. Can we talk? The role of organized psychiatry in addressing structural racism to achieve diversity and inclusion in psychiatric workforce development. *Acad Psychiatry.* 2021;45(1):89–92. <https://doi.org/10.1007/s40596-020-01393-9>. Epub 2021 Jan 12. PMID: 33438157.
18. NAACP Legal Defense and Educational Fund. Nikole Hannah-Jones issues statement on decision to decline tenure offer at University of North Carolina-Chapel Hill and to accept knight chair appointment at Howard University. NAACP Legal Defense and Educational Fund, 6 July 2021. <https://www.naacpldf.org/press-release/nikole-hannah-jones-issues-statement-on-decision-to-decline-tenure-offer-at-university-of-north-carolina-chapel-hill-and-to-accept-knight-chair-appointment-at-howard-university/>. Accessed on 10 Jan 2022.
19. Stanford FC. The importance of diversity and inclusion in the healthcare workforce. *J Natl Med Assoc.* 2020;112(3):247–9. <https://doi.org/10.1016/j.jnma.2020.03.014>. Epub 2020 Apr 23. PMID: 32336480; PMCID: PMC7387183.
20. Association of American Medical Colleges. Table 8: U.S. Medical School Faculty by Sex and ... – Aamc.org. <https://www.aamc.org/media/8931/download?attachment>. Accessed on 10 Jan 2022.
21. Advisory Board. Are female doctors paid less? See the Gap, in 6 charts. Advisory Board, Advisory Board, 23 Sept 2020. <https://www.advisory.com/en/daily-briefing/2020/09/23/female-compensation>.
22. Association of American Medical Colleges. Exploring faculty salary equity at U.S. Medical Schools by gender and race/ethnicity. https://store.aamc.org/downloadable/download/sample/sample_id/453/. Accessed 10 Jan 2022.
23. Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in psychiatry. https://www.acgme.org/globalassets/pfassets/programrequirements/400_psychiatry_2021.pdf. Accessed 10 Jan 2022.
24. Kaplan SE, Gunn CM, Kulukulalani AK, Raj A, Freund KM, Carr PL. Challenges in recruiting, retaining and promoting racially and ethnically diverse faculty. *J Natl Med Assoc.* 2018;110(1):58–64. <https://doi.org/10.1016/j.jnma.2017.02.001>. Epub 2017 Apr 21. PMID: 29510845; PMCID: PMC5844367.
25. Rodriguez JE, Campbell KM, Fogarty JP, Williams RL. Underrepresented minority faculty in academic medicine: a systematic review of URM faculty development. *Fam Med.* 2014;46(2):100–4. PMID: 24573516.
26. Avakame EF, October TW, Dixon GL. Antiracism in academic medicine: fixing the leaky pipeline of black physicians. *ATS Scholar.* 2021:ats-scholar.
27. Rodríguez JE, Campbell KM, Pololi LH. Addressing disparities in academic medicine: what of the minority tax? *BMC Med Educ.* 2015;15:6.
28. Association of American Medical Colleges. Best practices for conducting residency program interviews. <https://www.aamc.org/media/44746/download>.
29. Greenwald AG, McGhee DE, Schwartz JLK. Measuring individual differences in implicit cognition: the implicit association test. *J Pers Soc Psychol.* 1998;74(6):1464–80.

30. Milne DL, Reiser RP. A manual for evidence-based supervision. Hoboken: Wiley; 2017.
31. Kirmayer LJ. Rethinking cultural competence. *Transcult Psychiatry*. 2012;49:149–64.
32. Tervalon M, Murray-García J. Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. *J Health Care Poor Underserved*. 1998;9:117–25.
33. Taneja E, Sehgal P, Greenlee A, Frank AA. To dodge or disclose: a faculty development workshop to promote discussion of racial/ethnic minority trainee cultural identity. *Acad Psychiatry*. 2019;43(2):239–43. <https://doi.org/10.1007/s40596-018-1000-9>.
34. De Golia S, Corcoran K. Elements of supervision, supervision in psychiatric practice: practical approaches across venues and providers. Washington, DC: American Psychiatric Association Publishing; 2019; ISBN 978-1-61537-164-8. p. 3–23.
35. Hays PA. Doing your own cultural self-assessment. In: Hays PA, editor. *Addressing cultural complexities in practice: assessment, diagnosis and therapy*. 3rd ed. Washington, DC: American Psychological Association; 2016. p. 39–60.
36. Shah R, Tan M, Banstra BS. Supervising cross-cultural topics in a clinical setting. In S. De Golia & K. Corcoran (Eds.), *supervision in psychiatric practice: practical approaches across venues and providers*. American Psychiatric Association Publishing; 2019. p. 337–43.
37. Watson P, Raju P, Soklaridis S. Teaching not-knowing: strategies for cultural competence in psychotherapy supervision. *Acad Psychiatry*. 2017;41:55–61. <https://doi.org/10.1007/s40596-016-0552-9>.
38. American Psychiatric Association. Cultural formulation, in diagnostic and statistical manual of mental disorders. 5th ed. Arlington: American Psychiatric Association; 2013. p. 749–59.
39. Williams JC, Rohrbaugh RM. Confronting racial violence: resident, unit, and institutional responses. *Acad Med*. 2019;94(8):1084–8. <https://doi.org/10.1097/ACM.0000000000002610>.
40. Comas-Díaz L, Jacobsen FM. Ethnocultural transference and countertransference in the therapeutic dyad. *Am J Orthopsychiatry*. 1991;61(3):392–402. <https://doi.org/10.1037/h0079267>.
41. Bandstra BS, Shah R, Tan M. Chapter 35. In: *Cultural issues within the supervisory relationship*; 2019. p. 293–7.
42. Hospitals in Pursuit of Excellence. Building a culturally competent organization: the quest for equity in health care. <http://www.hpoe.org/Reports-HPOE/cultural-competency2011.pdf>. Accessed 10 Jan 2022.
43. Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequity. *Soc Sci Med*. 2014;103:126–33. <https://doi.org/10.1016/j.socscimed.2013.06.032>.
44. Hospitals in Pursuit of Excellence. Becoming a culturally competent health care organization. <https://www.aha.org/system/files/hpoe/Reports-HPOE/becoming-culturally-competent-health-care-organization.PDF>.



Resident Onboarding and Orientation

8

Sean Stanley, Anushka Shenoy, and Payton Sterba

New residents and fellows have many tasks to complete before beginning the official start of their training. If the resident or fellow comes from out of state, they need to move, settle their housing situation, register their car, get a new driver's license or other identification, and learn how to commute to program training sites, for instance. In addition, the new resident or fellow may need to become connected with places of worship or community groups that will serve as sources of support during training. They may also need to start self-care routines, such as exercise or meditation.

New residents or fellows may need to finish paperwork often started before arriving at the program, such as licensure applications or requests to access hospital systems. They may need new hospital badges, computer passwords, and identification codes. They may also need to learn how to operate the various electronic medical records and place orders. In addition, they may need to know about mental health laws and procedures specific to the area, such as civil commitment statutes. In addition, the new resident or fellow needs to learn how to maintain safety for themselves and others within clinical settings. Finally, they will need to know who to ask for

advice or help when they have difficulties both at work and outside of it.

Residents and fellows also need to meet the other residents and faculty in the program and in closely affiliated programs in other disciplines. Similarly, new residents and fellows need to meet staff such as the program coordinator, library staff, or other key staff people. The new residents or fellows also need to bond with each other as a class of learners and feel that they are part of the larger community of psychiatrists and physicians.

Given the many possible tasks for new trainees to complete before starting their programs, views of the purpose and goals of orientation vary. McGrath et al. [1] examined the curricular content and structure of orientation sessions in emergency medicine programs. Based on the McGrath study, the most frequent goal of orientation was social, especially providing an opportunity for new interns to get to know each other. Familiarization with hospital and departmental policies, acclimating to the program's emergency department (ED), getting to know department faculty and staff members, and completing administrative tasks were common orientation goals. CarlLee et al. [2] saw orientation as a time for residents to integrate into the new learning environment rapidly. Incoming residents were given an examination to assess baseline clinical skills, determine readiness for resident responsibilities, provide a background for individualized

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education plans, and identify areas for program curricular emphasis.

O'Brien [3] explored three perspectives on the transition to residency. First, the transition could be seen as one of transaction – the goal is the smooth movement of trainees from medical school to residency with the least wasted time, effort, and money for all parties. Under this perspective, the goal of orientation is transparency – from the trainees' residency application or current evaluations, programs develop a sense of the trainee's capabilities and needs. A vital task of the transition is the identification of strengths and weaknesses to develop an individualized learning plan. Alternatively, the transition could be seen from the point of view of a transfer – the goal to transfer skills learned in medical school to the new context of residency. Therefore, as described by O'Brien, the major task of orientation is to help new trainees “adjust to new health care systems, new roles and new levels of responsibility so that they can safely and effectively apply knowledge, perform a skill and communicate with patients, supervisors, and team members” [3]. Finally, the transition could be seen as one of continuing on a trajectory. As trainees gain clinical experience, they develop as clinicians on a developmental continuum. The goal of orientation is to continue promoting that developmental trajectory and prevent discontinuity as trainees take on new residency responsibilities.

It is the view of the authors that graduate medical education (GME) is a profoundly different experience than undergraduate medical education (medical school). As such, trainees cannot simply transfer into a residency program from medical school without understanding that work, education, and work/personal life balance must be approached differently than prior. It is not merely adjusting to new environments and responsibilities; one's professional identity must profoundly change. Further, the pathway will likely not be a smooth upward developmental trajectory. There will be setbacks, and skill sets will need to change. The goal of orientation is to foster a sense of community and support for when those inevitable problems occur.

Many institutions have a main orientation for residents and fellows of all of their programs. This centralized program typically consists of the onboarding tasks of credentialing and badging, life support training, vaccination verification and infectious disease testing, directions to personal health-care access, retirement planning, electronic health-care record and duty hour tutorials, and other administrative tasks. This orientation may also provide introductions to institutional, hospital, and graduate medical education leadership. The leadership may attempt to describe the culture and aspirational goals of the institution. However, most trainees, especially those in post-graduate year 1, will have little day-to-day interactions with these leaders. Most of their interactions will be the program faculty and other trainees. It is at this level that most of the orientation must take place, and therefore it is the focus of this chapter.

Below, we have broken down the task of orienting residents into three components. Trainees need to be introduced to the program's culture of work, education, and work/personal life balance approach. In this chapter, we present guiding principles for orientation to each of these components and provide sample orientation topics related to these principles. It is this chapter's goal that the reader will take these ideas and apply them to their local program.

Work Culture in Residency

As one would expect, the work culture of a residency program should be an important area of focus when designing psychiatry residency orientations. A positive and supportive work culture can optimize resident learning, acquisition of Accreditation Council for Graduate Medical Education (ACGME) core competencies, and overall well-being. Orientation provides opportunities to set the stage for developing the desired work culture, but it can be challenging to seize these opportunities without thoughtful preparation and focused efforts. Furthermore, orientations missing this at the beginning of the academic

year can pose risks to work culture later in the year, such as creating a hostile work environment, resident burnout, interpersonal conflicts, and adverse patient outcomes. In this section, the definition of the work culture of psychiatry residency training is explored to help programs better understand their own work culture. Then, orientation events that promote the desired work culture by fostering communication, community, and professionalism are discussed. Lastly, mechanisms to monitor, assess, and improve work culture and strategies for modifying orientations to adapt to a changing culture over time are examined. Orientation sets the tone for the creation of an ideal work culture.

Defining Work Culture Within Psychiatry Training

Building upon concepts discussed by Hoff et al. [4], the work culture of a residency program can be defined as a confluence of attitudes, beliefs, and behaviors that make up the atmosphere in a work environment. Work culture can build upon a residency program's core values or mission statement. The authors identified specific components of residency culture: openness, empathy, cooperation, sharing experiences, trust, support, respect, a habit of inquiry, flexibility/adaptability, examination of failure, self-reflection, shared vision, creative thinking, and systems thinking. Many of these components may be challenging to teach or enforce as they depend in part on the inherent characteristics of the trainees selected for the residency program. Still, efforts can be made to emphasize these values throughout orientation activities. In addition, individuals other than trainees also influence a residency program's work culture, such as department leadership, program leadership, faculty, supervisors, training office staff, support staff, and medical students. How well new trainees can adapt and contribute to the existing work culture within a psychiatry residency depends on many factors addressed during orientation.

Work culture is dynamic in that it changes over time and can vary significantly within a sin-

gle psychiatry residency program. Early in orientation, it is prudent to prepare psychiatry residents for the possibility of fragmentation of work culture between training experiences and rotations. The overall work cultures of the affiliated hospital, university, or health-care system influence a residency program's work culture, and different training sites and rotations will likely have their own cultures. In addition, there may be a work culture specific to call shifts, jeopardy coverage, supervision, inpatient wards, outpatient clinics, or outside institutions. Work culture may fluctuate throughout the academic year. For instance, it may strengthen in trust, support, and respect early on as residents get to know one another. On the other hand, it may weaken throughout the year in response to adverse experiences, burnout, or moral injury. Chief residents, program directors, supervising faculty, and training office staff are instrumental in maintaining the desired work culture throughout a given year. Still, it is critical to establish the foundation of work culture during orientation at the start of each academic year.

Orienting to Work Culture

Orienting to Communication

Orientation is an opportunity for program leadership to model effective, clear, and timely communication for new psychiatry residents and fellows. Chief residents and program directors should obtain and reflect on feedback from the previous year to improve communication for the coming year. They should also work together to define expectations for communicating issues or concerns. New residents and fellows should be informed about the available communication channels for voicing concerns. Also, specific examples should be provided as to how trainees should discuss concerns and who is most appropriate for them to contact for various issues (i.e., supervising attendings, peers, chief residents, program directors, human resources, or other institution-specific resources). New residents and fellows should explicitly be told about policies for sick leave and how to communicate unplanned

absences. Chief residents should be instrumental in emphasizing the importance of professional communication with other psychiatry trainees, residents and fellows from other departments, and staff from other disciplines (nursing, social work, support staff, etc.). Orientation to communication should include paging and sign-out etiquette.

Giving and receiving feedback are common sources of communication pitfalls. Consider scheduling an orientation session explicitly focusing on communication and feedback. By the end of orientation, residents and fellows should fully understand how to use evaluation systems and which evaluations are anonymous or not. New trainees should be encouraged to seek direct and regular feedback from supervisors before receiving formal evaluations. For new rotations, residents and fellows should know clearly who their rotation directors are and how to contact them. Rotation directors should be proactive in reaching out to trainees before starting new rotations. Any information about process groups or group reflections throughout the year should be highlighted during orientation, and chief residents, program directors, and co-residents should encourage attendance. Prioritizing these aspects of communication in orientation will promote critical components of work culture such as openness, sharing experiences, a habit of inquiry, examination of failure, a growth mindset, creative thinking, and systems thinking.

Orienting to Community

Strong camaraderie between co-residents and fellows is vital to a healthy psychiatry program work culture. It is essential to schedule group activities during orientation and throughout the year to foster rapport building. Many newly matched or selected residents and fellows have moved to a new city to begin the program and may not have a solid local support structure. Chief residents and program directors should schedule mixers and social gatherings at the beginning of the year to promote cohesion within and between residency classes. Any opportunities

to have mixers between residents and fellows, faculty, and other staff should be prioritized. If feasible, having one or two retreats throughout the year can be an excellent way for trainees to build a strong sense of community. Chief residents may elect to create social media or Short Messaging Service (SMS) groups (e.g., texting, WhatsApp) to facilitate more informal communication between residents and fellows.

It is crucial for new trainees to understand they should never worry alone and that there are multiple levels of support provided for them should they need it. Chief residents and program directors should consider implementing supportive programs throughout the year, such as a faculty/resident or fellow mentorship program, buddy systems between junior and senior residents, structured peer mentorship programs, or resident “families” to enhance the community. Again, process groups or group reflections throughout the year should be highlighted during orientation. Attendance at these groups should be facilitated so trainees can rely on a safe space to process challenging experiences. Prioritizing events to build community will promote key components of work culture such as openness, empathy, cooperation, sharing experiences, trust, support, respect, and shared vision.

Orienting to Professionalism

The culture of professionalism in GME programs dramatically influences the overall work culture. First-year residents are new to their roles as physicians, and they likely will enter residency training at different levels of professionalism. Chief residents can discuss the transition from medical school to residency (going from students to employees/learners) and set program-wide expectations for professionalism. This discussion can be an opportunity to review the core values of the training program, educate new residents about important program policies, and set expectations for professional growth over the year. It is crucial to define accountability regarding psychiatry training and review basic expectations for work, such as when to arrive for shifts, how to

prepare for rounds, how to give sign-out, and requirements for clinical documentation. Not explicitly defining these expectations during orientation risks harming the work culture later in the year. Common lapses in professionalism include residents showing up late to work, not giving adequate sign-out, providing inadequate documentation in medical records, and not returning pages/calls on time, all of which can lead to tension between residents, adverse patient outcomes, resident burnout, and disruption to the spirit of camaraderie.

Professional identity, professionalism, and patient ownership advance throughout training. Therefore, each residency class and fellowship should have its own professionalism orientation appropriate for its level of training at the beginning of each academic year. Topics may include self-reflection, examination of failure and opportunities for growth, and transitioning from inpatient to outpatient settings. Senior residents and fellows should be educated about leadership roles, being a mentor for junior residents, and preparing for independent practice after training. Yearly orientation is also an opportunity to review issues and concerns from the previous year and refresh residents on important program policies. Explicitly focusing on professionalism during orientation will promote key components of work culture such as cooperation, trust, support, respect, flexibility/adaptability, accountability, examination of failure, shared vision, and understanding systems.

Accounting for Iteration and Dynamic Change in Work Culture

We recognize work culture is not static. Psychiatry programs need to monitor their work culture iteratively and adjust their orientations over time to adapt to, maintain, or improve work culture. Hoff et al. [4] discussed how residency programs should develop “cultural templates” that identify the individual, group, and organizational barriers that must be overcome in the setting to move toward the desired type of everyday culture. The

program’s core values or mission statement may approximate such a template. Periodically throughout the year, program leadership should reflect on the current status of the work culture, assess for any deviations from the cultural template, and propose solutions to address the variations. Seeking input from trainees directly, from anonymous evaluations, or through the annual ACGME survey can assist in identifying weaknesses in the work culture. Once core issues and deviations from the cultural template have been identified, orientation can be tailored to address these specific concerns.

Similarly, Almost et al. [5] discussed the importance of assessing both positive and negative behaviors within the health-care setting in order to promote work culture and optimize patient-centered care. They encouraged the enhancement of positive behaviors such as collegiality, respect, cooperation, teamwork, social support, and mentorship. These behaviors can be facilitators of effective workplace relationships. They also discussed the importance of identifying, understanding, and learning from negative behaviors such as conflict, emotional abuse, harassment, ostracism, and verbal abuse. These behaviors are barriers to effective workplace relationships. Leadership should continually strive to correct underlying barriers and promote facilitators throughout the academic year to improve work culture. Program directors and chief residents should strive to collaborate, transformational, and dynamic; Sfantou et al. [6] demonstrated how health-care leaders who demonstrate these leadership qualities more effectively promote positive outcomes for workers and patients in health-care settings.

Orientations at the beginning of the year are often densely packed with information that might not be particularly relevant at the time and may slip through the cracks. First-year orientations are particularly content-heavy. Program directors and chief residents might consider planning serial orientations to disseminate information in more relevant chunks throughout the year. Residents and fellows may also need to be reoriented on specific topics as needed. Some high-yield strategies for improving work culture throughout the

year are to organize more social events or retreats, create new spaces for shared reflection, implement praise cards, and celebrate holidays and personal or shared achievements together.

Sample Work Culture Orientation Content for First-Year Residents

1. Introductions from the program coordinator and program director
2. Introductions from the associate program directors, site directors, and clinical rotation directors
3. Safety protocols – basic life support and advanced cardiovascular life support trainings, conflict resolution training, aggressive or violent behavior training
4. Electronic health record training
5. Handoff and call expectations, paging etiquette
6. Paperwork expectations, including how to ask for leaves of absence
7. Professionalism expectations, accountability, transitioning from medical school to residency
8. Who to go to for questions and concerns, education about leadership structure and resolving concerns at the lowest effective level
9. Social gatherings, mixers for residents and fellows and faculty
10. Faculty/trainee mentorship programs, buddy systems between junior and senior residents

Education Culture in Residency

Upon entering psychiatry training, one of the many transitions for new residents is the shift toward practice-based learning of focused professional skills or on-the-job learning. While the clinical years of medical school may have involved some case-based learning and patient-care-anchored educational experiences, those experiences may have been balanced with non-patient-case-anchored didactic experiences, or

learning-in-abstraction. As the medical learner becomes closer to competency in independent medical practice, educational experiences shift to support more proximal professional skills and utilize more in situ, active, practice-oriented learning, with a relative decrease in abstract didactic learning experiences.

For residents, this shift can feel anxiety-provoking and confusing. It can lead residents to grieve the loss of consequence-free practice space and generate concerns about the balance of education and service. Failing to discuss and clarify the nature of multiple venues for and expected trajectory of learning in residency can lead to resident anxiety about imposterism, anger about the perceived loss of traditional educational experiences, and concern about missed opportunities for learning. For programs themselves, lack of clarity about educational approach and venues can lead to faculty confusion, negative comments from residents in public forums, and more difficulty helping residents utilize all available learning experiences. Therefore, it is essential to orient residents early in training to the purpose and structure of the educational experiences in psychiatric residency.

Defining Education in Psychiatric GME Programs

Education in a psychiatric residency or subspecialty fellowship seeks to create competent, independently functioning psychiatrists or subspecialists by the end of training. While numerous factors distinguish one training program from another, there are many similarities – some inherent to the nature of the shared practices and practice settings, and others a result of centralized standards. The target competencies and necessary experiences for psychiatric residents and fellows are outlined by the Accreditation Council for Graduate Medical Education (ACGME) and, to a lesser extent, the American Board of Psychiatry and Neurology (ABPN). ACGME psychiatry workgroups have further elaborated these competencies to more specific

subcompetencies and performance indicators (Milestones), providing focused guidance to teaching faculty and trainees alike. To these educational ends, psychiatry programs generally employ educational experiences that adhere to adult learning theory and professional skill training of learning in place. How programs apply this theory may be as diverse as the programs themselves. Still, residents and fellows themselves often progress through similar stages of professional skill competency no matter how that theory is applied. Knowledge of educational targets, who governs them, what theory guides their acquisition, and what expectable stages they may progress through along the way is important for residents and fellows.

Orienting to Education in the Psychiatry GME Program

Orientation to education in the psychiatry residency or fellowship, like orientations to other aspects of training, benefits from iterative exposure, purposeful specification in particular contexts, and updating when changes occur. Outlined below are some general areas related to resident and fellow education that will be beneficial to orient trainees to

1. Competence and who defines it – ACGME, ABPN, and program-defined aspects
2. Adult learning theory
3. Expectable stages of skill acquisition
4. Program structures supporting resident competence acquisition
5. Trainee learning differences

Competency in Psychiatric Practice and Who Defines It

It is helpful and important for psychiatry residents and fellows to know the target experiences and skills they are expected to have and develop throughout training, and who defines those experiences and skills. Residents and fellows should

be informed that their training length and experiences are guided and governed by the Accreditation Council for Graduate Medical Education (ACGME) and, to a lesser extent, the American Board of Psychiatry and Neurology (ABPN). While the ABPN specifies some more general aspects of psychiatry resident training, such as length of training, limitations on breaks, and part-time training, to allow residents to become board eligible, the ACGME's Program Requirements for Graduate Medical Education in Psychiatry [7], Core Competencies [8], and Psychiatry Milestones [9] are a more specific guide to experiences and skills of the developing psychiatric resident or fellow. The Program Requirements outline the required experiential content of training, including duration of and care focus of rotations and didactic experiences. In addition, the six ACGME Core Competencies (Patient Care, Medical Knowledge, Systems-Based Practice, Practice-Based Learning and Improvement, Interpersonal Communication Skills, and Professionalism) help define the fundamental skills of a physician, and their elaboration for the psychiatric practice in the ACGME Psychiatry Milestones further details the target psychiatric skills and expectable developmental trajectories of those skills throughout a resident's or a fellow's professional development. Awareness and understanding of these concepts, documents, and their intent can be helpful to the trainee, an adult learner, who benefits from knowing why they are learning what they are learning and who makes these decisions.

It is also important for residents and fellows to know that, while some of the ACGME and ABPN's requirements are prescriptive, there remains a significant amount of local institutional and program variation in specific educational experiences and clinical rotations. Sometimes this local and regional variation comes in the form of limitations – for example, a program without an affiliation with a Veterans Affairs hospital or clinic may offer less experience in the care of veterans, certain disorders that are more common in veteran populations, or the broad array of services that many VA institutions pro-

vide their patients. Sometimes this local variation comes in the forms of opportunities – for example, a program with a close affiliation with a local university health and counseling center that provides residents opportunities to work with transitional age adults in college settings, or a program with close affiliation with a psychoanalytic center that may partner for robust psychodynamic teaching or supervision. Other times this local variation is a response to community needs – for example, a program within an institution with specific community responsibility or caché may have unique opportunities in alignment with the institution’s mission – for example, training opportunities within culturally based clinics, rural telecare clinics, state hospital, government relations, and public health.

Adult Learning Theory

It is important to help residents and fellows understand the theories of andragogy and professional skill development as they contrast to the more general concept of pedagogy. Andragogy is defined as methods and principles of adult learners. This term was created to distinguish it from pedagogy, which relates to more general methods of teaching and instruction, and has traditionally focused on education in the classroom for young learners. As developed by Malcolm Knowles [10], andragogy is based on adults’ increasing capability and desire for self-direction and responsibility for decision-making. The following assumptions shape andragogy: (1) adults learn when they know why they need to learn something; (2) adults learn experientially; (3) adults learn by problem-solving; (4) adults best retain learnings of immediate value. Adult brains have already gone through maturational pruning processes that preference computational efficiency and speed at the expense of serendipitous, context-independent learning that might occur, such as in their youth. Adult brains require learning activation within a relevant, salient context reinforced by purposeful action and decision-making. Table 8.1 contrasts aspects of pedagogy and andragogy.

Table 8.1 Learning theories: pedagogy and andragogy

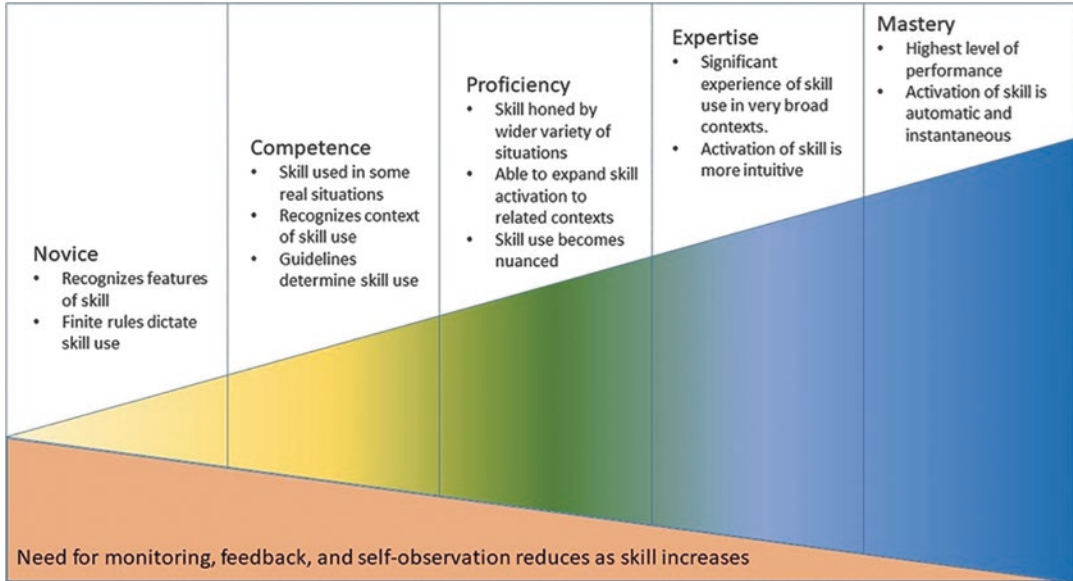
| Pedagogy (early life) | Andragogy (adulthood) |
|---|---|
| Few life experiences to draw from | Large number of life experiences to draw from |
| Learning needs dictated by teacher | Learning needs related to social roles |
| Learning structure/method dictated by teacher | Learning structure/method dictated by learner |
| Subject/content centered | Problem/situation centered |
| Extrinsic motivation | Intrinsic motivation |

Source: Stanley (2021) adapted from concepts outlined by Knowles

Expected Stages of Skill Acquisition

It is also important to help residents and fellows understand that professional skill development is an incremental process that often progresses through predictable stages. The Dreyfus model of skill acquisition [11], developed by Stuart and Hubert Dreyfus, describes some expected steps (novice through expert) through which professionals pass while developing a particular professional skill. Their model is based on the incremental growth of four factors: skill recollection (What is this skill I hold?), context recognition (In what situations might I need to use this skill?), decision (How do I use the skill and put it into action?), awareness (Now that I use the tool implicitly, where do I take the skill now?) – see Table 8.2 for details. Residents and fellows need to know that these stages build on one another in practice. For example, the better a resident can recall the criteria for a major depressive episode (MDE) in practice, the easier it becomes to sense the contexts/patients with which to use the criteria. As a resident becomes facile at recognizing contexts in which they can use the MDE criteria, they have more opportunities to put the criteria into use in their diagnostic discussions and treatment decisions with the patients for whom they care. These stages require active participation and purposeful engagement with the skill, resulting in increasing facility and innate use of the skill and an increasing sense of responsibility for the patient with whom the skill is used.

Table 8.2 Dreyfus model of professional skill acquisition



Source: Stanley (2021) adapted from concepts outlined by Dreyfus

It can also be helpful for residents and fellows to know that, due to the nature of a program’s sequence of training experiences, they may develop different professional psychiatric skills at different times in the program – for instance, developing the skill “diagnosing and treating patients with schizophrenia spectrum disorders” very early in residency. In contrast, the skill of “utilizing theories of psychosocial development in work with outpatients” may come later in their training. It can also be helpful to know that residents and fellows may develop specific psychiatric skills at different speeds based on prior experience or previously developed skill sets. For instance, a trainee who has had a sibling with attention-deficit hyperactivity disorder (ADHD) may be able to move more quickly along the stages of professional use of the ADHD diagnostic and treatment skills than might a trainee who has never previously had experience with that diagnosis. Or, a resident or fellow who had extensive volunteering with houseless persons before or in medical school may be able to more rapidly develop the professional skill of helping patients engage with community-based services.

Program Structures That Support Resident or Fellow Competence Acquisition

While orienting to the above concepts of standardized training experiences, target skill sets, adult education theory, and stages of professional skill development, it is likely most critical to connect these concepts to the applied learning practices within the training program. Educational opportunities at different institutions vary widely and commonly include educational experiences such as a didactic series, grand rounds, morbidity and mortality (M&M) conference, to name a few. The program, or the department, often organizes these educational opportunities, which may be independent of trainee practice contexts but are considered by many as easily identifiable educational experiences that adhere to traditional didactic learning models. At the same time, many parts of a training program falling outside the conventional didactic learning model actually include educational components that learners conditioned to pedagogy may not recognize as critical to their professional education.

Table 8.3 Example array of educational activities in a training program

| Educational activity | Required | Resident-directed? | Andragogy-oriented? | Knowledge | Skills | Attitudes |
|---|----------|--------------------|---------------------|-----------|--------|-----------|
| Clinical-based care and supervision | Yes | + | Yes | ++ | +++ | + |
| Clinical skills lab training | Yes | | | + | +++ | + |
| Group supervision | Yes | + | Yes | ++ | +++ | ++ |
| Didactics | Yes | | | ++ | ++ | ++ |
| Journal club | | | | ++ | ++ | + |
| Case conference | Yes | ++ | Yes | ++ | ++ | + |
| M&M | Yes | | Yes | +++ | + | + |
| Grand rounds | | | | +++ | | + |
| Quality improvement (QI) committee | | | Yes | ++ | + | + |
| Scholarly projects | Yes | ++ | Yes | ++ | + | ++ |
| Reflection rounds | | ++ | Yes | + | | ++ |
| Process group | | ++ | Yes | | | +++ |
| Individual learning plans | Yes | + | Yes | + | + | + |
| Clinical observation and feedback, clinical skills verification | Yes | | Yes | + | +++ | |
| Faculty mentorship | | ++ | Yes | | | +++ |
| Peer mentorship | | ++ | Yes | + | + | ++ |

Source: Stanley (2021)

The array of educational activities in psychiatric residencies may vary in requirement, degree of concordance with andragogy, and degree of resident control from one institution to another. Experiences may also differ in how they activate and assist in deepening knowledge, skills, or attitudes. (Table 8.3 attempts to give an example of an array of educational opportunities and approximate their differences about several factors. It is not intended to be exhaustive and will likely vary considerably from one program to another.) Therefore, it will be necessary for training departments to be transparent with residents about which departmental educational activities are required and which are not required. For those required educational activities, established goals and objectives should direct trainees to the importance of the material and the main points of the activity.

Resident Learning Differences

While residents and fellows should be oriented to the underlying educational theories and opportunities during training, program-created learning experiences are only one side of the learning

interface. Each psychiatric resident or fellow brings their own unique approach to learning to the start of residency or fellowship training. In addition, each new trainee's approach to learning may have been shaped by biological predispositions, encultured experiences, and generational effects.

It may be helpful for trainees to reflect on and explore with their fellow residents or fellows the diversity of learning styles, approaches, and expectations within their cohort. An awareness of this diversity can help match junior residents with like-styled senior residents or peers, can help residents and fellows own and utilize their preferred learning styles when working with clinical educators, can help decrease overgeneralization of a personal experience to the experience of other residents and fellows, and can help build tolerance and mutual support that can improve group cohesion and may even extend to patient care. In addition, discussion of different learning styles within resident or fellowship groups may prompt discussion of and concern for diagnosable conditions that affect learning. While it is critical to avoid diagnosis in the training setting, these discussions can offer an opportunity to reiterate learning supports and medical care available to trainees.

Accounting for Iteration and Dynamic Change in Education Culture

As discussed in previous sections regarding other aspects of the transition to resident or fellowship life, reiterating educationally oriented concepts throughout the training experience is important. This reiteration reminds and refocuses trainees on the purpose and intentionality of their educational experiences and may promote motivation to engage in a broad array of active learning experiences. This reiteration may also encourage residents and fellows to reflect on their professional growth over time, enhancing self-confidence and assisting in peer mentorship relationships, during which awareness of professional developmental stages can be critical to empathy and support. Finally, while reiteration can be helpful to gain confidence in some internal stability of educational experiences in the training program, it can also highlight the existence of and benefits from diverse learning experiences within those structures, especially for residents and fellows with a variety of learning styles.

While reiteration may assist in establishing coherence of the educational program and awareness of and motivation for residents and fellows using learning opportunities, the processes of learning and teaching are not static. They should incorporate processes to adjust dynamically to system, patient, and learner needs. Trainees need to understand how feedback on educational activities is acquired and utilized and the opportunities and limitations for programmatic and educational changes. It can also be essential for empowering trainees to become involved in education themselves – medical student teaching, peer mentoring, group facilitation, and more – as teaching reinforces learning.

Sample Education Culture Orientation Content for First-Year Residents

1. Who decides what residents are supposed to learn?

- (a) ACGME and ABPN requirements
 - (b) Core competencies and milestones
2. How do adults learn?
 - (a) Andragogy
 - (b) Dreyfus model
 3. How do residents in the program learn?
 - (a) Each learner is different
 - (i) Individual learning styles
 - (ii) Unconscious bias
 - (b) Learning through work – rotations, call, etc.
 - (i) How to learn while working
 - (c) Learning through reflection – supervision, peer groups, etc.
 - (i) How to use supervision
 - (d) Learning through teaching – medical students, conferences, etc.
 - (i) How to work with students
 - (e) Intentional practice –
 - (i) Goal setting
 - (ii) Receiving and using multimodal feedback
 4. Where in the program will resident learning happen?
 - (a) Rotation introduction by site directors
 - (b) Didactics introduction by course directors
 5. How can residents impact the learning environment?
 - (a) Feedback and process improvement on education in the residency

Work/Personal Life Balance in Residency

Psychiatry residency or fellowship orientation, both at the onset of training and throughout, must include proactive education about a trainee's own mental health and wellness. Residents and fellows can suffer from depression and experience burnout at higher rates than age-adjusted peers [12]. In addition, health and wellness can be compromised during residency for reasons including but not limited to isolation, toxic work environments, difficult work hours, and stress of transitioning to the “doctor role.” In particular, witnessing adverse patient outcomes or dealing

with severely ill patients, particularly those who can be verbally and physically abusive, can lead to anxiety, burnout, and even regrets about a resident or fellow's career choice [13]. Providing anticipatory guidance about these potential risks and information about proactive support systems can help residents anticipate these challenges.

The composition of the psychiatric workforce is evolving, and as such, the topics covered during orientation may vary over time based on changes in the resident or fellow group. To illustrate, consider that at many programs the average age of incoming interns is increasing, as is the proportion of female physicians, and much is being written about the changing demand for adequate parental policies in graduate medical education and psychiatry [14, 15]. Orientation about rapidly evolving ACGME, ABPN, and institution-specific policies about parental leave, childcare, new mothers expressing breast milk at work, and moonlighting might be crucial to some residents' or fellows' well-being. More generally, financial concerns and pressures are changing as it becomes increasingly challenging to afford housing in many large cities and student debt increases. Medicine is becoming more diverse, but due to the nature of the Match, some residents are moving from inclusive communities to communities where they face, at worst, abuse and, at best, ignorance about their backgrounds, beliefs, or practices. Orientation about the makeup of the institutions and communities that residents serve and resources to build community and combat intolerance might improve resident well-being and decrease the risk of burnout and moral injury. To best serve and protect today's psychiatry residents and fellows, orientation about work–personal life balance and wellness will likely need to be more multifaceted and creative than in the past.

Define the Area

As mentioned in the previous section, “work–personal life balance” and “well-being” are phrases that can be overused and sometimes try

to capture nebulous concepts. For this chapter, “work–personal life balance” means a trainee's ability to live a healthy life outside of the training program while fulfilling the program's educational and clinical demands. Well-being refers to the mental and physical health of a resident or fellow and their family, as well as some admittedly vague concepts such as job satisfaction, burnout vs. fulfillment, and desire to remain engaged in their career and program. These concepts are intertwined closely. Therefore, orientation to this area should include the following:

1. “Anticipatory guidance,” that is, psychoeducation about pitfalls and opportunities residents and fellows should look out for, including how to identify serious issues arising in oneself and to an extent, one's peers
2. Leave policies (sick days, Family and Medical Leave Act, extended leave) so that residents know how they can balance work duties and home duties/well-being if needed
3. Program- and institution-specific resources for health and well-being
4. Efficiency and time management strategies as these can improve work–personal life balance
5. Personal wellness strategies and how to use them during residency

Orienting to This Concept

Orienting to “Anticipatory Guidance”

The beginning of the intern year is often compared to “drinking out of a fire hose” and feels overwhelming and unsustainable. As such, intern orientation should be limited to the most crucial information for the next 6–12 months. This likely includes a short session highlighting the risks of intern year, review of where to seek help (discussed more in future sessions), and introduction of ongoing support groups and peer and mentor support. In particular, a short session should educate interns about the increased risk of sleep deprivation, burnout, anxiety, and depression

during intern year, during winter, more difficult rotations, and when studying for Step 3. In addition, the challenges of moving to a new city to start this job should be highlighted and relevant community resources introduced. Unique challenges to starting psychiatry residency should also be discussed, including serving a high-acuity patient population, working on off-service rotations where one can feel isolated from the psychiatry training program, and concerns about moral injury (treatment-resistant cases, involuntary treatment and commitment, use of seclusion and restraint). This “anticipatory guidance” will not scare interns but provide an open forum to discuss these challenges and pitfalls. Ideally, this session would be conducted with an experienced faculty member and a chief resident to provide different perspectives. An optional intern support group facilitated by a nonfaculty member throughout the intern year is highly recommended.

Annual orientations should take the same format. In particular, each year, a chief resident and/or program leader should meet with rising classes or beginning fellows to discuss potential challenges over the next 12 months. These could include periods of high call burden/night float, transition from inpatient work to outpatient, transition from direct to indirect supervision, receipt of performance reviews, changes in training sites, or transitioning to fellowship. Like the intern orientation, it should also highlight stressors not directly tied to rotations, such as job search/fellowship applications, potential postgraduation moves and financial changes, moonlighting, and ongoing standardized testing.

Continuing orientation can occur primarily in scheduled time with a faculty mentor and chief resident and peer support groups with the intern class. In addition, scheduled 1:1 meetups and group activities can help alleviate these stressors and allow the opportunity to discuss them. For example, informal lunches with senior residents and holiday parties (coinciding with the “higher risk” time of winter) with faculty in addition to more formal check-ins are essential.

Orienting to Leave and Time-Off Policies

Many residents and fellows fear taking time off, whether an individual sick day or a necessary extended period (parental leave, prolonged illness), because of the effects of time off on their career and reputation. In particular, residents feel unable to use sick leave because of the pressure this puts on other physicians and staff and because they fear retaliation, scrutiny, or damage to their reputation. In addition, residents and fellows can feel unable to take extended medical leave for fear that they will go unpaid, prolong graduation, and damage their reputation. Similar worries apply to various situations, including the need to schedule one’s own therapy or doctor’s appointments or requests for accommodations for injury, illness, or breastfeeding at work.

During intern orientation, residents should be provided clear, explicit guidance about requesting sick days and time off (vacation, wellness days, time for Step 3 exam, etc.). Doing so should be normalized by the program director, Graduate Medical Education (GME) office, and fellow residents. Expectations about who an intern will contact, when, and their responsibilities regarding coverage should be straightforward and clear. This practical orientation should come both from the program and chief residents, who often play a role in coordinating with other programs to clarify policies and expectations. Chief residents should also provide informal orientation about culturally appropriate policies, that is, whether a resident must take a sick day to attend a short doctor’s appointment. Depending on the demographics and culture of your program, it may not be necessary to provide a detailed orientation about parental leave or other types of long-term leave during intern orientation. Still, new interns should be made aware of where to find such information.

More detailed information about extended leave should be provided annually to all interested residents. Offering this preemptively allows residents to gain information without disclosing their status as someone who might be taking such a

leave. Additionally, changes to request time off, including coverage and other expectations, should be reviewed on an annual basis.

Orienting to Program- and Institution-Specific Resources

Most GME programs have implemented many policies to support residents' mental health, well-being, and work–personal life balance in this challenging part of their career. These efforts include but are not limited to support groups, peer support programs, resident or fellow-faculty wellness programs, crisis management teams, ombuds programs, new parent supports, and immediate debriefing and support after traumatic events. Interns and new fellows must learn about these programs during orientation, both officially from the program and unofficially, through faculty encouraging the use of these programs and endorsing their effectiveness while stressing that they will not be subject to retaliation or “singling out” if they engage with them. On an annual basis, residents should be reminded of these resources, and throughout the program, as applicable, leaders from these services should reorient residents and fellows. For example, members of a peer support group could do a presentation during each orientation and chief residents or program leaders could remind residents and fellows of the resident or fellow-faculty wellness program. Anonymized statistics highlighting the usage of such programs (i.e., $x\%$ of residents or fellows use the wellness program) can teach new trainees that it is safe to use these programs. If possible, dedicated time during orientation, both intern orientation and annual orientation, to participate in wellness activities reinforces a culture that prioritizes these activities. For example, a walk with the program directors, an afternoon off to enjoy cultural events or a barbecue, or other wellness and community-focused events during the traditional workday can teach residents and fellows that a program values wellness and self-care as much as other aspects of resident life.

Orienting to Efficiency Strategies to Improve Work–Personal Life Balance

Any discussion of work–personal life balance in residency or fellowship must account for the fact that residents and fellows work a lot. In particular, documentation burdens on physicians have steadily increased [16]. In addition, during the COVID-19 pandemic, hospitals have been at or above capacity more than in recent memory, leading to increased work burdens, fatigue, and moral injury. While trainees often have little control over the lengths of their shifts or the number of patients they see, they can be taught efficiency and time management habits from early on in training to improve their work–personal life balance.

During intern orientation, residents should be taught to continuously improve their workflow and recognize when they need to transition care. With respect to the former, orientation should include sessions on reasonable amounts of time to spend on activities (pre-rounding, rounding, literature reviews, documentation) and what to do if one finds they are exceeding this time (e.g., check-in with chief residents, seek guidance from attendings or near peers). “Over the shoulder” sessions wherein residents model efficient ways to perform tasks, such as chart rounding, preparing a note, or writing a progress note, should be incorporated into orientation and reintroduced at the beginning of each new rotation so that interns do not have to “reinvent the wheel” on every rotation. Residents and fellows at every level of training who are particularly efficient should be tasked to share their tools with others, whether organizational, cognitive, or as practical as setting up dictation tools for notes. Explicit guidance about how long tasks should take can help residents identify themselves as needing help and resources, and generalized education about cognitive strategies that can help physicians and residents thrive should be provided intermittently. Feedback on efficiency could be solicited from supervisors and shared with residents and fellows and their own self-evaluations during annual reviews.

Orienting to Personal Strategies to Improve Well-Being

Residents and fellows are adult learners who bring a plethora of life experiences to this job, including diverse hobbies and interests that facilitate their well-being and make them better physicians and colleagues. Unfortunately, it is not uncommon for residents and fellows to give up these “extracurricular” activities during medical school, residency, and fellowship with adverse effects on their health. It is important to emphasize the role of self-care, be it physical exercise, mindfulness, social activities, or spiritual prac-

tices during training, while also helping residents and fellows to set realistic expectations about their time commitments. During intern or new fellow orientation, this could mean showing trainees where the gym is on campus, providing dedicated time to sign up if they choose, and showing them how to use wellness half days and vacation time. As training progresses and work hours decrease, helping residents and fellows set wellness goals and supporting these goals can build program cohesion and facilitate wellness and well-being.

Table 8.4 summarizes the information presented in the prior sections.

Table 8.4 Topics covered at each phase of orientation related to work–personal life balance and well-being by theme

| Topic | Intern orientation | Annual orientation | Continuing orientation |
|-----------------------------------|--|---|---|
| Anticipatory guidance | Unique difficulties/“sticky situations” of psychiatric residency Difficult times of year (rotations, seasons, Step 3) | Unique difficulties of new role(s) (outpatient, call) Stress of job search/fellowship applications) | Debriefing or increased support after traumatic resident interactions Protected time to share information and tips from outgoing residents/fellows on service/in clinic Retreats! Faculty and peer mentorship Strategically timed social events (after PRITE, winter) |
| Leave policies | How to request sick days on on- and off-service rotations Culture around taking time off | Annually How to request extended leave and its effects on pay/training length | Policy updates Consider formal or informal “affinity” support groups or social events (e.g., parents) |
| Program and institution resources | Introduction to resident/faculty wellness center Introduction to relevant support programs State-specific reporting issues (what is reported) | Review of pertinent resources | “Expert hours” regarding resident or fellow wellness and available programs Usage statistics Resident/fellow support groups (formal and informal) Social events |
| Efficiency strategies | Explicit guidance on workflow/time management for each rotation Peer support to provide feedback (“big sibling,” chiefs) | Tips and tricks session with strong residents from the previous year Expectations (“how long should XX take) | Targeted outreach to self- or program-identified residents or fellows who need help Education about cognitive strategies for doctors/residents/fellows Discussion of efficiency at evaluations |
| Personal wellness strategies | How to recognize a personal or professional crisis Orientation to gym/meditation/sleep spaces on campus How to use wellness half days How to take vacation time | Protected time to set goals and check in/reflect on them Wellness half days/vacation | Social events that promote personal wellness habits (hikes, yoga/meditation, art) |

Source: Shenoy (2021)

Accounting for Iteration and Dynamic Change in Concepts

Of all the topics covered in this chapter, these are the least defined and discussed in residency and fellowship orientation, but that is changing. As more attention is called to the complex and sometimes toxic nature of medical training, residents and fellows seek to gain more power in the medical system (e.g., through unionization). By recognizing “the whole person” in a new trainee, psychiatry programs can help them succeed not only in their clinical work but also in their personal lives. This is a worthy goal, and orientation is a great place to start.

Sample Work/Personal Life Balance Orientation Content for First-Year Residents

1. Safety and emergencies
 - (a) Fatigue mitigation
 - (b) Guidelines about reporting physician impairment
 - (c) Crisis recognition, resources, and reporting implications
2. Practical tips
 - (a) How to seek preventative and urgent care
 - (b) How to find wellness resources (gym, wellness half days, call rooms, peer support)
 - (c) “High-risk” situations and times of year
3. Efficiency and time management

Conclusion

Graduate medical education is highly social. The learning involves a degree of acculturation to the standards of practice of the profession. The learning is situated in the same workplace context in which it is applied. Training programs are what Wenger [17] describes as a community of practice where members interact with each other bilaterally, have a common endeavor, and have a common repertoire of skills. As such, the goal of residency or fellowship is to welcome trainees

into the program smoothly and effectively and to acculturate them to membership within the program. These are the main goals of orientation described in this chapter.

References

1. McGrath J, Barrie M, Way DP. Emergency medicine resident orientation: how training programs get their residents started. *West J Emerg Med.* 2017;18(1):97–104. <https://doi.org/10.5811/westjem.2016.10.31275>.
2. CarlLee S, Rowat J, Suneja M. Assessing entrustable professional activities using an orientation OSCE: identifying the gaps. *J Grad Med Educ.* 2019;11(2):214–20. <https://doi.org/10.4300/JGME-D-18-00601.2>.
3. O'Brien BC. What to do about the transition to residency? Exploring problems and solutions from three perspectives. *Acad Med.* 2018;93(5):681–4. <https://doi.org/10.1097/ACM.0000000000002150>.
4. Hoff TJ, Pohl H, Bartfield J. Creating a learning environment to produce competent residents: the roles of culture and context. *Acad Med.* 2004;79:532–40. <https://doi.org/10.1097/00001888-200406000-00007>.
5. Almost J, Wolff A, Mildon B, Price S, Godfrey C, Robinson S, Ross-White A, Mercado-Mallari S. Positive and negative behaviours in workplace relationships: a scoping review protocol. *BMJ Open.* 2015;5(2):e007685. <https://doi.org/10.1136/bmjopen-2015-007685>.
6. Sfantou DF, Laliotis A, Patelarou AE, Sifaki-Pistolla D, Matalliotakis M, Patelarou E. Importance of leadership style towards quality of care measures in healthcare settings: a systematic review. *Healthcare (Basel).* 2017;5(4):73. <https://doi.org/10.3390/healthcare5040073>.
7. Accreditation Council for Graduate Medical Education. ACGME program requirements for graduate medical education in psychiatry. Accreditation Council for Graduate Medical Education; 2021. https://www.acgme.org/globalassets/pfassets/programrequirements/400_psychiatry_2021.pdf. Accessed 22 Jan 2022.
8. Accreditation Council for Graduate Medical Education. Milestones guidebook for residents and fellows. Accreditation Council for Graduate Medical Education; 2020. <https://www.acgme.org/globalassets/pdfs/milestones/milestonesguidebookforresidentsfellows.pdf>. Accessed 22 Jan 2022.
9. Accreditation Council for Graduate Medical Education. Psychiatry milestones. Accreditation Council for Graduate Medical Education; 2021. <https://www.acgme.org/globalassets/pdfs/milestones/psychiatrymilestones.pdf>. Accessed 22 Jan 2022.
10. Knowles MS, Holton EF III, Swanson RA. The adult learner: the definitive classic in adult education and human resource development. Routledge; 2014.

11. Dreyfus SE. The five-stage model of adult skill acquisition. *Bull Sci Technol Soc.* 2004;24(3):177–81.
12. Dyrbye LN, West CP, Satele D, Boone S, Tan L, Sloan J, Shanafelt TD. Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. *Acad Med.* 2014;89(3):443–51. <https://doi.org/10.1097/ACM.000000000000134>.
13. Dvir Y, Moniwa E, Crisp-Han H, Levy D, Coverdale JH. Survey of threats and assaults by patients on psychiatry residents. *Acad Psychiatry.* 2012;36(1):39–42. <https://doi.org/10.1176/appi.ap.10060090>.
14. Webb AMB, Hasty BN, Andolsek KM, Mechaber HF, Harris TB, Chatterjee A, Lautenberger DM, Gottlieb AS. A timely problem: parental leave during medical training. *Acad Med.* 2019;94(11):1631–4. <https://doi.org/10.1097/ACM.0000000000002733>.
15. Dillinger RL. From requisite to right: assessing and addressing paid maternity leave in US psychiatry residency programs. *Acad Psychiatry.* 2021;24:1–5. <https://doi.org/10.1007/s40596-021-01523-x>. Epub ahead of print. PMID: 34559391
16. Baumann LA, Baker J, Elshaug AG. The impact of electronic health record systems on clinical documentation times: a systematic review. *Health Policy.* 2018;122(8):827–36. <https://doi.org/10.1016/j.healthpol.2018.05.014>.
17. Wenger E. *Communities of practice: learning, meaning, and identity.* Cambridge University Press; 1999.



Recruitment of International Medical Graduates: Contributions, Trends and Challenges Ahead

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Introduction

International medical graduates (IMGs) are a heterogeneous group of physicians, defined as those who have received their medical education outside of the United States. It is the location of the medical school and not the nationality or citizenship of the physician that determines whether they are an IMG or not. Therefore, US citizens who have received their medical education outside of the US are categorized as IMGs. Similarly, non-US citizens who studied medicine in the United States are categorized as US medical graduates (USMGs). IMGs are further divided into US IMGs and non-US IMGs based on the status of their citizenship. US IMGs are US citizens or legal permanent residents, whereas non-US IMGs are often on a nonimmigrant visa as they pursue residency training. IMGs collectively make up 23% of the overall physician workforce in the United States [1]. In psychiatry, IMGs con-

stitute 30% of the practicing psychiatrists and 33% of the psychiatry trainees working within the country [2]. IMGs represent many different countries, languages, and religious and cultural backgrounds. According to the 2019 Resident/Fellow Census published by the American Psychiatric Association (APA), the top five countries of birth outside the United States for active psychiatry and internal medicine/psychiatry residents between 2014 and 2018 were India, Pakistan, Canada, China, and Nigeria [3].

IMGs play an important and unique role in providing mental health care in the United States. IMGs devote a greater percentage of their time to working in public sector clinical settings and hospital inpatient units. They are more likely than their USMG peers to treat patients who are severely ill, publicly insured, and socioeconomically disadvantaged. IMGs treat a significantly higher number of ethnic minority patients, including Black and Latinx patients [4].

IMGs are also more likely than their USMG peers to receive clinical revenue through Medicare and Medicaid. Non-US IMGs on a J1 visa provide essential services to rural and underserved communities through waiver requirements set forth by visa pathways such as the Conrad State 30 program [5]. In recent years, recruitment of IMGs to Postgraduate Year 1 (PGY1) positions is on the decline. However, IMGs continue to constitute a significant percentage of subspecialty fellows. In 2020, IMGs represented 35% of

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child and adolescent psychiatry fellows, 40% of addiction psychiatry fellows, and 47% of geriatric psychiatry fellows [6]. IMG psychiatrists also spend 35% more time on average than their USMG peers with the elderly patient population [4]. Therefore, given the practice trends of IMGs in psychiatry, they play a significant role in delivery of mental health services, especially to those patients who are vulnerable, marginalized, and underserved.

It is also important to note that the number of psychiatry trainees opting for subspecialty training is on the decline. As per the Resident/Fellow Census 2019 [3], only addiction psychiatry has seen significant growth (25.76%) in the number of fellows between 2014 and 2018. For child and adolescent psychiatry, the total growth was only 5.98%. Similarly, there was no total growth for forensic psychiatry, while for geriatric and consultation-liaison psychiatry, the number of fellows decreased. This, combined with an ongoing and projected shortage of subspecialty psychiatrists [7] in the United States, puts IMG psychiatrists in the crucial role of delivering subspecialty mental health care. Additionally, the US population is diversifying. To parallel patient diversity, it is important to recruit and train a diverse physician workforce. In light of the COVID-19 pandemic, health-care inequities within the US health-care system have become even more apparent [8]. Physician diversity is often cited as an important contributor to improved health outcomes, especially for ethnic and racial minority patient populations [9]. Despite the acknowledgment of the need to diversify the physician workforce, racial disparities within medical training continue to exist [10].

The range and depth of IMG physicians' cultural, linguistic, and international experiences are a resource for the delivery of mental health services [11]. Some IMG physicians have worked in conflict areas and low-resource settings, while managing patient expectations and logistics. Due to working in low-resource settings and perhaps coming from collectivistic cultures, IMGs are inclined to engage the patient's family, friends, and immediate community in their treatment, resulting in the genuine practice of community

medicine [12]. Their own life experiences such as immigration, loss, and trauma might enhance their ability to connect and empathize with vulnerable patient populations. In management schools across the world, the South Asian word "jugaad" (the ability to "make do") has become a buzzword [13]. This word encapsulates the inherent resourcefulness of individuals from these backgrounds. In the United States, IMG psychiatrists have made significant contributions. After the Second World War, a large group of IMG psychiatrists arrived in the United States from a destabilized Europe. In 1972, the American Psychiatric Association (APA) dedicated its annual conference to the contributions of IMGs. In the past three decades, three APA presidents have been IMGs [14]. American psychiatry has benefited from the contributions of those who migrated from elsewhere, including Alexander, Akiskal, Deutsch, Fava, Fromm-Reichman, Kohut Mezzich, and Mahler [15]. It is also important to recognize that many major innovations in psychiatry came from the work of non-Americans, such as Ramon y Cajal's recognition of the network nature of the central nervous system, description of convulsive therapy by Meduna, Cerletti, and Bini, the inauguration of psychopharmacology based on the observations of Denniker and Delay, and the groundbreaking work of Freud and Pavlov in introducing psychodynamic and behavioral therapies, respectively [16].

Despite these many significant and distinct reasons to include IMGs in the US mental health-care system, recruitment of IMGs into PGY1 positions in psychiatry residency programs is on the decline. According to the APA's Resident/Fellow Census 2019 [3], IMGs filled 17.14% of PGY1 spots in psychiatry in 2018. In 2014, IMG applicants filled 29.24% of PGY1 spots. One of the reasons cited for the decline of IMG recruitment in psychiatry is the growing interest of USMGs in psychiatry. The number of US allopathic and osteopathic seniors applying to psychiatry has increased from 685 in 2014 to 1537 in 2021 [17]. Along with this, there has been a disproportionate increase in the number of USMGs graduating from US medical schools compared

to PGY1 residency positions offered by US residency programs [18]. These changes are superimposed on previously reported challenges associated with IMG recruitment in psychiatry such as discrimination in the selection process [19]. Other reported and anecdotal reasons for declining IMG recruitment into psychiatry training include difficulty experienced by program leadership in assessing applications of IMG candidates, concerns regarding changing policies related to immigration and travel especially during the COVID-19 pandemic, and fears regarding adaptation and acculturation of IMGs to the US health-care system [14].

This chapter will address these challenges and provide strategies to equip program leadership in recruitment, training, and career development of IMG psychiatrists. Given the gap-filling and safety-net roles that IMG psychiatrists play in delivering mental health services to the US population, it is crucial to preserve their participation in the US health-care system.

Evaluation of IMG Applications

All residency applicants, including USMGs and IMGs, apply to Accreditation Council for Graduate Medical Education (ACGME)-accredited residency training positions in the United States through the Electronic Residency Application Service (ERAS). Additionally, all IMG applicants need to be certified by the Educational Commission of Foreign Medical Graduates (ECFMG) to be eligible to apply for residency training positions in the United States. ERAS has a standardized application format. The format includes an ERAS-generated curriculum vitae (CV), US Medical Licensing Exam (USMLE) scores, Personal Statement, Letters of Recommendation (LoR), and Medical School Performance Evaluation (MSPE). Although similar documents are required from both USMG and IMG applicants, their applications can look very different. With regard to the ERAS-generated CV, the differences will begin to show from the outset. The applications of non-US IMG candidates will indicate the need for a work visa in the

demographics section. IMG applicants usually do not have membership in honorary/professional societies in the United States. Depending upon their country of medical education, IMGs may or may not have an undergraduate degree. In some countries, students enroll in medical school after completing high school. The program leadership, especially if devoid of IMG faculty representation, might not be familiar with the reputation of international medical schools and can experience difficulty in discerning the rigor and prestige of an IMG applicant's medical school. There can also be some lapse of time between an IMG applicant's year of graduation and the year in which they are applying for residency.

Some applicants, specifically non-US IMGs, come from collectivistic cultures. This can be reflected in their communication style. Individuals from collectivistic cultures see themselves as connected to others and define themselves in terms of their relationships. It is important for collectivists to maintain social harmony. Therefore, their communication style can be indirect, only implying or alluding to what they want to say. This contrasts with the communication style used in the United States that tends to be direct and explicit. These differences in communication styles can come to light in an applicant's personal statement. They can also influence the way an applicant is described in the letters of recommendation from their country of origin. The language used in these letters, while describing positive attributes of an applicant, might still not be "glowing" or use superlatives, as US letters commonly do. Also, international letter writers might be unaware of specific phrases such as "top 10%" that are often used to describe exceptional applicants in the United States. Regarding the MSPE, most US medical schools follow a similar format to communicate an applicant's noteworthy characteristics, academic history, and academic performance. However, non-US medical schools may not follow this pattern, and very often, the language used in international MSPEs can be generic, nonspecific, and stilted. It may also be difficult to discern an applicant's performance in comparison to their peers. This is fur-

ther compounded by difficulty in establishing the rigor of an applicant's medical school in comparison to other medical schools in their country of education.

These differences often lead to difficulty in assessing applications of IMG candidates. That difficulty, in turn, can discourage and dissuade residency programs from reviewing applications of IMG candidates, especially in the context of ever-increasing applications of USMG candidates. This has likely downstream effects on the recruitment of IMG physicians, which then affects the delivery of mental health services in the United States. Therefore, programs can consider the strategies described below when reviewing applications of IMG candidates. These strategies will create relative comfort and nuanced understanding of applications of IMG candidates.

The residency selection process, which includes assessment of residency applications, is a process through which programs identify applicants who seem to be a good fit for the specialty and the program to which they are applying. Programs rely on several facets of the ERAS application to elicit important information regarding applicants. For example, medical school performance, clerkship grades, and USMLE scores are often used to discern an applicant's academic achievement that is then interpreted as an indicator of their readiness to begin residency training and their likelihood of passing certification examinations. Clerkship comments, the personal statement, and letters of recommendation are used to determine an applicant's interpersonal competencies. However, as mentioned earlier, since the applications of IMG candidates can be culturally influenced, a nuanced lens is needed to elicit this information when reviewing these applications. Depending upon their values, needs, and priorities, residency programs will focus on different aspects of the information communicated through ERAS application. Given that each individual program can receive a high volume of residency applications, these priorities can then be reflected through predetermined criteria or filters set by the program. However, more recently some have advocated for holistic appli-

cation reviews. Holistic review, which is defined as "a flexible, individualized way of assessing an applicant's capabilities by which balanced consideration is given to experiences, attributes, and academic metrics ..." [20], has been noted to improve the odds of underrepresented minority (URM) residency applicants being selected for residency interviews [10]. Although traditionally not recognized as URM, it is important to note that IMGs who are often grouped together based on a single characteristic, which is the location of their medical school, represent a heterogeneous group of physicians that add to the program's diversity. They can also be conceptualized through the minoritized lens, a term that acknowledges the role of systems of oppression in placing populations into "minority" status [21]. Therefore, one can assume that strategies that improve the odds of URM applicants being selected for residency interviews can potentially improve the odds of IMG applicants as well.

As discussed earlier, the increased number of applications of USMG candidates can result in inadvertent de-prioritization of applications of IMG candidates. In order to circumvent the de-prioritization of applications of IMG candidates and limit the impact of individual biases, it is important to put together a sizeable group of individuals (faculty and residents) to review residency applications and form the recruitment committee. It is also prudent to include members of minority and minoritized groups on the recruitment committee to optimize diversity-conscious recruitment [22]. For improving recruitment of IMG applicants, it is important to include IMG faculty and residents on the recruitment committee. The caveat here, however, is to not impose a minority tax on IMG faculty and residents. Minority tax is defined as the tax of additional responsibilities placed on minority faculty to advance diversity, equity, and inclusion efforts. Therefore, allocating protected time for recruitment activities while acknowledging and rewarding their contributions toward these activities is important.

While assessing applications of IMGs, it is important to remain cognizant of the ways in which their applications are similar and different

from those of USMGs. As mentioned earlier, some documents such as the MSPE might not be able to communicate information regarding an IMG applicant's academic performance relative to the performance of their peers and clerkship comments might not capture their interpersonal competencies. In this setting, other components of the ERAS application will be relied upon to elicit this information. When assessing applications of IMG candidates for academic performance, USMLE scores, comments contained in letters of recommendation regarding fund of knowledge and clinical expertise of the applicant, and medical school honors and awards can be used to create an applicant's academic profile. Some IMG applicants might have completed postgraduate training, including subspecialty training, prior to their relocation to the United States. In this case, prior training experiences, along with specialty board certifications, should be considered and given weight. IMG faculty and residents from an applicant's country of medical school can also be consulted regarding the rigor and reputation of the applicant's medical school.

The MSPE also communicates information regarding an applicant's interpersonal skills and clinical expertise. For an IMG applicant, this information can be gathered through letters of recommendation, their personal statement, and prior training experiences and board certifications. IMG applicants often seek US clinical experience (USCE) in order to familiarize themselves with the US health-care system. Familiarity with the US health-care system is often seen as a positive predictor of future acculturation. In addition, USCE provides IMG applicants an opportunity to familiarize themselves with the culture and colloquialisms of the United States and practice their communication skills if they are non-native English speakers. USCE can also potentially generate letters of recommendation from US physicians, which are in turn strong predictors of matching into residency [23]. Therefore, while assessing applications of IMG candidates, programs should pay attention to the nature, duration, and diversity of such US clinical experiences. US clinical experiences in the specialty for which the applicant is seeking resi-

dency training communicate a genuine interest and experience in that specialty. Proximity of such experiences to the beginning of residency training can create relative ease in adapting to residency training. However, regarding the MSPE and USCE, it is important to note some caveats. As mentioned earlier, IMGs are comprised of both US and non-US IMGs. IMGs who have completed medical education at Caribbean schools that often offer clerkships and elective opportunities in the United States might not have difficult-to-decipher MSPEs and might not need additional USCE to familiarize themselves with the US health-care system. It is also important to note that in order to gain USCE IMGs incur costs associated with international travel and lodging. For IMG applicants coming from low-resource countries and socioeconomically disadvantaged backgrounds, securing USCE might not be a possibility. In that case, programs can consider using local clinical experiences (outside the required rotations) of IMG applicants as an indicator of their interest in psychiatry and clinical expertise. This can be paired with offering USCE to matched residents prior to the start of residency training. Finally, it is important to recognize that during the COVID-19 pandemic and restrictions on international travel, many IMG applicants lost opportunities to secure USCE. In this situation, programs can consider offering telepsychiatry as a way of providing USCE to IMG applicants [24].

Previously, the USMLE Clinical Skills Examination (CSE) was used to evaluate applicants' clinical and communication skills. However, in light of the COVID-19 pandemic, this examination was initially suspended and then discontinued altogether. Since a component of the examination was targeted toward assessing communication skills, it was used by some programs to discern IMG applicants' English proficiency. The Educational Commission of Foreign Medical Graduates (ECFMG) has identified six alternate pathways along with an Occupational English Test (OET) in lieu of the USMLE Clinical Skills Examination. Additionally, programs can gather information about an IMG applicant's communication skills and English

proficiency by studying their personal statement, letters of recommendation, and USCE. Successful clinical and interpersonal encounters will translate into meaningful clinical experiences – which will then be communicated through strong letters of recommendation. It is also important to note that many letter writers provide their contact information for additional questions and concerns. When holistically reviewing applications, with a sizeable group of recruitment committee members, additional information gathering might not be prohibitive in considering an otherwise strong applicant for interview.

Other factors often considered by residency programs are an applicant's year of graduation and the gaps in their CV. Again, proximity of medical school graduation to residency training is seen favorably. However, it is important to remain mindful of those IMGs who are “older graduates” but with prior residency training, board certifications, and clinical practice experience. Therefore, close attention should be paid to “gaps” in the CV as opposed to using year of graduation as a predetermined inflexible criterion for screening out IMG applicants. Regarding gaps in CV, IMGs can have a difficult and convoluted path of immigration; therefore, attention should be paid to the personal statement for explanations of such gaps.

Lastly, while acknowledging the differences in the applications of USMG and IMG candidates that pose assessment difficulties for residency programs, it is also important to highlight sections of the application that capture the grit, resilience, and distance traveled (defined as the “trajectory relative to family or community-level barriers reflecting marginalization at a population or structural level” [19]) of IMGs. Clearly many IMG applicants overcome stressors related to immigration, acculturation, and loss (financial, relational, and social status) in their pursuit of residency training in the United States. Although IMG applicants will have varying reasons for relocating, it is important to recognize those that reflect their determination to acquire advanced postgraduate training, and their resilience in the face of many challenges experienced in their countries of origin and adopted countries. This

information can be gathered through the personal statement, letters of recommendation, and various work experiences. The section on “other awards and accomplishments” should be studied for extracurricular achievements that can also give an insight into their lives and characteristics.

Strategies for assessing IMG applications, as well as potential pitfalls associated with these strategies, are summarized in Table 9.1.

Special Issues With Regard to Onboarding and Credentialing

As discussed earlier, IMG applicants can be divided into two broad categories: US IMGs and non-US IMGs. This classification is based on the IMG applicant's citizenship status. Non-US IMGs are not US citizens and therefore need a work visa for residency training in the United States. There are two main types of visas used by non-US IMGs for training purposes in the United States, J1 and H1B. Table 9.2 highlights the differences between these two visa types.

Both residency programs and applicants should understand the differences between the two visa types, including the difference in the timeline, document requirements, and future implications of each visa type, in order to make an informed decision. Programs should also be aware of their institutional policies regarding visa sponsorship. Ideally, these policies should be mentioned on the recruitment website. Having an immigration attorney on board is helpful in understanding the nuances of this process. Legal counsel can also facilitate the timely acquisition and maintenance of a visa and provide guidance regarding travel.

Here, it is important to mention the events that have influenced visa processing for non-US IMGs. Since September 11, 2001, visa and security procedures have become more stringent. This can cause denial and delays in visa processing. This can dissuade residency programs from accepting IMGs who require visas [25]. In 2013, the National Resident Matching Program

Table 9.1 Strategies for evaluating applications of IMG candidates

| Challenges associated with assessing applications of IMGs | Strategies to mitigate these challenges | Potential pitfalls associated with these strategies |
|---|--|--|
| Increased number of applications of USMGs | Increase the number of individuals serving on the recruitment committee | Investment in training individuals serving on the recruitment committee in holistic reviews and implicit bias |
| Implicit and explicit bias in recruitment | Holistic reviews Implicit bias training Diverse recruitment committee | Minority tax on IMG faculty and residents |
| Discerning academic performance | USMLE scores LoR comments about fund of knowledge and clinical expertise Medical school honors/awards Prior residency training and Board certifications Perspectives of IMG faculty and residents regarding the rigor and prestige of international medical schools with which they are familiar | Relying too heavily on one metric for determining academic achievement, clinical expertise, and interpersonal competencies Systemic inequities in standardized testing Influence of implicit bias and collectivistic culture on the language used in LoRs Influence of collectivistic culture on the language used in personal statements |
| Discerning clinical expertise | LoR comments about clinical expertise Prior residency training and Board certifications | |
| Discerning interpersonal competencies | Personal statement LoR comments about interpersonal competencies | |
| Deciphering USCE | Nature, duration, diversity (within a particular specialty such as inpatient, outpatient, and partial hospital program experiences), and focus (on one specialty) of USCE Proximity to the beginning of residency training | Financial commitment COVID-19-related restrictions on international travel and decrease in USCE opportunities |
| Eliciting English proficiency | Occupational English Test Personal statement LoR comments about communication skills USCE | |
| Establishing a timeline/ understanding gaps in the CV | Carefully assess the application for any major gaps Look at personal statement for possible explanations | Prior training and work experience (creating time lapse between year of graduation and year in which the candidate is applying for the Match) Life circumstances |

(NRMP) introduced a rule change requiring all residency programs within an institution, each recruitment year, to declare individually whether they would be “all in” (filling all training positions via the NRMP Match cycle) or “all out” (filling all training positions outside the NRMP Match cycle). Prior to this rule change, training programs could offer some positions before Match to get a head start on the lengthy visa processing for non-US IMG applicants. This change was reported to cause delays in the starting time for some non-US IMG applicants [26]. In 2016,

there was a cut in Medicare funding for Graduate Medical Education (GME). As a result, many training programs stopped offering H1B visas that led to non-US IMG applicants being recruited via J1 visas. A J1 visa is sponsored by ECFMG without an additional cost being incurred by the training hospital. Sponsorship of an H1B visa costs the training hospital about \$3000–4000 per GME trainee [25].

A Presidential Executive Order in 2017 imposed a travel ban on individuals from seven Muslim-majority countries (Iran, Iraq, Libya,

Table 9.2 Differences between H1B and J1 visa type

| | H1B | J1 |
|------------------------------|---|--|
| Type of visa | Dual intent visa; allows the future possibility of directly obtaining permanent residency | Nonimmigrant visa; exchange-visitor status |
| Sponsor | Training hospital | ECFMG |
| Duration of training allowed | 6 years | 7 years |
| Common uses | Residency, fellowship, and employment | Residency, fellowship |
| Security clearance | Required | Required |
| Limitations | Step 3 required Narrower fellowship options | Annual renewal Travel restrictions after visa stamp expiration (re-entry requires new visa) Required to return to the country of residence for a duration of 2 years (unless J1-waiver requirements met) |

Somalia, Sudan, Syria, and Yemen). At that time, approximately 8000 physicians in the United States had received their medical education from one of these countries [27]. Some of the trainees from affected countries who were traveling at the time when the Executive Order was issued were either denied re-entry or deported after arriving in the United States. This resulted in interruption of their training. Finally in 2020, President Donald Trump issued a “Proclamation Suspending Entry of Aliens Who Present a Risk to the U.S. Labor Market Following the Coronavirus Outbreak.” However, alien physicians and foreign nationals accompanying or following to join them were exempt from provisions of this proclamation [28].

Policies regarding immigration and travel can change depending upon many factors, including federal regulations, international accords, and other sociopolitical factors. Therefore, it is important to stay up to date on federal policies. As mentioned earlier, this can be achieved by having the expertise of an immigration attorney

on board. In addition to factoring in time for security clearance, it is important to acknowledge that some non-US IMGs come from low-resourced countries where electronic record keeping might not be the norm. This can also result in delays in gathering and transmitting the required documents. Prior to starting residency, non-US IMGs might not have a social security number (SSN), bank account, or a driver’s license in the United States. Credentialing might be contingent upon having these documents. Therefore, it is important for residency programs and non-US IMG applicants to start the process of visa acquisition and credentialing as soon as possible after Match Day. In light of the COVID-19 pandemic, special attention should be paid to recommendations regarding international travel. Timely efforts should be made to complete required vaccinations.

Creating a Welcoming Environment

For IMGs, the stresses endured throughout the immigration process and relocation to a country with different systems and cultural norms are often immense. IMGs may experience loss and disorientation during their initial phase/entry into the US medical system. Many IMGs describe the admissions process as logistically difficult, impersonal, and stressful as a result of ambiguous selection criteria and lack of meaningful feedback. Many are older than their USMG counterparts, have children, face financial pressures, and do not have an extended familial support system in the United States. The process of relocation to a new country can be very demanding, time consuming, and strenuous. There must be either sufficient time built into IMGs’ training to facilitate this process or a concerted effort made so that psychosocial and disorientation issues are explicitly addressed and resolved. Organizations need to understand how IMGs are coping and accept that this group may have unique vulnerabilities that require a sensitive approach. Being proactive to prevent problems from arising by providing adequate supports that help provide a safe environment and avert the

need to spend time and resources on interventions at a later time can be helpful.

Community support and engagement with local communities is also important for IMG success. Studies have shown that community support helps promote psychological well-being in immigrant populations, and contacts with host support networks can have the most significant effect [29]. Community building with co-residents can include opportunities for bonding and creating a collegial environment such as social events or happy hours funded by the program. Many programs have instituted process groups, and it would be helpful for the process group leader to familiarize themselves with the varying needs of IMGs so they can provide support in a group setting as needed. Training leadership should make deliberate efforts to facilitate social integration to help reduce feelings of isolation. This can be through fostering peer relationships by creating a buddy system with senior residents. It may be ideal to have someone from a similar cultural background, but if this is not an option, it could be a USMG who has received adequate diversity, equity, and inclusion (DEI) training on how to mentor and support a junior resident from a different cultural background. Routine check-ins with a buddy or one of the chief residents can help an IMG trainee with cultural differences in the physician–patient interaction. Having a buddy who provides 1:1 support both within and outside the workplace can provide a safe space for the IMG resident to ask questions or express concerns without feeling inferior or incompetent. It may also be easier to receive constructive feedback from the senior resident who is acting as the buddy. The institutional GME Office may want to consider an IMG liaison officer who can keep track of all IMG residents entering the system every year and be responsible for creating a network of IMGs to provide advice, information, support, direction, and contact with other IMGs across specialties [30].

Residency programs can consider holding diversity days every few months where residents and faculty from various backgrounds can showcase their foods and culture. This will help nor-

malize the experience for the IMG resident. The induction and orientation process must include information about financial resources, spousal jobs, how to obtain a car, transportation options, how to open a bank account, visa information, among other topics. Assisting families to settle into the new community can have a positive impact on the well-being of new residents who are trying to figure out a new health-care system, workplace, and psychosocial environment. For those with children, having familiarity with the school system and presence of diversity within such school settings would be crucial.

Successful transition into the workplace can be enhanced with the combination of both an initial orientation and continuing support. It is also helpful to conduct a formal individualized needs assessment to understand any training needs to overcome cultural barriers. While sessions may be needed to address gaps in training, it is also important to acknowledge and respect the resident's original identity as an IMG by showing respect to and valuing their prior training and experience in their host/native county.

Providing Assistance to IMGs Who Need Help in Navigating the US Health-Care System

IMGs have varying degrees of familiarity with the US health-care system. Some Caribbean medical schools send their students to the United States for clinical experience. IMGs with extensive US clinical experience through electives, externships, and observerships might also be acquainted with the workings of the US health-care system. Therefore, it is important to identify the specific needs of individual IMG residents when considering ways to help them in navigating the US health-care system.

The US health-care system is financed through a complex combination of public payers (federal, state, and local governments), private insurance, and individual payments. The presence of taxpayer-funded systems such as Medicare and Medicaid [31], for-profit health insurance companies, and “networks” is unique to the US

health-care system [32]. Mental health services are delivered by a wide array of providers, including psychiatrists, psychologists, nurse practitioners, primary health-care physicians, and social workers. There is no universal system of record keeping, and even with electronic medical records, there is a variety of different systems. There is no federal or central physician license to practice medicine, and doctors working in different states are required to obtain and maintain individual state licenses. Some psychiatry residency programs also include training at Veterans Affairs hospitals, which have their own unique health-care system. All these factors can make the US health-care system a novel system to navigate for IMG physicians.

In the United States, the health-care system generally aspires to be patient-centered and non-hierarchical in nature. For IMG physicians coming from countries where a clear hierarchy exists among health-care workers and the practice of medicine is paternalistic in nature [33], these differences require an intentional change in approach. Needs assessment studies conducted in Canada noted that IMG physicians identify lack of familiarity with the health-care system as one of the biggest challenges when transitioning into residency [34, 35]. Different programs have adopted creative strategies to address this challenge. A surgical residency program at the University of Washington developed an 8-week clinical experience opportunity for IMG physicians with duties, responsibilities, and evaluations similar to a fourth-year USMG subintern [36]. Similarly, an internal medicine program at the University of Nebraska offers a 2-week pre-course developed around the ACMGE core competencies to IMG physicians entering their program [37]. Such programs provide IMG physicians with opportunities to experience the US health-care system, gain US clinical experience, and familiarize themselves with the culture. Residency programs committed to recruiting IMG physicians can consider developing such a systematic and intentional approach toward familiarizing them with the US health-care system prior to the Match or the beginning of residency training. In this way, USCE offered by

residency programs can also serve as a pipeline for recruitment of IMGs for residency training.

With restrictions on international travel during the COVID pandemic, non-US IMG physicians located outside the United States lack accessible opportunities for US clinical experience. It is important for residency programs to be aware of such limitations. Additionally, during this time telepsychiatry has emerged as a platform for delivering mental health care. Residency programs can consider using telepsychiatry to offer opportunities for US clinical experience to IMG applicants. This will also address the financial challenges and disparities faced by non-US IMG physicians who have had to travel to the United States for clinical experience.

Mentorship for IMG Residents

Mentors are role models who help shape their mentees' personal and professional development over time. Mentors provide input and guidance on research, clinical work, as well as career advancement, and are critical to build confidence, credibility, and competence needed for reaching career milestones. A mentorship relationship is successful when the mentor has a dual role: (1) a coach who gives technical advice and works with the mentee to help them understand how to do something, and (2) a counselor who creates space to discuss the experience of doing it and offers emotional support [38]. For a detailed discussion of mentoring for residents and fellows, see Chap. 20. While mentorship can take many forms, specifically for IMGs, intentional dual mentorship, for training/research, as well as for issues related to immigration, is valuable. IMGs entering a new residency program often face systematic barriers to mentorship that should be acknowledged and addressed. It helps for the training leadership or chief resident to be in contact with the resident before orientation to better understand their needs and design individualized support as IMGs can have varying levels of needs.

Studies have found that specific mentorship programs and faculty development around supporting IMGs are crucial to the success of IMGs

in training programs [39]. Programs such as the *Programme for Overseas Doctors* have improved the performance of IMGs, as assessed by outcomes including career progression, fewer complaints, fewer reported errors, and increased retention [40]. The authors recommend that all programs consider a comprehensive mentorship program for successful assimilation of IMGs into their communities. Such a program should include

1. A mentorship program for IMG residents (faculty mentors and peer mentors)
2. A faculty development session for faculty members to help them to understand the specific needs of IMG residents and how to support them
3. Educational programs/curricula for residents addressing discrimination against IMGs

This program should include frequent reflection and individual needs assessments and feedback to ensure that IMGs are receiving the individualized support they need.

Ideally, for IMGs, mentorship programs involve assigning a faculty as well as a peer mentor who can help orient the IMG resident to the implicit values and attitudes that shape their clinical environment, helping them to fully integrate and transition into their residency training programs. Both faculty and senior residents can provide constructive feedback on the trainees' observed interactions with patients and/or provide opportunities for the trainee to observe their own interactions with patients. This can include coaching on cultural nuances such as a shared decision-making model that involves patients and families in their own treatment planning, further enhancing the therapeutic alliance.

To support the entry and adaptation phase, the assigned faculty mentor should be someone who will be perceived as an advisor and support system. They should not be involved in the resident's formal evaluations and assessment processes but should rather be able to focus on creating an open and safe mentoring relationship. While mentorship is instrumental in imparting direct skills and knowledge, it can also enhance implicit knowl-

edge about the "hidden curriculum." IMGs may already feel a sense of disconnect and dissociation when starting residency in a new environment and culture. Lack of understanding of the hidden curriculum may inadvertently impede their clinical performance and further alienate them. This mentoring would focus on enlightening the IMG resident with specific values and practices of feedback, self-directed learning, conflict management, teamwork, directness, and deference that may differ from practices in other countries. There must be a dedicated time in the week for the IMG resident to meet with their mentor and observe them during clinical interactions. For those residents with a specific career interest in research, the program may consider another mentor to cultivate these interests and expose the resident to various research and funding opportunities.

While development of organic relationships in the workplace is important, it is not always possible. Hence, it is helpful to provide IMG residents with a buddy/peer mentor to provide support within and outside the residency program. It is ideal to have someone from the host/native country and another peer from a different culture as both can have their own advantages, but this may not always be feasible. Peer mentoring can be collaborative and mutually beneficial. Involving as peer mentors senior IMG residents who have experienced similar challenges previously can be validating for both parties. Seeing senior IMG residents progress in their residency and go on to be successful after training can be quite liberating for new IMG residents, instilling hope for their own future. Peer mentoring can also be helpful for those IMGs with family obligations and time constraints since it is usually more flexible and less structured. Programs that do not have IMG residents can consider assigning an alumni IMG (ideally a recent graduate) as a peer mentor. Peers can help guide skill development but also serve as a supportive community and sounding board. A peer mentor ideally would be someone who can share their own experience, impart wisdom, and help the mentee to adapt and progress successfully in their residency. They can be a guide to help the mentee build social support

networks and help familiarize them with the community outside the program, including figuring out basics of day-to-day living such as how to use transportation, how to obtain a driver's license, and locating grocery stores where the mentee may find supplies from their native country.

Training program leadership should be equally involved and cognizant of the IMG resident's needs. There are IMG-specific awards or research opportunities that program directors should encourage their residents to apply for. Since IMG residents may have limited social networks, mentors and program directors are in a unique position to not only introduce them to potential career, award, and funding opportunities, but also to assist them in making connections with other mentors with similar interests, both within and outside their institution. The ever-increasing use of social media among medical professionals has augmented opportunities for networking and mentorship, specifically for underrepresented minorities [41]. Social media platforms are being used to disseminate information about virtual IMG-specific seminars, workshops, and webinars that are relatively easy to attend. Trainees can also seek mentorship by approaching a faculty member at another institution via social media. Physicians of many nationalities have organized groups in the United States (e.g., the American Association of Physicians of Indian Origin [AAPI], Association of Physicians of Pakistani Descent of North America [APPNA]) [42]. Program directors can also steer their trainees toward these organizations.

It is also important to highlight the role of sponsorship. Much as sponsorship is crucial for the career development of women and underrepresented minorities in medicine, it is also central to an IMG resident's growth and professional fulfillment. Sponsorship is the act of using one's influence and position to propel the career advancement of an individual who is commonly referred to as a protégé or sponsee. While this model shares some similarities with mentorship, a sponsor is a mentor and more and can have a long-lasting impact on the career of the spon-

sored physician. Sponsors provide exposure, visibility, and experience through opportunity and help their protégés develop skills needed to become future leaders. While research on this topic is still in its early stages, in the authors' experience, sponsors vouching for the merit and talent of their IMG trainees can be a strong determinant of their professional development and success. However, a deliberate effort by those in influential positions (whether IMG or non-IMG faculty) is needed to recognize and sponsor those who are traditionally excluded from consideration of opportunities. Since this concept is still relatively new to many, this is also something that must be incorporated into faculty development programs. As with any other relationship, to be successful, protégés and mentees need to feel connected to their sponsor or mentor.

Given that IMGs may have had experience with hierarchical culture in their home country, it is important that training leadership regularly check in with the resident to assess the fit of mentor-mentee relationships as it can be difficult for the resident to bring up any challenges on their own. At the beginning of the relationship, it is helpful for mentors to discuss their role as well as the role and expectations of the mentee. With the program director's support, the resident should have the chance to opt out if the relationship does not feel helpful or productive. Trainees may have differing perspectives on whether a faculty mentor should be an IMG or not. Every IMG is unique, and so it is important to understand that pairing an IMG trainee with an IMG faculty member from a different background does not necessarily mean that this will be a good fit. Having a mentor from a similar background could ensure that the mentee receives tailored mentoring from someone who understands their knowledge, beliefs, values, behaviors, and cultural and/or religious practices. An IMG mentor from a different country can provide valuable insights on how they were able to incorporate learning the style of US clinical encounters alongside learning the practice of clinical psychiatry. Mentorship can still be effective if the mentor is a non-IMG or from a discordant back-

ground. However, it is ideal to have a mentor who has experience in training and educating IMGs and is familiar with the system, resources, and the cultural norms of the training program. The authors are also mindful that many programs may not have enough or any IMG faculty to mentor trainees, and these programs may consider the latter option (i.e., assigning a non-IMG mentor) or help connect the resident with an IMG mentor at a nearby institution.

Despite the benefits associated with diversity in the medical workforce, significant disparities exist. Many programs are rightfully enhancing their focus on their diversity, equity, and inclusion efforts. Mentorship is one proposed mechanism to address disparities for underrepresented minorities and has been associated with increased career satisfaction [43]. While these efforts are often designed for underrepresented minorities, specifics around IMGs can be missed. Biases arising from a difference in one's dress, communication, interpersonal skills, or accent can be perceived as microaggressions. This can cause further delay in the IMG resident's sense of belonging in the community and the system. Implicit bias can also affect recruitment, career development, well-being, and self-esteem of IMG residents. IMG residents can face bias and lack peer support from those with similar backgrounds, leading them to feel isolated and impacting their well-being and sense of belonging. Faculty cluster hiring is an emerging practice in higher education and involves hiring faculty into multiple departments around interdisciplinary research topics, or "clusters." Training programs may wish to advocate for faculty cluster hiring, to capture a large and diverse pool of faculty with remarkable backgrounds that can help with identification of synergistic connections among trainees and diverse faculty, and foster collaboration, as well as a shared experience. Along with promoting diversity, cluster hiring can help recruit and retain underrepresented minority trainees with diverse backgrounds, who can then mentor future generations of URM trainees. When done well, this process can be a powerful way to build program/department excellence and diversify the

workforce. However, it also requires buy-in from department administration and leadership. A workplace culture that acknowledges the importance of a diverse trainee cohort is crucial to retention of these trainees as faculty.

It is imperative that these efforts include a focus on IMG discrimination in the program's practices and curricula. Given that IMGs can experience and face discrimination and bias from their peers and faculty, creation and implementation of faculty development programs and curricula centered around this issue must be prioritized. This would equip trainees and faculty to foster a safe and inclusive culture for all. Alignment of mentorship programs with institutional goals and resources is crucial to sustain efforts to foster an environment of diversity and inclusion [44]. Implementing structural policies can help IMG residents not only survive but *thrive* in the program.

Anticipated Changes and Future Directions

In February 2021, the Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME) announced that USMLE Step 1 scoring will transition to pass/fail instead of the three-digit score. This change will be implemented after January 2022 [45]. Historically, the Step 1 score has been used by program directors to screen applicants for interviews during the residency selection process [46]. Although this transition may encourage residency programs to holistically review applications of candidates, its impact on the applications of IMG physicians is currently unclear. The Step 1 score has traditionally been a way for IMG applicants to distinguish themselves. In fact, the mean Step 1 score of matched non-US IMG applicants has been reported to be higher than that of unmatched non-US IMG applicants (mean score 234 versus 223) in the 2020 Match cycle [47]. Now with the transition to pass/fail reporting, IMG applicants will have to find alternative ways of making their application more competi-

tive. Furthermore, it is likely that this will cause the Step 2 Clinical Knowledge (CK) score to assume a much more central role. IMG applicants might also try to supplement their academic performance by taking USMLE Step 3 prior to the Match cycle. In addition to finding ways for showcasing their academic ability, IMG applicants will be tasked with bolstering their chances of matching through other aspects of their application such as extensive US clinical experience, strong letters of recommendation (preferably from US physicians), research, publications, other scholarly activities, and networking [48]. Residency programs should be aware of the additional challenges this change may cause for IMG applicants. As previously discussed, considerations at various levels, ranging from recruiting a group of people from diverse backgrounds to holistic review of applications, to employing telepsychiatry as a means of providing IMG physicians with US clinical experience, are desired.

In addition, the number of attempts for Step 1 will be reduced from six to four. Furthermore, in January 2021, USMLE decided to discontinue the previously suspended (due to the COVID-19 pandemic) Step 2 Clinical Skills exam [49]. Despite its flaws, Step 2 CS has been used by residency programs to not only assess clinical skills, but also spoken English proficiency of IMG applicants. As noted earlier in this chapter, the ECFMG has introduced the Occupational English Test (OET) to fulfill this role and is offering six alternative pathways that will lead to certification.

Beginning in 2024, IMG physicians applying through ECFMG will need to be educated at a medical school accredited by agencies recognized by the World Federation for Medical Education (WFME) [50]. This requirement might make program directors more comfortable regarding the standards of international medical schools. However, it remains to be seen whether international medical schools will participate in such accreditation processes. It will be important to follow any related effects of this requirement, perhaps even unintended effects. Some students from medical schools that choose not to participate in the accreditation process might be inad-

vertently affected. It can also affect the status and perception of international medical schools in the eyes of local students. The impact of these changes is currently unknown; however, it will be important to stay vigilant about the unintended ways in which these changes can influence recruitment and training of IMG applicants.

Given that IMG physicians constitute a large part of physician workforce in the United States and make unique and significant contributions, novel strategies must be considered to facilitate their inclusion. Some IMG applicants are already specialty- and subspecialty-trained and certified in their countries of origin. Instead of having them repeat residency training, mechanisms for directly incorporating them into fellowships or the US health-care workforce after ECFMG certification should be considered. A precedent for this, known as the “Alternate Pathway,” exists in other specialties such as radiology. Creating such a pathway in psychiatry will require developing due processes but the following strategies can be considered. The role of WFME, ECFMG, and ACGME can be extended to include accreditation and credentialing of international residency training. The American Board of Psychiatry and Neurology (ABPN) can offer in-residency training exams and board certification in general psychiatry for international psychiatrists. Using strategies like these to develop processes that allow international psychiatrists to pursue general psychiatry and specialty training in the United States without having to repeat residency training will also address the shortage of general and specialty psychiatrists in the United States. In Washington State, a bill was passed that would permit IMGs to practice at a US facility with a limited license [51]. As conversation regarding improving access to care by incorporating other practitioners gains momentum, it is important to recognize the unutilized physician workforce that exists in the form of unmatched IMG physicians.

IMG physicians are an asset to the US health-care system, and efforts to recruit, train, and support their careers is a small investment that yields high results in the form of their unique contributions.

References

- Murphy B. How IMGs have changed the face of American medicine. 2019 [cited 2021 July 26]. Available from: <https://www.ama-assn.org/education/international-medicaleducation/how-imgs-have-changed-face-american-medicine>
- Rao N, Ahmed S, Sangha J. Navigating psychiatry residency in the United States. 2018 [cited 2021 July 26]. Available from: <https://www.psychiatry.org/psychiatrists/international/international-trainees/internationalmedical-graduates-guide-to-u-s-residency>
- American Psychiatric Association. 2019 resident/fellow census. Published 2020. Available from: <https://www.psychiatry.org/File%20Library/Residents-MedicalStudents/Residents/APA-Resident-Census-2019.pdf>. Accessed 13 Nov 2021.
- Blanco C, et al. Practice patterns of international and U.S. medical graduate psychiatrists. *Am J Psychiatry*. 1999;156(3):445–50.
- Ahmed AA, et al. International medical graduates in the US physician workforce and graduate medical education: current and historical trends. *J Grad Med Educ*. 2018;10(2):214–8.
- Virani S, Mitra S, Grullón MA, Khan A, Kovach J, Cotes RO. International medical graduate resident physicians in psychiatry: decreasing numbers, geographic variation, community correlations, and implications. *Acad Psychiatry*. 2021;45(1):7–12.
- Balon R. Subspecialty training: time for change. *Acad Psychiatry*. 2017;41(4):558–60.
- Laurencin CT, McClinton A. The COVID-19 pandemic: a call to action to identify and address racial and ethnic disparities. *J Racial Ethn Health Disparities*. 2020;7(3):398–402.
- Laditka JN. Physician supply, physician diversity, and outcomes of primary health care for older persons in the United States. *Health Place*. 2004;10(3):231–44.
- Barceló NE, Shadravan S, Wells CR, et al. Reimagining merit and representation: promoting equity and reducing bias in GME through holistic review. *Acad Psychiatry*. 2021;45:34–42. <https://doi.org/10.1007/s40596-020-01327-5>.
- Kirmayer LJ, Sockalingam S, Fung KP, Fleisher WP, Adeponle A, Bhat V, Munshi A, Ganesan S. International medical graduates in psychiatry: cultural issues in training and continuing professional development. *Can J Psychiatry*. 2018;63(4):258–80.
- Dave S. It is time to accentuate overseas doctors' positives. *BMJ*. 2016;353:i2148.
- Radjou N, Prabhu J, Ahuja S. Jugaad innovation: think frugal, be flexible, generate breakthrough growth. Wiley; 2012.
- Majeed MH, Ali AA, Sudak DM. International medical graduates and American psychiatry: the past, present, and future. *Acad Psychiatry*. 2017;41(6):849–51.
- Mohl PC. Psychiatry and international medical graduates. *Acad Psychiatry*. 2001;25(3):133.
- Kramer M. Educational challenges of international medical graduates in psychiatric residencies. *J Am Acad Psychoanal Dyn Psychiatry*. 2006;34(1):163–71.
- Moran M. Psychiatry residency match numbers climb again after unprecedented year in medical education. 2021. [cited 2021 July 30]. Available from: <https://psychnews.psychiatryonline.org/doi/10.1176/appi.pn.2021.5.27>
- Boyle P. Medical school enrollments grow, but residency slots haven't kept pace. 2020. [cited 2021 July 30]. Available from: <https://www.aamc.org/news-insights/medical-school-enrollments-grow-residency-slots-haven-t-kept-pace>
- Desbiens NA, Vidaillet HJ. Discrimination against international medical graduates in the United States residency program selection process. *BMC Med Educ*. 2010;10(1):1–5.
- Coleman AL, Lipper KE, Taylor TE, Palmer SR. Roadmap to diversity and educational excellence: key legal and educational policy foundations for medical schools. Washington, DC: A Report for the Association of American Medical Colleges; 2014. Available from: https://store.aamc.org/downloadable/download/sample/sample_id/192
- Shim RS. Dismantling structural racism in psychiatry: a path to mental health equity. *Am J Psychiatr*. 2021;178(7):592–8.
- Capers Q, McDougale L, Clinchot DM. Strategies for achieving diversity through medical school admissions. *J Health Care Poor Underserved*. 2018;29(1):9–18. <https://doi.org/10.1353/hpu.2018.0002>.
- Driver TH, Loh AR, Joseph D, Keenan JD, Naseri A. Predictors of matching in ophthalmology residency for international medical graduates. *Ophthalmology*. 2014;121(4):974–5.
- Pham DQ, et al. The impact of telehealth on clinical education in adolescent medicine during the COVID-19 pandemic: positive preliminary findings. *Front Pediatr*. 2021;9:642279.
- Al Ashry HS, Kaul V, Richards JB. The implications of the current visa system for foreign medical graduates during and after graduate medical education training. *J Gen Intern Med*. 2019;34(7):1337–41.
- Alweis R, Khan MS, Kuehl S, Wasser T, Donato A. Internal medicine program directors' perceptions of the "all in" match rule: a cross-sectional survey. *J Grad Med Educ*. 2017;9(2):173–7.
- Jena AB, Olenski A, Blumenthal DM, Khullar D. Trump's immigration order could make it harder to find a psychiatrist or pediatrician. *FiveThirtyEight*. 2017. <https://fivethirtyeight.com/features/trumps-immigration-order-could-make-it-harder-to-find-a-psychiatrist-or-pediatrician/>. Accessed 12 Aug 2021.
- Ramani G, Rutkofsky IH. Visa hurdles faced by IMGs. In: *International medical graduates in the United States*. Cham: Springer; 2021. p. 443–56.
- Jasinskaja-Lahti I, Liebkind K, Jaakkola M, Reuter A. Perceived discrimination, social support networks, and psychological well-being among three immigrant groups. *J Cross-Cult Psychol*. 2006;37(3):293–311.

30. McGrath P, Henderson D, Phillips E. Integration into the Australian health care system: insights from international medical graduates. *Aust Fam Physician*. 2009;38(10):844–8.
31. De Lew N, Greenberg G, Kinchen K. A layman's guide to the US health care system. *Health Care Financ Rev*. 1992;14(1):151.
32. Guide AC, Tohid H, Maibach H. International medical graduates in the United States.
33. Zaidi Z, Dewan M, Norcini J. International medical graduates: promoting equity and belonging. *Acad Med*. 2020;95(12S):S82–7.
34. Zulla R, Baerlocher MO, Verma S. International medical graduates (IMGs) needs assessment study: comparison between current IMG trainees and program directors. *BMC Med Educ*. 2008;8(1):1–5.
35. Sockalingam S, Hawa R, Al-Batran M, Abbey SE, Zaretsky A. Preparing international medical graduates for psychiatry residency: a multi-site needs assessment. *Acad Psychiatry*. 2012;36(4):277–81.
36. Horvath K, Coluccio G, Foy H, Pellegrini C. A program for successful integration of international medical graduates (IMGs) into US surgical residency training. *Curr Surg*. 2004;61(5):492–8.
37. Porter J, Townley T, Huggett K, Warriar R. An acculturation curriculum: orienting international medical graduates to an internal medicine residency program. *Teach Learn Med*. 2008;20(1):37–43.
38. https://www.uab.edu/medicine/peds/images/Faculty_Development/Mentoring/ARTICLE-TruthAboutMentoringMinorities-RaceMatters-HBR.pdf by David Thomas. Accessed Aug 2021.
39. Najeeb U, Wong B, Hollenberg E, Stroud L, Edwards S, Kuper A. Moving beyond orientations: a multiple case study of the residency experiences of Canadian-born and immigrant international medical graduates. *Adv Health Sci Educ*. 2019;24(1):103–23.
40. Kehoe A, Metcalf J, Carter M, McLachlan JC, Forrest S, Illing J. Supporting international graduates to success. *Clin Teach*. 2018;15(5):361–5.
41. Ojo E, Hairston D. Recruiting underrepresented minority students into psychiatry residency: a virtual diversity initiative. *Acad Psychiatry*. 2021;12:1–5.
42. Lee MS, Nambudiri VE. Sources of support for IMGs. In: *International medical graduates in the United States*. Cham: Springer; 2021. p. 357–63.
43. DeCastro R, Griffith KA, Ubel PA, Stewart A, Jagsi R. Mentoring and the career satisfaction of male and female academic medical faculty. *Acad Med*. 2014;89(2):301.
44. Bonifacino E, Ufomata EO, Farkas AH, Turner R, Corbelli JA. Mentorship of underrepresented physicians and trainees in academic medicine: a systematic review. *J Gen Intern Med*. 2021;2:1–2.
45. United States Medical Licensing Examination [Internet]. [Usmle.org](https://www.usmle.org/incus). [cited 2021 Aug 23]. Available from: <https://www.usmle.org/incus>
46. Boulet JR, Pinsky WW. Reporting a pass/fail outcome for USMLE Step 1: consequences and challenges for international medical graduates. *Acad Med*. 2020;95(9):1322–4.
47. National Resident Matching Program, editor. *Charting Outcomes in the Match: International Medical Graduates*. 3rd ed. National Resident Matching Program; 2020. Accessed 23 Aug 2021.
48. Desai A, Hegde A, Das D. Change in reporting of USMLE Step 1 scores and potential implications for international medical graduates. *JAMA*. 2020;323(20):2015–6.
49. United States Medical Licensing Examination [Internet]. [Usmle.org](https://www.usmle.org/announcements/?ContentId=30). [cited 2021 Aug 23]. Available from: <https://www.usmle.org/announcements/?ContentId=30>
50. World Federation for Medical Education (WFME). <https://wfme.org>. Accessed 23 Aug 2021.
51. House approves bill on limited licenses for foreign physicians [Internet]. [Columbiabasinherald.com](https://columbiabasinherald.com). [cited 2021 Aug 24]. Available from: <https://columbiabasinherald.com/news/2021/feb/28/house-approves-bill-limited-licenses-foreign-physi/>



Creating a Safe and Stimulating Program for Four Years of Professional and Personal Development

Joan M. Anzia

Introduction [1]

Many new program directors start their roles with considerable anxiety about adhering to the ACGME program requirements, including worry about how to fix a citation or area for improvement (AFI). If AFIs or citations are not the focus, new program directors often focus on [1] those items that scored lower on their Accreditation Council for Graduate Medical Education (ACGME) resident or faculty surveys or [1] satisfying the desires of their chair, designated institutional official (DIO), or the dean. Such an approach can be very stressful and results in the program director experiencing their role as one long unending chase to attain positive reviews from those individuals. This perspective can draw focus away from the essential and truly rewarding job of ushering a group of talented young medical school graduates through training to become competent and compassionate psychiatrists. What could be more compelling, more replete with challenges, surprises, and sometimes, if not often, outright fun? The aim of this chapter is to try to capture some of that experi-

ence and offer some best practices to guide you through the adventure of fostering an environment of well-being and scholarship. This chapter is written based on the author's experience as a program director and based on published best practices in the area of promoting a positive learning environment.

The secret of long-time program directors is this: if you approach this job with a passion for medical education, care deeply about your residents (and the faculty who teach them), and try to provide residents with the best possible learning experience throughout their 4 years, you are naturally going to do most of the things that the ACGME Psychiatry Review Committee (RC) expects you to do as a program director. But, more importantly, your residents and faculty will know that you "have their backs," that you are doing your best for them and their future careers. In doing so, you will have "imprinted" them with the knowledge, skills, and attitudes that will enable them to stay well as individual professionals, flourish in their careers, and develop habits of a scholar and lifelong learner. To be in a position to have that kind of positive impact is simultaneously rewarding, a joy, and privilege.

The position of passion for medical education, advocating for your residents, and developing young professionals should always be your central focus, your touchstone. If you are doing this job for any other reason, you will end up exhausted, frustrated, and unrewarded. Some

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physicians in medicine create new scientific discoveries, new treatments, innovative treatment programs, or are innovative leaders and administrators. As a program director, you will have the opportunity to help create skilled new psychiatrists who will engage in all of those areas of medicine. The task of the program director is essentially generative: your reward will be a second “family” of well-trained, highly professional, and relatively happy young psychiatrists who have gone forth to provide excellent care, and perhaps contribute to the field in areas of scholarly research, education, and leadership. If you do your job well, that “second family” will never forget your role in their growth and development.

Residency training is so much more than the mastery of knowledge and skills, although those are essential. It is an apprenticeship in a vocation with core professional values, ethical principles, and a body of wisdom about caring for patients and oneself. Trainees must find their own unique ways to adopt and embody these values and principles and integrate them into their professional identities. The trainee will also encounter much human tragedy in their work with patients and their families on this journey. In psychiatry, residents also enter a world that is foreign to most others: they learn about mental illness from the inside; they have intimate encounters with human beings suffering profound depression, psychoses, and other mental disorders. They will also need to make choices about professional expectations and events in their personal lives. There is no instructional manual that can serve this function; residents will need experienced guidance at crucial times during training to help them navigate and understand these experiences and their role as psychiatrists. This may be your most important role as a program director: guide, real-time teacher, and mentor. It is your availability and support at crucial moments that can be career-changing for a resident.

In this chapter, we will cover the basics of establishing and maintaining a residency program in which residents learn to foster their well-being (and that of team members), learn how to navigate the spheres of personal and professional challenges and opportunities, and how to manage

individual and group well-being challenges effectively. We will also discuss strategies to create a program that fosters lively scholarly inquiry and creativity, which can also be a component of well-being for residents. The chapter is divided into the following sections:

1. A brief overview of scholarly work in medical education regarding important factors in promoting wellness
2. Resident traits that are correlated with resilience and well-being
3. Creating a “safe-enough” residency program environment (pyramid of essential factors)
4. Work and life events that can impact resident well-being throughout training
5. Residents with illness or disability
6. Residents who exhibit disruptive behaviors and disciplinary issues that affect well-being

Graduate Medical Education and Well-Being

It is beyond the scope of this chapter to present a comprehensive history of the increasing focus on physician and resident well-being that began in the early 2000s. Though there were many earlier initiatives in physician health and wellness before these years, after 2000, there was a groundswell of interest and concern about physician burnout, well-being, and stressors in residency training generated by research and critical events. Studies by Shanafelt, Dyrbye, and West at Mayo Clinics [1] and Sen at the University of Michigan [2] demonstrated the high prevalence of burnout and depression in physicians of all specialties, including high rates of depression in medical trainees. Nearly 20 years before, the death of 18-year-old patient Libby Zion in New York City in 1984 highlighted the impact of chronic sleep deprivation on the functioning of residents [3]. Following this tragic death, the ACGME began to study the impact of long work hours in residency and instituted duty hours regulations for the first time in 2002. Michael Myers published research on the incidence of physician suicide [4]. Some tragic resident suicides in 2011 and 2018 brought increased focus on depression during residency

training and the importance of improving mental health services for residents [5]. The ACGME held its first national conference on resident well-being in 2015 in Chicago and has continued to hold these conferences annually in conjunction with the National Academy of Medicine (NAM) [6]. In 2017, the NAM created the Action Collaborative on Clinician Well-Being and Resilience, which promotes research and evidence-based interventions for resident mental health [7]. In 2019, the ACGME added several elements to Section VI of the Common Program Requirements; one of these was a subsection on well-being. The well-being section highlights the frequency of burnout and depression during residency training and includes requirements targeting elements such as resident time off for family and relaxation, ability to attend health and mental health appointments during the workday, and program attention to work intensity [8].

The NAM defines resilience as a “multidimensional characteristic that embodies the personal qualities that enable one to thrive in the face of adversity. Resilience can be built and fostered and is a dynamic, evolving process of positive attitudes and effective strategies.” [7] The Action Collaborative continues to describe four main dimensions of resilience: “(1) attitudes and perceptions, (2) balance and prioritization, (3) practice management style, and (4) supportive relations.” [7] The Stanford WellMD website [9] encourages regular exercise and offers strategies for finding balance in one’s work life (reference). Special attention should be paid to residents who are parents of young children; work/home conflict (especially having a child at home) can be a significant risk factor for burnout.

In 2018, the NAM published a model illustrating the various components contributing to physician well-being: society and culture, rules and regulations, organizational factors, the learning/practice environment, health-care responsibilities, and skills and abilities. The last component is personal factors [10]. The model illustrates the fact that “personal factors” are only one of seven that contribute to well-being. Most of the others are partly under the control or influence of the residency program and in large part determined by the institution. Therefore,

any program “wellness plan” should try to address all of these areas [10].

The training years are ideal for residents to learn how to increase and maintain their resilience and overall wellness through their careers. However, they cannot do this alone: a program director who has a solid understanding of factors that promote well-being can design and implement a program that facilitates residents’ learning to live a rewarding and positive life as a physician/psychiatrist.

What We Know About Resident Traits That Are Correlated with Resilience

Cloninger et al. examined personality traits that were associated with resilient physicians [11]:

Resilience was associated with a personality trait pattern that is mature, responsible, optimistic, persevering, and cooperative. Findings support the inclusion of resilience as a component of optimal functioning and well being in doctors. Strategies for enhancing resilience should consider the key traits that drive or impair it.

Identifying traits that drive or impair resilience in prospective residency candidates is beyond the scope of this chapter. In addition, no medical school graduate arrives at internship year with strengths in all of these areas. However, program directors can attempt to foster qualities that promote resilience during the years of residency training. And, they can expressly nurture a positive attitude toward our profession, train residents in cooperative teamwork, and set clear expectations for appropriate responsibility and perseverance in the face of challenges.

The Safe and Stimulating Environment: The Resident Needs Both

What Is a “Safe Enough” Environment for Training?

Because psychiatry residency training occurs during young adulthood, and is lengthy as well as

cognitively, physically, and emotionally demanding, program directors must do their best to create environments in which residents can devote their energies to learning without unnecessary and undue hardship, distress, or extraneous burdens. This does not mean that the program director needs to provide massage therapists, frequent bonus days off, special resident “wellness” days, free food for resident meetings, or non-evidence-based interventions to forestall burnout. “Safe enough” also does not mean overprotection. The balance of safety and necessary difficulty is similar to that provided by good parents: the program director has to allow and encourage residents to face many difficult professional and personal challenges and responsibilities during training as an essential part of their learning.

A format based on Maslow’s hierarchy of needs [12] illustrates some of the levels of safety that should be built into a residency program and monitored on a regular basis. At the foundation level, the resident’s personal safety, workload, and basic human needs should be addressed. Then, a culture of trust and tolerance must be nurtured in the program, and the fostering resident accountability to each other, the program, and the profession can take place.

The program director ensures a “safe enough” environment by continually monitoring the resident experience and assuming responsibility for providing for the resident’s relative physical, mental, and emotional safety throughout training. The resident’s ability to manage challenges will generally increase throughout the training years. As such, the program director must be attuned to the learning level of particular trainees. “Safe enough” includes a multitude of elements, from adequate security presence in high-risk environments to adequate confidential reporting systems for the processing of harassment and other complaints in the workplace, to advocating for the hiring of mid-level providers to assist residents in a busy clinic setting, to ensuring a safe return-to-work plan for a resident who has been ill or on parental leave. This is an environment in which residents can make “productive errors” [13] with adequate supervision (to ensure patient safety) in an atmosphere devoid of shaming and humiliation.

Access to Mental Health Care

The importance of quality, accessible, mental health care for residents cannot be overestimated [14]. The ACGME appropriately mandates that residents have 24/7 access to quality mental health consultation and care; this is one area in which graduate medical education cannot cut corners – when physicians and trainees ask for help, they usually needed it “yesterday.” Ideally, mental health clinicians providing care for residents should have advanced training and credentials (PhD, MD, PsyD), have knowledge about medical training, medical culture, and training challenges, and have clinical experience in treating young professional adults. There should be available consultation and treatment hours that suit the schedules of busy residents, as well as 24-hour availability for emergency consultations.

The mental health providers should be made familiar to all trainees in the program, and their contact information easily available at all times (e.g., on the back of the resident’s ID or on the house staff wellness page). Optimally all residents should be introduced to the team of providers during intern orientation; the clinicians can also make appearances at other residency events or conduct departmental presentations. Mental health services should be geographically accessible, but also arranged so that resident privacy is protected. Residents must be confident in the firewall between graduate medical education and mental health services (i.e., no reporting other than numbers of residents seen per time period).

Many of today’s current interns have received mental health treatment prior to starting residencies, but may feel uncomfortable continuing with treatment due to stigma, worries about available time to access care, privacy, and other concerns. This may be one of many factors in the increase in depression and anxiety of interns within months of starting training. Leadership in graduate medical education can address this by sending out a letter (along with other pre-orientation notices) encouraging new interns to continue with their medical and mental health treatment as they start work, and listing available resources, so

that trainees can set up appointments prior to the start of residency training.

A resilient residency program, one that can promote well-being and sustain the everyday challenges of medical training, clinical and scholarly work, as well as the common events in departments (faculty changes, geographic moves, etc.), *can* be built with attention to several core principles illustrated in Maslow's hierarchy.

We have already discussed many of the elements in the lower third of the pyramid: establishing and maintaining a "safe-enough" environment for residents to grow and learn.

The middle section of the pyramid can be implemented strategically through thoughtful policies, procedures, scheduling, and special events.

Building Trust and Support Within Resident Groups

Fostering trust between residents, as well as residents and program leadership, starts during the recruitment and selection process. Communications with prospective trainees should be consistent, accurate, timely, equitable, and kind; this is an exciting but often nerve-racking time for applicants. It is especially helpful if program directors and coordinators can be respectful, patient, and compassionate throughout the process. This attitude is modeled also for the current residents who are involved in recruitment and sets expectations for their future relationships with the new interns.

Research has demonstrated that residents rely most on peers for support and also as teachers [15]. Therefore, explicitly fostering a resident community early in training is an essential element in strengthening resident resilience and well-being. The PGY1 year is one of excitement and anxiety. Many residents have moved far from family and friends, are living in a new city or town, and have not formed a social support network yet. In addition, in most programs, new residents are rotating between primary care, neurology, and psychiatry, which limits opportuni-

ties to bond with classmates. It is crucial for resident well-being that PGY1s can bond with each other, with more senior residents, and with faculty early in their first year. Social isolation in residency is a contributor to depression; thus, the importance of a supportive residency community. The program director(s) and chief residents must provide several opportunities for residents to spend time together both at work and outside of work, to get to know one another and each other's partners/families, throughout the initial year of training. Along these lines, some programs hold a special get-together for PGY1 significant others to introduce them to psychiatry residency training and foster a sense of inclusion in the program "family."

Another helpful strategy is to assign "buddy" or "big sib" senior residents to PGY1 residents at the start of training so that the intern has a supportive fellow resident, in addition to the chief resident, to call with any questions or concerns. Senior residents should be explicitly coached by the program director to be available mentors for junior residents. Welcome parties and frequent informal get-togethers should be regular events during the PGY1 year. Faculty can hold "movie nights" or casual dinners in their homes; interested residents can put together sports teams (softball, volleyball, and running clubs are common examples). If possible, the chair or program director should hold at least one annual event in their home for residents and fellows; this shared event is tangible evidence that the resident is welcome into the department "family."

Importance of Chief Leadership

Resident groups, like all groups, can tend to regress if inadequate attention is paid to mission, values, and boundaries. This is why the program director must pay close attention to preparing the chief residents for leadership roles: the chief residents bear much of the responsibility for a culture of well-being as well as scholarly productivity. Providing some training for chief residents on group dynamics, particularly managing conflict and regression in groups, can be extremely useful in maintaining a positive resident culture. Chiefs

can also be coached on running effective meetings, leading the group through inevitable changes and challenges, and coping with individual residents behaving in a disruptive manner. Chiefs, like program directors, must learn to simultaneously validate residents' feelings and worries *and* "take the high road." In other words, they should represent the goals and values of the program and the profession.

Privacy and Confidentiality

Program directors and chief residents must also maintain vigilance concerning individual resident privacy and confidentiality. Chief residents must learn when an individual resident issue must be brought to the program director, especially when the issue involves resident well-being, such as a resident exhibiting signs of burnout, depression, or symptoms of medical or psychiatric illness. Such situations, especially when other residents in the program are aware of the individual resident's difficulties, call for a careful balance of priorities and judicious communication. The program director may likely need to meet with the resident in question, evaluate the situation, and develop an appropriate plan to assist them, which may be a general medical evaluation (or a specific evaluation, such as a sleep study), fitness for duty evaluation, a referral for psychiatric evaluation for an undiagnosed or untreated mental disorder, a few "mental health days" off, or professional coaching on burnout mitigation.

When other residents in the program ask questions or express concerns about the affected resident, the program director and chief residents must remind them that every resident's privacy should be respected. However, this maintenance of privacy may sometimes result in the resident group feeling anxious that appropriate intervention or assistance may not have occurred. In this situation, the program director can speak to the group in generalities about how the program supports individual residents, without referencing the particular resident situation in question. This approach usually calms the overall resident group while respecting privacy issues.

Fostering an Ability to Tolerate Differences of Opinion and Conflict

It is inevitable that disagreements arise within residency programs. If handled poorly, festering conflict can seriously impair morale and well-being in a program. It is crucial that the program director foster a culture of open discussion and tolerance for a variety of viewpoints. It is equally important that the residency group knows that the program director will expect appropriate civility and respect for others and will hold residents accountable who do not meet these standards. Along these lines, the resident group must know that the program director is in charge, can make firm unambiguous decisions, and is comfortable saying "no" when necessary. The fastest way for a program director to lose credibility with residents is to avoid making essential decisions while trying to please everyone. The program director is not a "best friend," parent, or therapist to residents. In the words of James Lomax, M.D. (personal communication), the program director is a "compassionate administrator." The program director must be comfortable in setting limits with individual residents or a small group of residents' behaviors. If they fail to do this, residents will feel frustrated, demoralized, and inevitably some will try to fill the vacuum of leadership – sometimes with disastrous consequences.

Accountability to Each Other and Sharing Core Values

Most humans will work very hard if they believe that their work is important and valued. One contributor to physician burnout is the perceived inability to live up to one's professional values in the workplace. In a residency program that fosters well-being, residents believe that they are contributing to the profession and that their fellow residents live by the same standards of professionalism and accountability. This does not mean that residents do not make mistakes (after all, they are learners), but truthfulness, treating one's fellow residents as one would want to be treated, fairness, and "good citizenship" must be front and center. The program director, chief residents, and senior residents must consistently model and reinforce these core values daily.

Modeling of core values is a frequent and common challenge in residency programs, especially because night call and night float are hard work. In addition, backup coverage can be a burden, and unexpected coverage demands are inconvenient and distressing. Some policies can enhance a sense of equity concerning call: for example, if a resident must cover for a fellow resident who is ill, the latter resident will pick up one of the covering resident's calls at a later time. There are other policy iterations that can help even out the playing field. However, call schedules never work out perfectly. Therefore, regular discussions about shared workload, gratitude, equity, fairness, and accountability to patient care and each other are important.

Managing Personal and Professional Events in the Life of the Resident That Affect Well-Being

Work-Related Events

The program director must guide residents, especially junior residents, in their response to work challenges. There are common developmental challenges that occur during training in psychiatry, and the program director must be familiar with them and able to respond in real time. Here, we provide some case vignettes of such work-related events.

1. *Feelings about their patients: A PGY1 resident working on the inpatient unit pages the Program Director at 4:00 pm one weekday afternoon. The resident is a usually calm and even-tempered young man in clinical settings. However, he sounds tense, and urgently asks if he can speak with the Program Director. When he arrives, he tells the Program Director that he is very upset that he finds himself angry at a paranoid young male patient with schizophrenia, who is assigned to his team. The resident describes the patient as glaring at him in a very hostile manner several times during the day. The resident is alarmed that he is having brief fantasies about killing the patient; he has never experienced such*
2. *Feeling overwhelmed on call: A PGY2 resident has completed several training calls and three independent night calls covering a busy emergency department (ED). On her fourth call, the psychiatric section of the ED is unusually busy with patients and she struggles to keep up. She calls in the backup resident but feels guilty about that and not being able to "clear" the roster of patients on her own before morning.*

thoughts and feelings. The Program Director, sensing that humor may help this particular resident, says "Welcome to psychiatry!", then explains that these are universal experiences in psychiatry training. Then, the Program Director describes the psychodynamics at work behind the resident's response to working with this very ill patient.

Immersion in the world of inpatients with psychotic disorders, severe personality disorders, and profound mood disorders can be disorienting and emotionally challenging for most, if not all, junior residents. Faculty members and program directors can be affirming and reassuring mentors in these common situations and transform them into positive learning experiences.

This is still a common experience for residents long after duty hour guidelines were put into place initially in 2002 and modified significantly in 2011. Medicine selects for perfectionism in trainees and rewards it, so it is not surprising that our trainees struggle with overwork, an exaggerated sense of responsibility, unrealistic expectations of themselves, and shame if they do not meet these expectations. It is difficult to overestimate the propensity for shame and perfectionism in medical residents. Residency is a crucial time for modification of those traits as the resident develops a professional identity. The program can explicitly help with resident self-expectations of perfection through presentations on reasonable goals, acknowledgment that we all fall short at times, and that we can only do what is humanly possible. Building a strong backup system for residents is essential, as is selecting supportive and mature

chief residents who know when to “jump in” to help.

3. *Problems with time management: A PGY1 resident with an outstanding application from medical school is struggling to keep up with his workload on the inpatient unit; compared with his fellow residents, his notes are too long and he appears to belabor his documentation; he is often late for meetings and is staying late on the unit to finish his work. He looks exhausted and worried.*

This is a common problem for beginning residents, one that may not have been recognized or addressed in medical school. It is important that the program director identify time management issues as early as possible in training and initiate assistance for the resident. Some graduate medical education programs have trained tutors or professional coaches to help residents improve their efficiency; another solution is to select a senior resident (preferably one who also struggled with this problem and learned to master it) to confidentially coach the PGY1 in time management techniques in vivo.

4. *Transition to outpatient rotations and psychotherapy: An incoming PGY3 resident has just attended the annual “sign out” event in late spring, when graduating PGY4 residents meet with incoming PGY3s to discuss patients who will be transferred to their new outpatient caseloads at the start of the new academic year. Although the PGY3s are reassured that they will have time to space out their first appointments and get to know their patients, the resident asks to meet with the chief residents. She appears overwhelmed and very anxious about starting outpatient work, stating that she feels totally unprepared and “won’t know what to do.”*

This transition mid-training may be the most challenging of psychiatry residency for some residents; they have just begun to master the inpatient and CL settings, and then they have to switch gears and learn something entirely new. The program director can ease this transition by (1) openly acknowledging the challenges of the transition, (2)

emphasizing that the resident has already developed some therapy skills in their inpatient work, (3) providing a good, several-session orientation to the outpatient clinic setting and outpatient work, and (4) ensuring that residents not only have weekly supervision sessions, but available in-the-moment supervision from attendings and senior residents in the clinic.

5. *Patient suicide*

No single vignette can capture the impact of the suicide of a resident’s patient. This is our worst outcome, and yet between 30% and 60% of residents will experience the suicide of a patient during the training years [16]. This statistic is a reminder of the malignant nature of many mental disorders. For example, 15% of depressed patients die by suicide and 50% of all suicides involve depressed patients (reference). This chapter cannot cover in detail all of the pre- and post-interventions that can help ease the experience of losing a patient to suicide, but we can summarize some of them. Because a patient suicide always comes as a shock, and there is a flood of affect for individuals including the small communities of program, units, and departments, it is important that program directors prepare well in advance for these events.

First, the program director can help prepare residents by having annual discussions and presentations on the topic of patient suicide and the impact of the same on clinicians. There are many helpful resources, including curricula and videos, that are available [17].

Second, in the immediate aftermath of a patient suicide, the program director must have an established protocol for how to notify and support residents; the protocol should be written and readily available to all. The program director or designated faculty members should inform not only the resident who primarily cared for the patient, but every resident who provided care for that patient – preferably in person, but most importantly before the residents hear about it from other sources.

Third, the program director must help the resident process this event when they are

informed – again, in person – and assess if the resident may need to take some time off – from the rest of the workday to a day or two. Often, the resident feels numb from the shock, and the suicide does not feel “real,” so immediately returning to work the same day of receiving the news is generally not advisable. However, most residents prefer to return to work the next day; remaining at home isolates them from peer and faculty support, and can contribute to the resident’s remorse, self-questioning, and loss of confidence. In most cases, we recommend the program director check in with the resident briefly on a daily basis for a few days, then once a week for a few weeks, to monitor sleep, level of anxiety, hyperarousal, and possible risk avoidance; the program director should also be alert to common cognitive sequelae such as shame, self-blame, and demoralization. For some residents, a referral for psychotherapy may be indicated.

Fourth, the program director or designated faculty member should help prepare the resident for any critical incident review and attend this event with the resident to provide support.

The benefits of providing these pre- and post-interventions are not only for the individual resident. Demonstrating how to manage and integrate such painful losses also models for the entire resident group how psychiatrists can cope with the worst clinical outcomes.

6. Other adverse events

A PGY2 resident is working in the Emergency Department during the daytime; the ED is crowded and a group of psychiatric patients are waiting in a holding area for inpatient beds to become available. The resident goes to the bedside of a patient with borderline personality disorder to do a routine reassessment; he does not leave arm’s length of space between himself and the patient. The patient, a young woman, reaches out with her fist and hits him hard in the jaw.

Patients’ verbal and attempted physical assaults on clinicians in the emergency setting

are not rare, and although thorough safety training and supervision for beginning residents are essential, there are times when residents may experience them. Like a patient suicide, a resident assault should be considered a program emergency, and the program director or faculty designee should assess the situation in person as soon as possible. If there is a question of an injury, the resident must be evaluated by medical staff in the emergency setting. The program director should meet with the resident frequently in the aftermath to check in on any physical symptoms or symptoms of acute stress disorder, such as impaired sleep, hypervigilance, or avoidance of triggers.

An assault on a resident, no matter how slight, will impact all residents’ perceptions of their own safety on the job. Therefore, a thorough critical incident review as well as a detailed examination of security procedures is recommended, with full transparency about the process within the residency.

7. Ending residency

Despite attending the PGY4 course on career planning, a senior resident is highly anxious about the decisions facing her as she begins her last year of training. She is not sure if she wants to remain in her current location or seek a job closer to her family. She feels overwhelmed by financial decisions, including loan repayment, as well as questions about pursuing a fellowship.

Despite what senior residents may say, they are typically anxious about leaving residency and becoming attendings, whether they choose a fellowship or plan to pursue a particular job. Residency training constitutes a kind of adult developmental delay; while the resident develops the skills, knowledge, and professional identity of a physician, they have had to put off some “real-life” decisions. In addition, residency training is very structured, so the major increase in freedom of choice can be both exciting and unnerving. This is a time when regular guidance from the program director, faculty mentor, or other faculty designate is crucial.

PGY4 residents (and PGY3s departing for certain fellowships) will need explicit guidance on career planning, from an overall view of possible careers down to crafting one's CV and cover letter, and how to manage job interviews. Transitioning residents need to learn about how to negotiate a contract and what legal assistance they may need.

These transitioning residents need to learn about everything from malpractice and disability insurance to risk management as well as personal and professional financial issues. They need to ensure that they will be lifelong learners. All of these issues can best be addressed in a regular seminar or course on transitioning from resident to attending. Residents especially enjoy visiting speakers, particularly recent graduates of the program, who can talk about their own early career journeys.

In addition to career planning, PGY4 residents need guidance on how to plan for their terminations with patients as the end of residency approaches. If residents are following some patients throughout the PGY4 year, administrative and clinical strategies for disposition of patients should be discussed at length. Lastly, residents should plan to allow themselves time to say goodbye to their fellow residents, the faculty, the program director, and the program administrator/coordinator. With this level of information and guidance, the resident is better prepared to move forward with confidence as they complete training.

Life Events

Of no less importance is the role of the program director in assisting the resident in developing responses to both planned and unplanned life events, which can be as diverse as how to manage an upcoming wedding, or how much leave they will need for recovery from an appendectomy or caesarian delivery. Most residents have never had to balance their responsibilities as a physician with major life events. This is one of

the major learning opportunities on well-being and professionalism for trainees because there is no "instruction manual" on how to make these complex decisions. The program director must teach and demonstrate how to use basic principles of self-care and responsibilities to others in making plans to address individual situations.

Life Happens: Personal and Family Events

The four or more years of young adulthood that constitute the training years are personally exciting, full, and challenging. For many residents, it is the first time they have a full-time salaried position with a contract and benefits as well as considerable responsibilities. Here is a partial list of life events that can and do occur during the training years:

1. Finding a life partner, commitment, and marriage
2. LGBTQ residents coming out to friends, colleagues, and family
3. Pregnancy, childbirth, and parenthood
4. Relationship breakups and divorce
5. Personal illness or injury, an emergency surgery, development of a disability
6. Serious illness or death of grandparents or parents, illness or injury of siblings and significant others
7. Personal financial or property loss, such as home, fire, or flood
8. Experiencing a traumatic event such as an assault or natural or man-made disaster

Assisting the Resident in Responding to a Life Event

Life events offer "real-time" and valuable learning in decision-making as a physician. The program director must be an active supervisor in how to integrate one's professional and personal lives: this can help promote lifelong well-being. In addition, many residents are living far from

their families, who may have supported and advised them in the past.

For example, while junior residents must learn how to plan for regular vacations and make the most of their time off, they also need to plan for good patient handoffs before they leave. More senior residents need to learn how to notify patients and fellow residents if they are unexpectedly ill, and to decide if they need to take a “mental health” day following a painful relationship breakup. Some individual vignettes can illustrate the management approach of the program director to some diverse events.

The Wedding

A PGY1 resident requests 2 weeks off for his wedding in the spring of the intern year. The chief resident informs him that in the first year of training vacations are scheduled in 1-week blocks. The PGY1 is distressed; he had planned on having time off prior to the wedding for a bachelor party and rehearsal dinner as well as time off after the wedding for a week-long honeymoon trip. He and his intended decide to delay the honeymoon trip, but as weeks go by, he feels overwhelmed by the demands of wedding preparation and his family members.

Thirty years ago, residents usually got married before or toward the end of residency training, for the very reasons described above. However, residents now plan weddings and family reunions at all times during training, and they are often surprised how taxing the preparation for such events can be in the early training years. If the resident is the first physician in their family, relatives may have little understanding of the demands of training. It is not surprising that junior resident well-being can be compromised by what is supposed to be a happy event.

It is often helpful to ask new interns – before they start – if they are planning a wedding in the coming year, and if they are, offer information and advice well ahead of time. In addition to the timing of various wedding events, the resident should consider delegating preparatory tasks to family members or friends, or hiring a planner.

Home Disaster

A PGY2 resident and her husband have just purchased their first home, a condominium, and spend 2 weeks painting the interior. After living there just 1 month, a fire breaks out in the condo building. They escape, but it will be uninhabitable for at least several months for repairs. At 5 am on the morning of the fire, the resident calls the program director to ask if she should go to her ED rotation that day.

This is only one of many home disasters that can occur to residents in training, and most of the time residents have no idea how to manage both the disaster and their obligations to work. Residents usually underestimate the emotional and physical toll of such loss and the effort it will take to recover, so they need clear direction from the program director on how to proceed. In this particular case, the resident needs to be told that she will need to take several days to a week off from work in order to find a new place to live, move, contact, and work with their insurance company, have their clothing treated for smoke damage, and just recover emotionally. The program director can take on some of the burden of contacting faculty members, chiefs, and (if the PGY2 resident agrees) her fellow residents. In a program with a positive collaborative culture, her fellow residents may volunteer to help out with the move and other chores. Through the program director’s actions, all residents will learn about managing similar personal crises of their own.

Medical Illness

A very responsible PGY3 resident has appeared fatigued, very pale, and drawn for a month. Her classmates express concerns to the program director about her health. When the program director meets with her privately, the resident acknowledges that she just saw her PCP and has a hemoglobin of 6.5 g. The resident wants to keep working her regular demanding schedule. This precipitated a discussion about the need for her to immediately pursue a more definitive diagnosis and treatment, as well as the resident’s primary obligation to care for herself. Her internist recommended some time off service for recovery, and the program director and resident took their lead from the internist.

Some readers may feel that this was unnecessarily intrusion on the part of the program director. However, this young resident had not yet learned to appropriately balance her work responsibilities and self-care. Had the program director not intervened, she could have become very ill and also failed to learn a most important principle in well-being. This is not only a personal health issue, but also may be a training issue, since residency training can be difficult, if not impossible, to complete in the face of serious illness.

Residents with Disabilities

Any residency program director who is in the role for more than a few years is likely to have a resident in the program with a disability. I have worked with residents who have long-standing vision and hearing disabilities, cerebral palsy, seizure disorders, and chronic immune system disorders. Some students will disclose their disability on their application or during interviews, but some may not disclose the disability (for fear that this will prejudice their ranking) until they are already well into training. Some students have specially considered psychiatry because it is a specialty in which their disability may not be an obstacle in their careers.

Whether the resident discloses their disability before or after starting training, it is very important that the program director is a support and advocate for them, especially in arranging for reasonable accommodations. Some residents have no idea that training institutions must provide reasonable accommodations such as special computer support for visually impaired residents or devices to enhance communication for those with hearing impediments. Reasonable accommodations are required in accordance with the Americans with Disabilities Act [18]. The program director's interventions can truly change a resident's experience with their disability.

Disruptive Behavior in Individual Residents and Groups

One of the most painful and time-consuming tasks of the program director is managing a resident with disruptive behaviors, especially behav-

iors that are manifestations of character disorders. Experienced program directors generally try to identify such prospective applicants during recruitment, but given the limited time given to the recruitment process, any program can have a resident whose character difficulties emerge in the first few months of training.

Once these behaviors come to light, the program director must accept that assessment, mitigation/remediation, and possible disciplinary actions may consume a good deal of time during the resident's training years. There are many exceptions; sometimes, disruptive behaviors are not part of an enduring pattern, but a manifestation of a resident's response to the new developmental challenges of training.

A bright PGY1 resident with a stellar record from his medical school has been heard by staff making cynical remarks about some patients in the emergency room, and has been failing to include the other clinical staff in decision-making in that setting. At times he was quite defensive when an attending supervisor questioned him about differential diagnoses. When the program director meets with the resident to discuss the behaviors, the PGY1 appears embarrassed and genuinely apologetic. Over time, he is able to understand that his maladaptive behaviors were a manifestation of insecurity in his new role and overall lack of confidence. He was able to change his attitude and behaviors fairly quickly.

There are also behaviors that are caused by an undiagnosed medical or psychiatric illness, such as an undiagnosed sleep disorder causing chronic lateness or falling asleep in the clinical setting, or panic attacks that may interfere with a resident answering a page promptly. Thoughtful questioning on the part of the program director can usually clarify these situations, leading to appropriate diagnosis and treatment. However, the program director must avoid becoming a diagnostic or treating clinician for the resident, tasks that fall outside of the program director's relationship with residents.

When these behaviors recur and it becomes clear that these are part of a long-standing maladaptive pattern, the program director must begin a process of frequent documentation of the behaviors, meetings with the resident, communi-

cation with the chair and possibly the DIO. It is absolutely essential that the program director document these observations and start a file as soon as the problem surfaces. Unaddressed, the problem will not go away, and there will likely be a time when such documentation is crucial.

It is also essential that the program director become well versed in the written expectations, remediation, and disciplinary processes of their institution. In all communications with the resident, the program director must follow the processes defined by the sponsoring institution.

When there is a question of resident impairment (due to medical or psychiatric illness, including a substance use disorder), the DIO must be notified and the resident should have a medical or psychiatric evaluation. When there is a question of a psychiatric diagnosis, the evaluation should be done by an independent psychiatrist who has subspecialty training in forensics or in performing fitness-for-duty evaluations.

When the behaviors clearly do not indicate impairment, but are contrary to the values of the program, or do not meet the minimum standard of expected resident behavior, a graded process of feedback, monitoring, and documentation begins. The first intervention is usually a meeting or two with the program director, who describes the problematic behaviors (with dates, location, and details) to the resident and explains that these are unacceptable. If the resident is dismissive of the problem, prognosis is more serious. The program director should be clear in describing expectations for change and recommend counseling at this time. The program director should document the contents of this discussion and send an email to the resident summarizing the meeting.

If the resident does not adequately change the behaviors, the next intervention is usually a formal letter of warning. At this point, the GME office is notified and they will usually send the program director an approved format for the letter. The program director should meet in person with the resident, discuss the contents of the letter, and give the resident a copy. The letter should outline expectations for changed behaviors in detail as well as a target date when the resident

will be re-evaluated. The resident should be informed about next steps should they not make the expected changes; this usually means probationary status.

It is beyond the scope of this chapter to describe the process of probation and the disciplinary processes of various institutions. These issues are covered in greater detail in other chapters in this book. All institutions spell out due process in detail, and it is crucial that process be followed. It is possible that the program director may realize that a particular resident should not graduate from the program and practice psychiatry. This, too, is an important component of the program director's job: they are the last "gatekeepers" before the resident is free to practice independently.

Impact of a Problem Resident on the Resident Group

Once again, it is difficult to protect the problem resident's privacy when many or all of the other residents are aware of their maladaptive behaviors. Typically some residents have been negatively affected by the resident's behavior (i.e., having to cover when the resident fails to show up for call on time, listening to negative commentaries or emotional outbursts from the resident). The entire resident group may feel frustrated and demoralized by the resident's failure to live up to program expectations and hope that the program director will be able to deal effectively with the situation. At the same time, some in the resident group may be hesitant to complain about the resident out of apprehension and guilt that they may contribute to a negative outcome for the individual.

Failure of the program director to recognize and act appropriately regarding the disruptive resident will result in residents' loss of trust in the program leadership and the feeling that no one will be held accountable for patient care, the resident group, and even the resident in question. The resident group may feel ambivalent about a fellow resident needing remediation or being placed on probation, but it will be a far worse out-

come if the program director does not intervene. The residents need to know that the program director is “in charge” and dealing firmly yet compassionately with the problem. This is one of the most challenging roles for the program director, and yet it is one of the most important to manage well. The morale and well-being of the resident group are at stake and depend on the program director’s leadership.

Summary

In this chapter, we briefly reviewed the recent history of research on well-being of physicians and residents-in-training and highlighted the changes in residency that are outcomes of this work. We described ways in which the program director can create an environment that will foster a positive learning and working environment for trainees, and presented a model of hierarchy of needs in such an environment. We discussed a variety of developmental challenges, both in the workplace and the resident’s personal life, which can present just-in-time learning opportunities for residents in making wellness-based choices in their careers. We also reviewed the management of some unique challenges, such as disruptive behaviors in residents.

References

1. West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. *J Intern Med.* 2018;283(6):516–29.
2. Sen S, Kranzle HR, Krystal JH, Speller H, Chan G, Gelenter J, Guille C. A prospective cohort study investigating factors associated with depression during medical internship. *Arch Gen Psychiatry.* 2010;67(6):557–65.
3. Lerner BH. A life changing case for doctors in training. *NYTimes.* 3 Mar 2009.
4. Myers MF. Why physicians die by suicide; lessons learned from their families and others who cared. Copyright Michael F. Myers. 14 Feb 2017.
5. Sinha P. Why do doctors commit suicide? *NYTimes.* 4 Sept 2014.
6. <https://nam.edu/past-events/>.
7. <https://nam.edu/initiatives/clinician-resilience-and-well-being/>.
8. https://www.acgme.org/globalassets/pfassets/programrequirements/400_psychiatry_2021.pdf.
9. <https://wellmd.stanford.edu/>.
10. <https://nam.edu/clinicianwellbeing/wp-content/uploads/2019/07/Factors-Affecting-Clinician-Well-Being-and-Resilience-July-2019.pdf>.
11. Eley C, Robert Cloninger CR, Walters L, Laurence C, Synnott R, Wilkinson D. The relationship between resilience and personality traits in doctors: implications for enhancing well being. *Peer J.* 2013;1:e216.
12. Maslow AH. A theory of human motivation. *Psychol Rev.* 1943;50(4):370–96.
13. <https://elearningindustry.com/7-benefits-of-mistake-driven-learning>.
14. https://www.acgme.org/globalassets/pfassets/programrequirements/400psychiatry_2021.pdf.
15. Mordang SBR, Vanassche E, Smeenk FWJM, Stassen LPS, Könings KD. Residents’ identification of learning moments and subsequent reflection: impact of peers, supervisors, and patients. *BMC Med Educ.* 2020;20:484.
16. Fang F, Kemp J, Jawandha A, Juros J, Long L, Nanayakkara S, Stepansky C, Thompson BL, Anzia J. Encountering patient suicide: a resident’s experience. *Acad Psychiatry.* 2007;31:340–4.
17. Helping residents cope with a patient suicide ([psychiatry.org](https://www.aadpr.org/training-directors/virtual-training-office)); <https://www.aadpr.org/training-directors/virtual-training-office>.
18. Meeks LM, Jain NR, Moreland C, Taylor N, Brookman JC, Fitzsimons M. Realizing a diverse and inclusive workforce: equal access for residents with disabilities. *J Grad Med Educ.* 2019;11(5):498–503.



Developing and Managing a Didactic Curriculum in Psychiatric Graduate Medical Education

Allison S. Brandt and Scott R. Beach

Introduction

A monumental task in managing a psychiatry training program is overseeing the formal didactic curriculum that complements a resident's clinical exposure. As part of the Common Program Requirements, the Accreditation Council for Graduate Medical Education (ACGME) calls for residency programs to provide "structured didactic activities" aimed at advancing resident achievement of the ACGME Psychiatry Milestones and the specific educational goals of the residency program [1].

In this chapter, didactics will refer to any formal learning in a conference or classroom setting and specifically directed by the training program. This may include lectures or seminars that are part of academic half-day or core didactics, formal teaching in a classroom setting during individual clinical rotations, journal clubs, noon conferences, or morning report. Activities targeted at the broader faculty and department, such

as Grand Rounds, resident process groups, or optional learning opportunities, such as special tracks in research, psychotherapy, or clinical education, are beyond the scope of this chapter and are discussed elsewhere in this text.

This chapter explores the process of planning a formal didactic curriculum from start to finish. It considers how to arrange and schedule didactic activities and who should teach the psychiatry didactic curriculum. The chapter enumerates teaching approaches and techniques, as well as how to identify and address the many challenges that may arise while managing a didactic curriculum. Finally, the chapter considers the process of continuous assessment and improvement of a residency didactic curriculum.

Determining What to Teach

With the ever-expanding knowledge base in psychiatry, it is imperative to determine the essential elements to include in the didactic curriculum of a psychiatric residency training program. There are many factors that should be considered in topic selection. First, the ACGME requires that six core competencies be taught to residents through their educational activities, including the provision of "structured didactic activities." [1] Yet, while the six competencies highlighted below must guide the didactic curricula of psychiatry residency programs, the ACGME also

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notes the importance of a program's curriculum aligning with its institution's "mission, the needs of the community it serves, and the desired distinctive capabilities of its graduates." [1] As such, the ACGME not only allows for but encourages individual programs to conduct their own needs assessments. This provides an opportunity for training programs to integrate didactic elements that fit their unique mission, vision, and values while providing the essential training elements.

This section will detail the ACGME competencies and propose appropriate didactic content to meet these requirements. Next, it will illustrate how to conduct a thorough needs assessment to build a unique didactic curriculum that aims to fulfill the values of an individual residency program. Then, it will consider building a didactic curriculum from scratch for programs in their infancy and how to overhaul existing didactic curricula for established programs. Finally, it will explore how to develop unifying learning principles throughout the curriculum. Throughout, it will underscore that not all educational topics are best learned through didactics and introduce ways to thoughtfully consider what topics are best learned in didactic versus other settings. In addition, some topics may be taught in both

didactic and non-didactic settings in a complementary fashion.

ACGME Requirements

The ACGME core competencies are as follows: professionalism, patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, and systems-based practice. It is through these core competencies that the ACGME asserts, "Graduate medical education transforms medical students into physician scholars who care for the patient, family, and a diverse community; create and integrate new knowledge into practice; and educate future generations of physicians to serve the public." [1] Through the ACGME Milestones Project, these competencies are divided into subcompetencies for the specific medical specialties [2]. In psychiatry, the six ACGME competencies are further delineated into 21 subcompetencies (Table 11.1) [3]. Each subcompetency is further divided into individual milestones, which are knowledge, behaviors, or attitudes organized in a developmental sequence over the course of training.

Table 11.1 ACGME Psychiatry Milestones 2.0 core competencies and subcompetencies

| ACGME competency | Psychiatry subcompetency |
|---|--|
| Patient care | Psychiatric evaluation Psychiatric formulation and differential diagnosis Treatment planning and management Psychotherapy Somatic therapies Clinical consultation |
| Medical knowledge | Development through the life cycle Psychopathology Clinical neuroscience Psychotherapy |
| Systems-based practice | Patient safety and quality improvement System navigation and patient-centered care Physician role in health-care systems |
| Practice-based learning and improvement | Evidence-based and informed practice Reflective practice and commitment to personal growth |
| Professionalism | Professional behavior and ethical principles Accountability/conscientiousness Well-being |
| Interpersonal and communication skills | Patient- and family-center communication Interprofessional and team communication Communication within health-care systems |

In designing a psychiatry residency didactic curriculum, an overarching goal is to ensure that the curriculum appropriately incorporates teaching toward the specifically enumerated subcompetencies and milestones.

Conducting a Needs Assessment

The ACGME encourages that the values of a residency program align with the institution's "mission, the needs of the community it serves, and the desired distinctive capabilities of its graduates." As such, each training program should conduct a needs assessment to promote its unique vision for its educational goals. Kern (2009) elucidates a six-step approach to curriculum development in medical education [4]. The second step in this approach, the "targeted needs assessment," describes the process through which this is accomplished. The "targeted needs assessment" should consider the experiences, strengths, weaknesses, skills, and performance of the "targeted learners," as well as the "targeted learning environment" in which they operate. Residency programs must consider what their residents need to learn, not only to function well in clinical settings during residency but also to develop a breadth of knowledge and experience to provide excellent care across a wide variety of settings after residency. In developing the formal didactic curriculum of a residency program, educators must consider which organic learning opportunities arise during the clinical experiences provided to residents throughout their residency. For example, if junior residents in a particular residency program spend significant clinical time in the emergency psychiatry and inpatient settings, formal didactics for junior residents may initially need to focus on the specific medical knowledge elements required for the acute management of psychiatric crises, before broadening in subsequent training years to a focus on the longitudinal care of outpatients. The psychopharmacological and psychotherapeutic approaches used in the inpatient versus outpatient setting are similar but different. The didactic curriculum will need to reflect this to meet the needs of the learners.

Alternatively, programs should use classroom didactic settings to focus on aspects of psychiatric practice to which residents in their program are less likely to be exposed. For example, many residents do not have an opportunity to participate in the specialized treatment of eating disorders during residency. For these residents, it would be imperative that the program provide them with sufficient classroom didactics and case discussions to ensure that they feel comfortable with the basics of treating patients with eating disorders by the time they graduate.

Further, the "targeted learning environment" encompasses more than simply the physical and institutional environment where a resident learns to become a psychiatrist. In developing a curriculum that best serves the "needs of the community it serves and the desired distinctive capabilities of its graduates," residency programs should involve key stakeholders in conversations aimed at identifying the primary tenets of its curriculum [1]. Key stakeholders may include current and past residents, program leadership, department leaders, faculty experts representing different topic areas in the field of psychiatry, as well as representatives from community and state partners (Department of Mental Health (DMH), community organizations working with the patients the program serves), and community members with lived experience [5]. In examining the targeted learning environment, consideration should be given to the clinical settings outside of the classroom where residents will do the bulk of their learning. For example, who are the teachers from whom residents will learn? Do residents have adequate exposure to psychiatry attendings, nursing staff, social workers, psychologists, group therapists, administrators, and people with lived experience? How are supervision and support structured? How do the service needs of different rotations promote or inhibit educational learning? Formal exploration of these and other questions about resident experiences is critical in prioritizing which content areas are best learned in clinical settings and which must be emphasized in the didactic curriculum. A committee of key stakeholders can help identify the questions to be asked. The answers to these questions can

be explored through informal discussion, direct observation of clinical settings, and formal interviews or focus groups of learners and educators [6]. Ultimately, it is important to align the focus on individualized needs assessment with the overarching Milestones put forth by the ACGME for all psychiatry programs. This can be achieved through “curriculum mapping,” a technique described below.

Building a Didactic Curriculum from Scratch

For newer residency programs, building a didactic curriculum from scratch may seem a daunting task. Figure 11.1 enumerates the steps to designing a new curriculum from scratch.

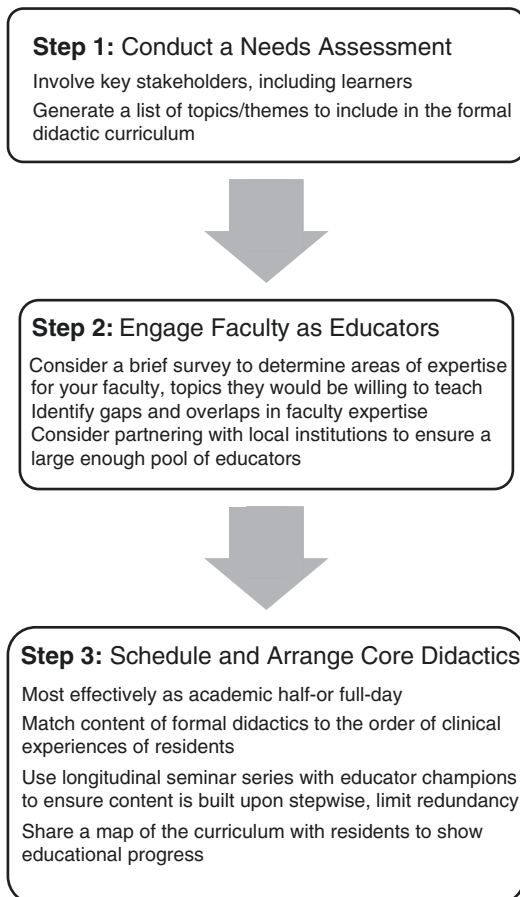


Fig. 11.1 Designing a new curriculum from scratch

In parallel to generating a needs assessment that considers the specifics of the targeted learners and the targeted learning environment, we suggest beginning by generating a list of topics that encompasses the breadth of psychiatric knowledge and practice. This list should include all issues that any general psychiatrist should be exposed to during residency, but also may consist of topics specific to the particular institution, region, and community within which the psychiatric resident works. As an example – although generated during an overhaul of an existing residency curriculum, rather than building an initial curriculum from scratch – the curriculum committee of the Massachusetts General Hospital (MGH)/McLean Residency Program enumerated 20 content areas in its didactic curriculum (Fig. 11.2) [7].

An alternative approach is to generate a list of themes, or overarching content areas, to be high-

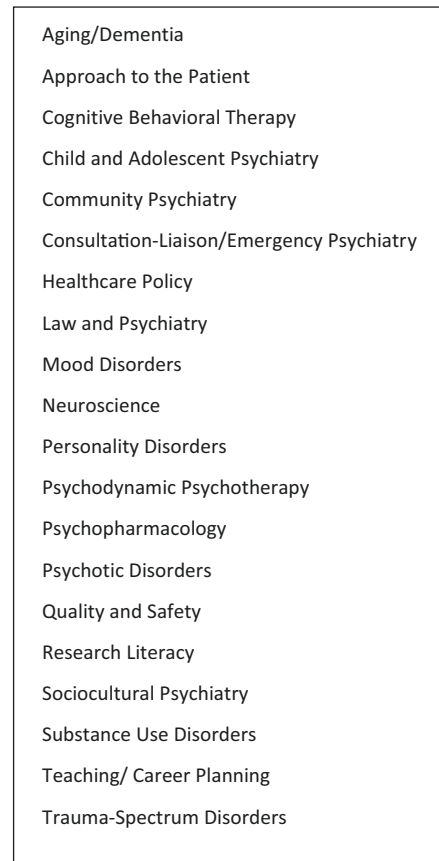


Fig. 11.2 Example of potential didactic content areas

Table 11.2 Resources for curricula

| Curricula resource | Website |
|---|---|
| American Association of Directors of Psychiatry Residency Training program (AADPRT) Model Curricula | https://www.aadprt.org/training-directors/curriculum |
| <i>Academic Psychiatry</i> | https://link.springer.com/journal/40596/volumes-and-issues |
| Academy of Consultation-Liaison Psychiatry C-L Curriculum for Psychiatry Residents | https://www.clpsychiatry.org/training-career/resident-curriculum/ |
| American Association for Community Psychiatry Model Curriculum | https://www.communitypsychiatry.org/resources/model-curriculum |
| American Psychiatric Association Supplemental Education and Training for Success | https://www.psychiatry.org/residents-medical-students/residents/set-for-success |
| American Society of Clinical Psychopharmacology Model Psychopharmacology Curriculum | https://ascpp.org/resources/educational-resource/ascp-model-psychopharmacology-curriculum-seventh-edition/ |
| Association of Directors of Medical Student Education in Psychiatry Clinical Simulation Initiative eModules | https://www.admsep.org/csi-emodules.php?c=emodules-description |
| <i>Med Ed Portal</i> | https://www.mededportal.org/ |
| National Neuroscience Curriculum Initiative | https://www.nncionline.org/ |

lighted within a curriculum. For example, the University of Toronto Postgraduate Psychiatry program identified seven content themes in their curriculum: organic, legal and systemic, personality and therapy, mood, geriatric, child, and emergency, into which they have organized each of their didactics [5]. One challenge of any such list is the likelihood that it will be incomplete, given the vast array of potential topic areas within psychiatry. Nonetheless, these lists may be an appropriate place to start for new residency programs, recognizing that within each topic or theme, different programs may prioritize or weight different subtopics with greater or lesser importance depending on the specific needs of their learners and learning environment. For example, teaching on substance use disorders, while essential to all psychiatrists, may vary across programs depending on regional variation in substance use rates. Areas with high rates of methamphetamine use might consider additional emphasis on the identification and clinical management in their unique curriculum. At the same time, this may be less critical in geographic areas where methamphetamine use disorders are not frequently encountered in clinical practice. After generating a list of topics or themes to be included in the formal didactic curriculum, educators can start developing specific lecture or seminar series

to teach these themes. How to teach didactics will be explored in a later section. Table 11.2 shows several resources for existing curricula that can be used as starting points or incorporated into the curriculum directly.

Overhauling an Existing Curriculum

Once a curriculum is established, it is important to revise and overhaul it at regular intervals to ensure the curriculum continues to meet the needs of its learners and learning environment (Fig. 11.3). It is helpful to organize a “Curriculum Committee,” like those of the two programs described above, to facilitate this process of continuous improvement. Similar to the committee of key stakeholders described above, this committee often consists of experts in medical education (core teaching faculty) and residents. In addition, the committee may include specific topic experts, education scientists, community members, and persons with lived experience [5, 7]. It is helpful for the Curriculum Committee to generate a “Curriculum Map.” A curriculum map focuses in detail on what is taught within a curriculum, where it is taught, who teaches it, how it is taught, and for how long [7]. Curriculum maps also show how top-

Step 1 : Organize a Curriculum Committee

- Involve key stakeholders
 - Current + past residents
 - Program leadership
 - Faculty Experts
 - Department leaders
 - Expert Educators
 - Community/State partners
 - Persons with lived experience

Step 2 : Generate a Curriculum Map

- What is taught?
- When/where is it taught?
- Who teaches it?
- How is it taught?
- For how long is it taught?

Step 3 : Form Content Teams

- Select faculty content experts and residents with interest in the content area
- These teams can answer the questions in Step 4
- Faculty on this team may be the optimal teachers for these content areas
- Content teams present recommendations back to the larger committee
- Larger committee must balance all recommendations and determine which to prioritize

Step 4 : Identify content areas that are over or under-emphasized

- Which ACGME Psychiatry Milestones are highlighted? Which are not?
- Consider redundancies
- Consider opportunities for encouraging that adult learning principles are regularly incorporated

Step 5 : Ongoing assessment and improvement of the curriculum

- Seek feedback from residents and educators
- Use a continuous quality improvement model⁷

Fig. 11.3 Overhauling an existing curriculum

ics complement and build upon each other. Creating a curriculum map of the didactics of a psychiatry residency is a significant investment in time and effort. Examples of this process suggest it can take many hours of work across committee members to generate the map [5, 7]. Developing a curriculum map can point to

which content areas are overemphasized, underemphasized, or even missing within a curriculum. In particular, content areas can be mapped to the ACGME Milestones to ensure residents are exposed to an appropriate breadth of knowledge and experience throughout their training.

Developing Unified Learning Principles

It is essential to create learning principles that acknowledge the theory behind how didactics are taught to residents and develop overarching goals and objectives for the curriculum. Often, the learning principles that drive the teaching approach are not explicit, nor are they unified throughout a curriculum. Though often overlooked, a lack of unifying learning principles can contribute to the shortcomings of redundancy and lack of focus in a multiyear didactic curriculum of this magnitude, with many learners across different residency years and educators who are often unconnected to each other. Educators must keep the principles of adult learning theory at the forefront in developing a cohesive curriculum. Adult learning theory will be discussed in more detail in the section “How to Teach.” Programs should ensure that principles of adult learning theory are always in mind while organizing the overarching curriculum.

Goals and objectives explicitly communicate to educators, learners, and others (e.g., department chairs, outside program directors, site reviewers, and accreditation bodies) the aims of the curriculum. Enumerating clear goals and objectives of a didactic curriculum help to prioritize or assign appropriate weighting to different curriculum components. In addition, they are important in determining what methods are most suited to evaluate the quality of the curriculum and its impact on the progress of the learner [8]. Thomas (2009) clarifies that while educational goals “communicate the overall purposes of a curriculum and serve as criteria against which the selection of various curricular components can be judged,” learning objectives “permit further refinement of the curricular content and guide the selection of appropriate educational and evaluation methods.” [8] As such, while an overarching didactic curriculum, such as the curriculum of the psychiatry residency, should have educational goals, learning objectives should be specific to the individual sessions or group of seminars that make up components of the curriculum. In developing a curriculum of this size, it is helpful for

the curriculum committee or curriculum leaders to review the educational goals and objectives of the different sessions that make up the larger curriculum to ensure that educators are teaching with the principles of adult learning theory in mind, have specific, actionable aims for the sessions, and to prevent redundancy or lack of focus and cohesion as the curriculum progresses.

Program leaders need to recognize that a psychiatry clinical curriculum encompasses much more than the formal classroom didactics. Many topics may be best taught in settings outside of the classroom. Curriculum mapping and refining learning goals and objectives can allow for reflection about which topics or themes are best addressed in the classroom, didactic format, versus topics that are best addressed in clinical settings or supervision. In mapping the didactic content areas or themes, curriculum committees can consider which milestones are taught formally in the classroom setting and which need to be accounted for elsewhere in a resident’s learning experience. Many of the milestones can be addressed both in the classroom and in clinical situations. For example, psychotherapy milestones almost certainly should be partly taught via a series of psychotherapy classroom lectures and seminars that highlight different psychotherapeutic techniques and theories. At the same time, much of the richness of learning psychotherapy occurs during the residents’ own clinical experience, especially during supervision. Ensuring a balance between these activities concerning particular topics is an important component of curriculum mapping. Similarly, classroom didactics on the structure of health-care systems can bolster the ongoing educational process of working throughout residency within the health-care system.

Finally, when considering what to teach in psychiatry residency didactics, consider that, while there are traditionally and historically “core” psychiatry topics, a comprehensive and thoughtful psychiatry curriculum includes much more than what has been historically regarded as medical knowledge. Core psychiatry topics may consist of descriptive psychopathology, nosology, psychopharmacology, psychotherapies, case

formulation, risk assessment, etc. In addition, a well-rounded didactic curriculum for today's psychiatry residents will include seminars on race and racism in psychiatry and society, structural competency, ethical and legal challenges in psychiatry, advocacy, religion and psychiatry, telepsychiatry and psychiatry in the age of COVID, resiliency and wellness, and physician burnout, among other topics. Striking a balance between these two types of topics can be one of the biggest challenges of mapping an overall curriculum. However, it is essential for residents to feel like the material being taught is useful for their practice and relevant to their experience. The field of psychiatry is rapidly growing and evolving. In particular, including residents in both curriculum development and the teaching of specific didactics offers opportunities for the evolving interests of new psychiatrists to be incorporated into the curriculum.

When to Teach

Scheduling Core Didactics

In addition to determining didactic content, an equally important question becomes didactic timing. At the most basic level, this may start with defining protected time for didactics within the typically busy clinical experience. Different programs approach this problem in different ways. In many programs, there is a designated didactic day or half-day, when all residents are protected for core learning (see below for a discussion of protected time). This so-called academic half-day has been shown to improve resident satisfaction with and engagement in didactics [9]. One of the significant advantages of this approach includes setting clear and consistent expectations for protected time among residents and faculty. For example, if resident didactics occur every Tuesday afternoon, specific clinical services may adapt by increasing attending staffing on Tuesday afternoons to provide resident coverage. Notably, if clinical services are not offered additional buffering during the academic half-day, faculty on those services may feel frustrated and over-

worked [10]. The consistency of the academic half-day also creates an expectation that all residents will be engaged in didactics at that time, which may help to increase attendance via a group effect [11]. Another advantage of the protected didactic day is that it allows programs to combine didactics with other experiences that residents may want to attend, including Grand Rounds, process groups, and other local conferences. Scheduling meetings with the program director or departmental leadership when all residents can be present is also more accessible by this approach. Scheduling for didactic speakers is greatly facilitated by having faculty know precisely when they are expected to show up. If there are several residency programs in the same geographic location, coordinating a protected half-day schedule may also allow for some didactics to be combined, increasing cross-talk among residents from different programs and expanding the teaching faculty pool.

There are some disadvantages to the consistent half-day model, however. For small programs, it may be challenging to find multiple faculty to teach different classes of residents at overlapping times. Similarly, there may be physical space issues in terms of needing multiple conference rooms for residents. Some programs approach these dilemmas by combining multiple postgraduate year (PGY) classes in didactics, which will be discussed further below. Another potential disadvantage of all residents having the same protected time is that it limits the ability of senior residents to teach seminars for junior residents as they may be otherwise occupied with their own seminars. Similarly, from a clinical standpoint, it limits senior residents' ability to provide cross-coverage for junior residents to attend didactics. Finally, loading all didactics into a single time period has the potential to be draining for adult learners, who may not tolerate more than 3 hours of structured learning at a time.

For these reasons, many programs take alternative approaches to structuring their didactic time. For example, some programs have a core half-day for some postgraduate year (PGY) classes but a different time for others. Other pro-

grams may have short didactic periods spread across multiple days. For example, PGY-2 didactics may take place on Mondays and Fridays at noon, whereas PGY3 didactics take place on Tuesdays and Thursdays at noon and PGY4 didactics Wednesdays at noon.

Intern didactics can be particularly challenging to schedule, given that interns rotate through off-service experiences such as medicine and neurology. Some programs will approach this dilemma by having interns attend off-service didactics when on those rotations, with the idea that interns should be fully integrated into those experiences. However, scheduling protected time for all interns to come together to learn core psychiatric material can prove particularly challenging. One potential approach is to set up the rotation schedule so that interns essentially rotate in two large groups, with half of the interns in psychiatry at any given time. If the schedule is set up in this manner, core didactics for psychiatry can be given to one group and then repeated for a second group. Another approach is arranging protected time for psychiatry interns on off-service rotations, though this may be tricky to negotiate. However, if medicine interns are given a half-day off for clinic or didactics, it would seem reasonable to ask for that same time to be excused for psychiatry residents on medicine rotations.

It may be reasonable for smaller programs or those with limited teaching faculty to combine some didactics for multiple PGY classes. Notably, the ACGME Program Requirements for Psychiatry do specify that at least some didactics must be specific to a resident's level of education and coordinate with clinical rotations [12]. Nonetheless, in many programs, all residents do come together for some didactics, while other programs divide some didactics into "junior" (PGY1 and -2) and "senior" (PGY3 and -4) seminars. Combining multiple classes allows for pooling of resources, a greater number of learners, which might generate more cross-talk and interaction, and the opportunity for junior residents to learn from their senior residents who may identify important clinical relevance for them. One of the major challenges of using a

combined didactic model is targeting the material for different learner stages, particularly if PGY1s and PGY4s attend the same seminar [13]. Junior residents may frequently lack the background knowledge to make meaningful connections, and senior residents may feel that teaching points are too basic. Some programs use didactic models where senior residents are involved with teaching junior residents under the direction and supervision of faculty as a way of addressing this issue. The structure of such didactics can also be challenging, involving the creation of a 4-year, repeating curriculum, which different learners enter and exit at different time points. In such a system, some residents would have certain psychotherapy didactics as a PGY1, whereas others might not have the same didactics until PGY4.

Didactic Learning Outside of Core Didactics

Another consideration is whether all didactic material belongs in so-called "core" didactics, where all residents in a given class are together, as opposed to having some didactics occur during specific rotations for the residents currently on that rotation. For example, if some PGY2s will be doing their consultation-liaison psychiatry rotation at the beginning of the academic year and others at the end of the year, it may make sense for those topics to be taught during the rotation for maximum retention and application. Many rotations will have an easier time scheduling an hour per day of didactics for a small group of residents than trying to find a common time across all rotations that will allow all residents to attend. As with everything, a hybrid approach may work best in the end. Having dedicated time for core didactics may allow for hidden benefits such as increased class bonding, while having additional time for didactic learning during rotations may reinforce important principles specific to those experiences.

Similarly, programs should be mindful of other venues where learning might occur separately from core didactics. Journal clubs, for example, sometimes meet outside of core didac-

tics, allowing multiple classes to participate simultaneously. Some programs offer specialized or advanced learning in specific topics via special interest groups that may immediately follow didactics or in the evenings. For example, residents interested in psychotherapy might attend a video seminar for part of the year, occurring early in the evenings on certain didactic days, as a way to enhance their learning. Finally, it is important to remember the value of allowing residents to direct their own learning. Having a venue like a weekly Resident Report or Resident Association Meeting allows residents to develop their own content. They may choose to spend this time inviting faculty to discuss challenging cases in a case conference or morning report format, creating a reading club to discuss portrayals of psychiatry in popular culture or offering talks on topics not otherwise covered in core didactic sessions.

The Order of Core Topics

Once the structure of didactics has been determined, it will be important to consider which topics should be taught when and in which order. Again, we recommend explicitly encouraging the matching of didactic content to clinical experiences. Our experience has been that interns desire seminars that offer a “crash-course” overview of an important topic, introduce a larger concept that will be elaborated on later in training, and provide a systems-level perspective on clinical work they may be doing. Examples might include a multipart seminar on basic psychopharmacology covering common medications they will use in early rotations, an introduction to psychotherapy with practical tips for techniques they might use on the inpatient unit, or an overview of the mental health system and resources in the city or state in which the program is based.

For PGY2s, it is important to continue emphasizing content-driven topics like differential diagnosis, psychopharmacology, and clinical neuroscience. Most PGY2 residents are still at a developmental stage where they appreciate being told what to do in specific situations and being

offered practical guidance for common clinical scenarios. At the same time, many PGY2 residents are interested in exploring systems-level and process-driven content like quality improvement and topics of race and culture in psychiatry.

As most PGY3 residents are immersed in outpatient psychiatry, seminars targeted at various forms of psychotherapy and outpatient psychopharmacology often represent important elements of the PGY3 didactic content. PGY3 residents might also desire a series that begins to explore fellowships and career opportunities, such as a “Transitions to Practice” seminar focused on key issues related to independent practice, particularly in the latter half of the year.

PGY4 residents may desire seminars that pull together and consolidate previously learned material, embrace the ambiguity inherent in psychiatry, and prepare them for successful careers. For example, popular senior seminars might include a case-based psychotherapy cross-talk, where residents can better understand and wrestle with how to determine which particular therapeutic modality might work best for a specific patient presentation, or a seminar exploring how psychiatry is portrayed in the media through the use of readings and videos. A board preparation or neurology refresher course might also be greatly appreciated by graduating residents.

An important challenge of designing an overarching didactic curriculum is ensuring that the content flows from week to week and from year to year. It is relatively easy to generate a list of topics that should be covered and plug them in randomly across the 4 years. In many ways, such an approach is also much more practical to schedule, given the challenges inherent in asking a particular faculty member to lecture at a specific date and time. However, such a haphazard approach is likely to result in a series of random topics and leave residents feeling lost in terms of the overall trajectory of learning. Faculty teaching a particular seminar may be unaware of related seminars that appear elsewhere in the curriculum, thus increasing the risk for gaps and redundancies. Residents often desire a specific roadmap to their didactic learning that helps them

understand why a particular topic is being taught at a given time and how it fits into the larger picture, building on previously covered topics and anticipating material to come later [5].

Longitudinal Seminar Series

One approach to this challenge would be breaking the didactic content into several large seminar series, each provided time each postgraduate year [14]. Longitudinal curricula have been shown to improve knowledge and skills in a variety of disciplines [15]. Creating longitudinal seminar series also helps tackle the problem of “orphan” didactics. Topics not part of a larger series are at risk of being left out, duplicated, or dropped from year to year. Creating seminar series usually requires faculty champions for each topic who can oversee the longitudinal curriculum and work with specific lecturers to optimize flow. For example, a seminar on psychodynamic psychotherapy might begin in PGY1 with the introduction of core principles and continue in PGY2 with a practical seminar based on the nuts on bolts of doing psychotherapy and allowing space for residents to bring challenges to the group as they start to practice psychotherapy for the first time. PGY3 residents, having a somewhat greater ability to prepare for didactics outside of class time, might dive more deeply into psychodynamic principles, reading some classic literature in the field. Finally, PGY4 residents might finish with a seminar guiding them on supervising psychotherapy, thus preparing them to transition to academic faculty. Leaders in charge of this seminar series may only directly teach some of the didactics. Still, they should have a bird’s eye view of the entire series and work with individual faculty to develop learning objectives and respond to feedback.

In the age of virtual didactics, programs should be creative about opportunities to not reinvent the wheel each year. Indeed, ACGME requirements dictate that programs must provide the capability to record didactics for residents who cannot attend due to other responsibilities. Thankfully, platforms like Zoom make recording

lectures far more manageable, though storage may continue to pose a challenge. In addition, having a library of available recordings can allow for greater flexibility of learning, a principle that residents increasingly value. For example, rather than sitting through 3 hours of PowerPoint-based talks in a single afternoon, residents can be asked to watch the recordings at some point during the week and then engage in a brief question-and-answer session live with each speaker on their didactic day. This will undoubtedly make for a livelier experience and likely has the additional advantage of shaving time off the didactic afternoon.

Programs should also think about other ways to incorporate wellness principles into didactics. For example, a common error is to run multiple didactics back-to-back without breaks. Asking speakers to end at 45 or 50 minutes allows residents to stretch, grab coffee, and use the restroom between lectures. With virtual didactics, it is particularly important to ensure breaks between speakers to offset screen fatigue. Another idea capitalizing on adult learning principles is to create a series of brief (10–15 minute) talks, rather than requiring each speaker to talk for a full hour. Many topics lend themselves to this format, and residents often engage better with brief lectures. We have also found that giving residents occasional weeks off from didactics lifts morale and allows for time to do everyday things that might otherwise prove challenging while training.

Who Should Teach?

Once the structure of didactics has been determined, a second central question to consider is who should teach. Programs will likely find some faculty very eager to teach and others hesitant for various reasons, most often involving time and competing demands [16]. It is essential that programs achieve significant buy-in from all faculty who will be delivering the talks. This can be challenging for programs to navigate, especially those lacking obvious leverage to enhance participation. Programs should be encouraged to work with departmental leadership to determine

ways to enhance the value of teaching in the department, though the actual feasibility of this is highly variable. One option available to many programs is to offer small incentives for faculty who receive the best feedback from residents. This can be as simple as creating end-of-year teaching awards for faculty, which are desirable for promotion and departmental standing. Nomination for national teaching awards may be another desirable incentive for faculty on a clinician-educator promotion track.

One important guiding principle when determining who should teach in the curriculum is that the most prominent experts are rarely the best teachers. In our experience, content experts often receive some of the lowest ratings for resident didactics. This is a common dilemma for larger programs with a robust number of faculty willing to teach on particular topics. There are many reasons why programs might naturally choose the expert teacher. They may be pressured by departmental leadership or by the faculty members themselves. Residents may also clamor for an opportunity to interact with those perceived to be big names in the field. Programs should be mindful that some experts are likely to simply recycle a talk given at a national meeting or bring an extensive slide deck packed with material that may be over the heads of the resident audience. In addition to having a conversation with the speaker upfront to set expectations, perhaps utilizing the seminar series leader, programs might also consider pairing the speaker with another faculty member known for expertise in teaching to help guide the preparation of the talk. A popular approach is to ask the speaker to give a shorter overview talk, followed by a case-based presentation or question-and-answer session moderated by the teaching expert. This team-teaching approach allows the senior faculty member to teach while also offloading some of the work of preparing the topic. The junior faculty member, or expert teacher, has an opportunity to expand their network and develop additional expertise in the topic while also receiving extra teaching time. Residents get the best of both worlds and are often highly satisfied by this approach.

Another consideration when setting up the curriculum is whether to use senior residents or fellows as teachers under the direction and supervision of faculty. This possibility presents a unique opportunity to incorporate near-peer teaching into the curriculum. Near-peer teaching offers several advantages, including allowing learners to feel more comfortable and at ease with vulnerability, creating better opportunities to teach process in addition to content, and allowing teachers to understand better the unique challenges that particular material poses to learners [17, 18]. Near-peer teaching also creates excellent chances for trainees to hone their own educational skills. For smaller programs with fewer faculty, employing near-peer teaching is a great way to expand the pool of teachers. It also facilitates junior and senior residents working more closely, enhancing program bonding. One challenge of near-peer teaching is that it may require more regular changes to the curriculum as the senior residents and fellows turn over each year. The specific topics that senior residents or learners feel comfortable teaching may vary from year to year. It may also be helpful to identify a faculty member to oversee the group of near-peer teachers in case questions arise and to help with their development as educators.

How to Teach

Once the timing of didactics and the participating faculty are determined, perhaps the most important area of focus should be on working with faculty to think through the many challenges of how to deliver the material. As most academic faculty are not reimbursed meaningfully for their teaching and as the most straightforward approach to teaching is generally to create a set of PowerPoint slides on the topic (which many faculty may already have handy from other versions of the talk), programs will need to be creative about how to motivate faculty to create and deliver content in a way that is engaging and accessible to resident learners. One way to do this may be to create faculty development around teaching,

allowing faculty access to instruction and assistance in creating content and possibly even counting toward Continuing Medical Education credit [19].

Even when faculty are motivated to utilize active learning principles in residency didactics, it can be challenging to figure out how to implement these amid an otherwise busy training program. Examples of active learning include seminar discussions or cross-talks, reading or watching material ahead of the class in preparation for deeper discussion, simulated debate or role-plays, experiential sessions in which residents practice interviewing or teaching, or think-pair-share exercises involving small group breakouts before larger reflection. Gamification is another common strategy, with a jeopardy-style format commonly used to review in-service exams. While all of these can better motivate and engage adult learners, many require significant additional preparation for the teacher, learner, or both. For example, requiring prereading for junior residents may be unrealistic in the context of busy rotations and call schedules and risks having residents show up unprepared to maximize learning from the talk, or, worse yet, skip because they have not completed the preassignment [20]. One potential strategy to navigate this pitfall is to build additional time into the didactic session for residents to read and prepare. For example, in a seminar on reading the literature, the first 30 minutes of a 2-hour session could allow residents to read the article independently or in small groups before the faculty leader joins to discuss the study. Another approach may be to develop seminars where the burden of prework rotates among the group. For example, each of the 10 sessions might be led by a different resident so that most residents do not have significant prework for most of the sessions. Faculty can also be thoughtful about limiting pre-reading to a digestible amount. Active learning principles tend to be easier to implement for senior residents, who often have more flexible schedules and time to prepare.

It may be worth highlighting in this section two classic approaches to incorporating active learning principles in residency teaching that

seem to work well and are a cornerstone of many training programs: journal clubs and case conferences. Journal clubs present an opportunity for residents to hone their critical thinking skills while also keeping up with recent literature in the field. In the classic form, residents are expected to complete the reading of the article ahead of time. Then, during the session, one or more residents or faculty lead the group through a discussion of the article, including a deeper understanding of the methods used, key findings, major takeaways, and a critique of any limitations. Some programs structure a single journal club for the entire residency. In contrast, others offer journal clubs specific to postgraduate year or several smaller journal clubs that include a mix of residents from different years. Journal clubs also vary considerably in frequency and in attendance or leadership by faculty. When thinking about how to structure journal clubs, programs may want to pay particular attention to the identification of journal club leaders. Some programs use this as an opportunity for senior residents to gain didactic leadership experience and a chance for residents who are more engaged with research to demonstrate leadership. Other programs identify faculty champions, as they would for any other seminar series, to facilitate conversation and help coordinate logistics. Team-based learning formats and online collaborations have also been implemented to leverage greater enthusiasm among learners [21]. Another important aspect is curating articles for the journal club, ideally striking a balance to maintain flexibility in allowing individual residents to choose the article they want to discuss while also ensuring that all articles chosen are of sufficiently high quality to be educational and digestible [22]. A summary of tips for structuring journal clubs is presented in Fig. 11.4.

Another classic didactic format that capitalizes on active learning principles is the case conference series. In its simplest form, a resident presents a case seen on the wards. A faculty discussant or discussants leads the group through a conversation about differential diagnosis, formulation, and management. Case conferences are often some of the most engaging didactics

| Tips for Structuring Journal Club |
|---|
| <ul style="list-style-type: none"> • Determine key structural elements <p>Timing</p> <p>Frequency</p> <p>Which residents will attend?</p> <p>Will faculty be involved as discussants and moderators?</p> <ul style="list-style-type: none"> • Identify resident and faculty champions <ul style="list-style-type: none"> Consider this as a leadership and educational opportunity for residents in a research track or concentration • If not during core didactics, protect time for Journal Club in the same way as didactics and consider making it mandatory • Consider curating a list of articles <ul style="list-style-type: none"> Retains opportunity for resident choice Decreases risk of presenting articles that are highly flawed, too long for the format, too esoteric • Consider how Journal Club fits in with didactics with similar goals and objectives <ul style="list-style-type: none"> e.g., How to Read the Literature, didactics about research methodology • Consider creating reading guides for each article <ul style="list-style-type: none"> Helps trainees who may be less familiar with research methodology and interpretation |

Fig. 11.4 Tips for structuring journal club

because they allow residents to draw directly from their clinical experience and think critically about an approach to complex presentations. Furthermore, there is often no extensive additional preparation required on the part of residents as they present a patient with whom they are already actively engaged. Often, case conferences are curated, such that the discussant is aware of the case ahead of time and prepares specific teaching points about the scenario. For braver faculty, a “blinded” case conference can be an excellent way for residents to gain a glimpse into the thought process of seasoned faculty when faced with a difficult presentation. It can also be refreshing for trainees to see a faculty member struggle with a challenging case and reinforce the principle of diagnostic humility.

Virtual Learning

During the COVID-19 pandemic, one of the biggest challenges for programs has been pivoting to virtual learning. Even as the situation evolves, many programs are already considering the pos-

sibility of maintaining a virtual or hybrid model indefinitely. Virtual teaching has numerous advantages, including many residents noting improved wellness due to joining didactics in a more relaxed setting, residents and faculty not having to worry about commuting between settings to join didactics, and greater availability of faculty to join remotely [23, 24]. With many programs now offering didactics exclusively over Zoom or other video platforms, it is imperative to create opportunities for faculty to learn how to engage audiences in a remote setting best [25]. One key principle that many programs have identified as a starting point is ensuring that all trainees have their cameras turned on for didactic sessions. This allows faculty to engage all audience members directly and reduces the likelihood of learners attempting to multitask during a seminar. However, recent research has demonstrated that the increased burden of being on camera for meetings is disproportionately felt by women and junior members of organizations [26, 27]. Other trainees may be joining from shared workspaces and therefore unable to use their camera. These concerns have led to some programs deciding to

waive this requirement and leave it up to the individual trainee. Faculty should also be offered training targeted at navigating the virtual platform. At a minimum, all teaching faculty should know how to share their screens, including video and audio, how to use the chat and Q&A functions, how to generate and assign learners to breakout rooms, and how to mute and unmute learners. Identifying a faculty champion willing to lead a basic training session for faculty who might feel less comfortable utilizing the platform is a great way to allow faculty to feel a sense of mastery before delivering their talk. More advanced strategies, like using the whiteboard feature or hiding participants, are excellent ways to create more dynamic content and facilitate role-play or experiential scenarios. Programs should also ensure that faculty and learners have access to a quiet, personal learning space with a strong Internet connection. In-hospital space should be identified for residents who may lack adequate space at home to meaningfully participate. A summary of key tips for virtual learning is shown in Fig. 11.5.

As programs start to consider the possibility of a return to in-person learning, it will be important to balance the desires of faculty and resi-

dents. In general, virtual learning is perceived as more challenging for the teacher, and many programs may experience a strong push on the part of faculty to return to being in-person. However, concerns may also be raised about the learners' engagement in a virtual setting. Residents themselves may note feeling less connected to their peers, as in-person didactics often provide an opportunity for socializing, even briefly. At the same time, many residents appreciate the benefits of learning in a more comfortable environment and increasing their time out of the hospital. Programs should consider this balance and engage in active discussions with all stakeholders, aiming for a compromise that maximizes learning while also prioritizing well-being.

Managing Didactics: Potential Pitfalls/Challenges

Attendance and Protected Time

Many challenges can arise over the course of administering a psychiatry residency didactic curriculum. As discussed above, it is common among residencies to establish didactic time as

| Tips for Virtual Learning |
|--|
| <p>Identify champions for virtual learning among residents and faculty</p> <p>Create faculty development opportunities</p> <ul style="list-style-type: none"> • Ensure all faculty teachers feel comfortable enough with technology to utilize effectively • Identify point person to troubleshoot technology issues that come up Can be program coordinator, faculty member, or resident • Reserve space Ensure faculty and learners have access to quiet, private space for didactics Consider providing office space for those who do not have adequate home set-ups • Plan appropriate lead time to convert material from in-person to virtual Encourage faculty to practice ahead of time • Encourage use of unique features of video conferencing Breakout rooms for small group discussions Screensharing Whiteboard features • Require video participation for all participants (all cameras turned on) |

Fig. 11.5 Tips for virtual learning

“protected time,” generally meaning that residents do not have other responsibilities during the time they are present at didactics. However, the definition of “protected” can vary. Depending on the service needs of the residency, residents may be “on call,” hold their pagers, or have clinical responsibility during didactics, amassing tasks that may come up and at times needing to step out of didactics to respond to urgent issues. Alternatively, residents may hand off clinical responsibility to a senior resident or attending present on the service but continue to have tasks to complete that developed before didactic time. This model of protected time often allows residents to be more present during the session but comes at the expense of residents being aware that attendance at didactics may result in them staying later than they otherwise would. In its purest form, protected time may mean another resident or faculty member is responding to pages and completing tasks for the resident while they are at didactics, allowing them to fully focus on didactics without concerns about the work they will return to. These nuances are important for program leadership to consider. The more protected a resident is, the more likely a resident is to attend didactics, pay attention and participate in the discussion, and learn from the educational session. At the same time, programs must consider that patient handoffs between residents or a resident and faculty member to protect didactic time may open up communication deficits adversely affecting clinical care or may not be possible depending on the staffing needs of the service. Furthermore, residents being fully protected for didactics will come at the expense of faculty wellness unless services are buffered for didactic times (as discussed above in the “When to Teach” section).

Attendance at didactics often becomes a large issue for residency programs. The ACGME requires that residents attend 70% of all didactics and conferences. Per the ACGME Common Program Requirements, programs should define the circumstances in which residents may be excused from these didactic activities [1]. Many programs excuse residents who are post-call, on

vacation, or on leave. Some programs will also excuse residents from didactics during specific rotations or when on backup for sick call. In addition to determining the allowed exceptions to attendance, programs must decide what counts as formal didactics and conferences. For example, many residency programs hold noon conferences, in addition to their academic half- or full-day, which may vary in formal educational content. Programs must decide how strict they will be about attendance at each event held.

Most programs have processes in place to track resident attendance at didactics. Many programs use sign-in sheets that must be completed at each session. In this format, attendance must be monitored by program managers and coordinators and can be time-consuming to organize and track, particularly for large programs. An alternative is to tie attendance tracking to resident feedback on didactic sessions, which can be helpful to ensure residents participate in providing feedback. With this method, feedback may not be fully anonymous, so efforts must be taken to uncouple feedback provided with attendance taken.

With the ACGME requirement that residents attend at least 70% of didactics, the question arises of how to encourage attendance at didactics and what consequences to provide if residents do not adhere to these guidelines. In general, residents are more likely to attend didactics in which lunch or snacks are provided and are more likely to attend didactics earlier in the academic year [28]. Of course, the financial burden of providing lunch to residents can be significant. It may be worth ensuring that the most important didactic topics are addressed early in the academic year when attendance typically peaks. As discussed above, structuring didactics as an academic half- or full-day program can be beneficial for attendance, as didactics are likely to be more engaging to residents, and residents are less likely to be pulled away by ongoing clinical needs than a traditional noon-time conference [29]. Programs may also consider additional incentives, such as only allowing those who attend the required 70% of didactic activities to

moonlight, be eligible for an annual academic “book money” stipend, or participate in other opportunities that may benefit the resident.

The question of protected time for wellness activities often comes up around protected time for didactics. There is a strong movement in residency education toward promoting resident wellness and preventing physician burnout [30]. As a default, residents often use didactics time to schedule doctor’s appointments or take necessary personal time that does not interfere with their participation in direct patient care. To promote attendance at didactics while valuing the time and well-being of their residents, some programs may consider developing policies to allow residents to take time off during non-didactic business hours for personal needs [31]. Other programs may build in “free” academic half-days, designating certain weeks free of formal didactic content but encouraging residents to pursue their own learning or focus on wellness.

Faculty Size

Depending on the size of the department of psychiatry at the program’s institution, residency programs may struggle with having either too many or too few faculty who are interested and available to teach resident didactics. Most programs will likely struggle with the challenge of not having enough faculty available for teaching. In this case, it is important to identify specialty areas for the faculty available, such that curriculum leaders can assign appropriate faculty to appropriate content areas. It is also helpful to recruit psychiatrists from the community who may have additional expertise to participate as guest educators in the curriculum. With recent advances in and ability to use videoconferencing technology for meetings and didactic sessions, it is becoming easier to utilize experts from other geographic locations to teach on particular topics.

Another alternative to using exclusively faculty teachers is resident teaching. Senior residents can take on the task of teaching junior residents. This can be an opportunity for senior residents to develop their skills as educators and

provide a service to the residency program without the need for additional compensation. It is often an immensely rewarding experience for the senior residents, offering them a refresher that may be helpful for the board exam or fellowship, helping to prepare them for careers in academic medicine, and fostering inter-class bonds within the program. This can be especially successful if senior residents are paired with educational mentors to support them. Another approach when teaching faculty are scarce is to support residents in taking ownership of their own learning. For example, a seminar can be conducted in which residents take turns preparing a topic and teaching it to other residents, as long as there is a faculty member or senior resident with some background on the topic, ensuring accurate information is conveyed.

When a program does not have access to experts in various content areas, it can be helpful to turn to national standardized curricula developed to be taught by those without previous knowledge on the topic. A strong example of this is the National Neuroscience Curriculum Initiative, which is freely available and was explicitly developed for psychiatry residency training programs given concerns about “a lack of faculty resources and portable curricula” for teaching neuroscience to residents [32]. The curriculum is specifically designed so that faculty without expertise or background in neuroscience can lead the interactive lectures. Similarly, most subspecialty organizations such as the Academy of Consultation-Liaison Psychiatry offer free didactic curricula with prerecorded slide presentations that programs can use if they lack faculty on hand to teach the material.

If a residency program ends up relying on a core group of teaching faculty, this can often be a significant burden of time and effort for a few educators. There are benefits, however, to a smaller core group of educators. Learners tend to gain more from learning environments where they feel safe, comfortable being vulnerable, and connected to the educator [33]. Core teaching faculty are more likely to adhere to principles of adult learning theory, making educational ses-

sions more effective. They can also support and provide feedback to one another in a peer supervision model, which fosters an identity for clinician-educators. Programs and departments should consider compensating faculty members who share a significant burden of resident teaching through direct payment, protected time dedicated to teaching, and special promotion opportunities. In the best models, this becomes an attractive position for junior faculty who may vie for a coveted spot among the core teaching group.

For psychiatry programs affiliated with larger departments of psychiatry, the challenge can often be that too many faculty members are interested in teaching residents. While it may make sense to include as many faculty as are interested in teaching, programs may find it challenging to ensure educators are aware of the educational sessions that have come before or are to come after their sessions. It is important to ensure seminar leaders or champions oversee all of the different faculty giving individual talks. Additionally, when faculty members not closely affiliated with the residency are teaching one-off educational sessions, it may be harder to ensure the quality of the sessions provided. Often faculty repurpose PowerPoints they have developed for other settings, whether conferences or other educational events. As a result, their sessions may not be directly tailored to the residents' needs and educational level. Residents respond best to interactive sessions that adopt principles of adult learning theory to address topics appropriate for their stage of development as psychiatrists. When programs are overrun with faculty interested in teaching residents, it can be helpful to add opportunities for teaching and learning outside of core didactics. For example, programs may sponsor a special interest group in which faculty and interested residents meet monthly at a faculty members' home for dinner, a presentation, and discussion of a case or relevant topic. Additional elective seminars may also be offered in the evenings for residents who want to take a deeper dive into the material, creating opportunities for faculty to earn teaching credit and interact closely with residents.

Assessment and Iterative Improvement of the Didactic Curriculum

Once a curriculum has been organized and implemented, it must be continuously evaluated by program leaders, educators, and learners to ensure it continues to meet the broad goals and specific objectives valued by the program. Psychiatry is a rapidly evolving field, and curricula must remain topical and relevant to learners.

There are several elements to the ongoing assessment and improvement of a psychiatry residency didactic curriculum. First, psychiatry residents, who provide important feedback on individual portions of a curriculum, must have a clear understanding of the overarching trajectory of the curriculum throughout their several years in residency. Without this, residents can react to individual sessions before clarifying the role of the session in the larger curriculum. The same is true for the faculty who participate as educators. Faculty must be aware of their place within the curriculum and be open to professional development opportunities that help unify the approach to education and improve their adherence to the program's overall learning principles, goals, and objectives. It falls to program leadership to effectively communicate the curriculum's overarching goals, objectives, and trajectory to both learners and educators. This can be accomplished by widely sharing and reviewing the curriculum map drawn during the initial curriculum development or overhauling an existing curriculum. In addition, it can be helpful to name or acknowledge ambassadors of the curriculum, be it a program director or core faculty member particularly interested and involved in teaching, a senior resident with a focus on residency education, and program administrators, who take on the role of ensuring residents and faculty educators are frequently reminded of the map of the curricular trajectory.

An important part of the ongoing improvement of the didactic curriculum is feedback from residents on each individual session. There are several challenges associated with this process.

Programs must be creative in ensuring that residents provide feedback and create opportunities to do so in an anonymized fashion. Some approach this by requiring residents to complete feedback forms in person at the end of each session. This has the benefit of ensuring that residents who attended the session will provide feedback but can also infringe on the time available for the didactic session and requires significant time and effort on the part of program leadership to read, collate, and analyze the written feedback forms. Other programs tie individual session feedback to attendance tracking. Some programs hold resident group discussions to provide feedback on the curriculum yearly or at specific intervals throughout the year. Again, there are tradeoffs to be considered. Programs must weigh the accuracy of feedback provided immediately after a session with the potential for a reactive response that does not consider the place of a specific session within the larger curriculum and learning-to-come. Programs must also weigh the time it takes to provide, process, and analyze feedback for residents, program staff, and curriculum committee members, with the impact of specific feedback on the quality of the education.

The exact format used by residents to evaluate didactic sessions is also important. A Likert scale system, for example, tends to skew positively, with most residents being hesitant to rate sessions in the lower half of the scale. An alternative approach, which asks residents to rate each didactic session as being in the top, middle, or bottom third of all didactic sessions, may generate a more realistic spread of opinions. Programs should also be mindful of asking too many questions on the didactic feedback form, which can negatively impact the residents' willingness to complete it and may lead to less accurate information if residents are simply checking boxes to finish the task. Providing space for free text comments and encouraging residents to leave direct but politely worded feedback is strongly recommended. This provides a more accurate and detailed assessment of learner experience and facilitates feedback delivery to faculty in aggregate form. Whereas it may not be particularly

useful for a faculty member to be told that their lecture scored a 4.37 out of 5, it is likely very useful for them to see the specific comments from residents in an anonymized fashion.

At the MGH/McLean psychiatry residency program, the curriculum committee uses a Continuous Quality Improvement Method to assess the didactic curriculum. This process involves soliciting feedback on each session from residents via online open-ended survey questions tied to resident attendance forms. Resident-led curriculum subcommittees work to review and summarize resident feedback and recommend changes to specific sessions. The larger curriculum committee of key stakeholders then recommends overarching curricular changes and delivers feedback directly to faculty [5]. This process is ongoing throughout each year, allowing for both session-to-session improvements and reflection on themes affecting the larger curriculum that need to be addressed.

Programs may also elect to evaluate their didactic curriculum, whether the overarching curriculum or specific sessions or series within it, through an attempt to assess the impact of certain didactics on the learner's knowledge base or clinical performance. Programs can attempt to measure this through monitoring changes in self-assessments over time, pre- and post-tests in either written or oral form, and direct observation of residents in clinical settings before and after didactic sessions. Some programs use changes in PRITE© scores over time as a proxy for the impact of didactics and other educational efforts on resident knowledge. However, many confounding factors will impact a resident's performance on this test. Ultimately, true experimental design testing the impact of didactics on resident knowledge is challenging. Developing a randomized, controlled pre- and post-test for didactics in residency would require that not all residents receive the same educational opportunities [34].

In addition to the continuous evaluation of the individual components of a curriculum, the overarching curriculum must remain dynamic, responding not just to feedback from learners but to changes in the knowledge that makes up the field, changes in the background knowledge and

experiences of residents entering the field, new and innovative educational approaches, changes in ACGME requirements, changes in the perspectives and values of key stakeholders in the curriculum, both within the institution and the surrounding community, as well as changes in society [35]. Programs are encouraged to have a faculty or program director lead who reviews the overall didactic curriculum each year and identifies at least five key changes to content with each cycle. These changes may include adding new topics or material, eliminating or condensing pre-existing seminars, or substituting faculty who receive consistently poor reviews. Being intentional about this process will help programs avoid the easy path of simply recycling the same curriculum each year despite resident feedback.

Conclusion

Ultimately, developing, scheduling, teaching, and continuously assessing the formal didactic curriculum of a psychiatry residency program is a mammoth task. The process of putting on the psychiatry residency didactic curriculum establishes, clarifies, and supports a residency program's values and culture. Therefore, it is worth investing substantial time and effort into the quality of the content and organization of the didactic curriculum to support the growth and development of well-rounded psychiatrists who work to serve the missions of their programs, institutions, and the communities they serve.

References

1. The Accreditation Council for Graduate Medical Education. Common program requirements (residency). Retrieved from: <https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency2021.pdf>. Accessed 28 Aug 2021.
2. Edgar L, McLean S, Hogan S, Hamstra S, Holmboe ES. The milestones guidebook. Retrieved from: <https://www.acgme.org/globalassets/MilestonesGuidebook.pdf?ver=2020-06-11-100958-330&ver=2020-06-11-100958-330>. Accessed 14 Jan 2022.
3. The Accreditation Council for Graduate Medical Education. Psychiatry milestones. Retrieved from: <https://www.acgme.org/globalassets/pdfs/milestones/psychiatrymilestones.pdf>. Accessed 14 Jan 2022.
4. Kern DE. Overview: a six-step approach to curriculum development. In: Kern DE, Thomas PA, Hughes MT, editors. Curriculum development for medical education: a six-step approach. 3rd ed. Johns Hopkins University Press; 2016. p. 5–10.
5. Colman S, Wong L, Wong AHC, et al. Curriculum mapping: an innovative approach to mapping the didactic lecture series at the University of Toronto postgraduate psychiatry. *Acad Psychiatry*. 2020;44(3):335–9.
6. Hughes MT. Step 2: targeted needs assessment. In: Kern DE, Thomas PA, Hughes MT, editors. Curriculum development for medical education: a six-step approach. 3rd ed. Johns Hopkins University Press; 2016. p. 29–49.
7. Benson NM, Vestal HS, Puckett JA, et al. Continuous quality improvement for psychiatry residency didactic curricula. *Acad Psychiatry*. 2019;43(1):110–3.
8. Thomas PA. Step 3: goals and objectives. In: Kern DE, Thomas PA, Hughes MT, editors. Curriculum development for medical education: a six-step approach. 3rd ed. Johns Hopkins University Press; 2016. p. 50–64.
9. Randall MH, Schreiner AD, Clyburn EB, Rockey DC, Duckett A. Effects of an academic half day in a residency program on perceived educational value, resident satisfaction and wellness. *Am J Med Sci*. 2020;360(4):342–7.
10. Wagoner H, Seltz B. Attending physicians' perspectives of resident academic half day. *Teach Learn Med*. 2019;31(3):270–8.
11. Zastoupil L, McIntosh A, Sopfe J, et al. Positive impact of transition from noon conference to academic half day in a pediatric residency program. *Acad Pediatr*. 2017;17(4):436–42.
12. ACGME Program Requirements for Graduate Medical Education in Psychiatry. Retrieved from: <https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency2021.pdf>. Accessed 19 Jan 2022.
13. Farrohi ET, Jensen AR, Brock DM, et al. Expanding resident conferences while tailoring them to level of training: a longitudinal study. *J Surg Educ*. 2008;65(2):84–90.
14. Benson NM, Puckett JA, Chaukos DC, et al. Curriculum overhaul in psychiatric residency: an innovative approach to revising the didactic lecture series. *Acad Psychiatry*. 2018;42(2):258–61.
15. Boniface MP, Helgeson SA, Cowdell JC, et al. A longitudinal curriculum in point-of-care ultrasonography improves medical knowledge and psychomotor skills among internal medicine residents. *Adv Med Educ Pract*. 2019;10:935–42.
16. Roshetsky LM, Coltri A, Flores A, et al. No time for teaching? Inpatient attending physicians' workload and teaching before and after the implementation of the 2003 duty hours regulations. *Acad Med*. 2013;88(9):1293–8.

17. Warren MB, Hutchison EP, DeHaan J, Krause AJ, Murphy MP, Velez ML. Residents teaching residents: results of an interdisciplinary educational endeavor. *Acad Psychiatry*. 2018;42(4):473–6.
18. Vautrot VJ, Festin FE, Bauer MS. The feasibility and effectiveness of a pilot resident-organized and -led knowledge base review. *Acad Psychiatry*. 2010;34(4):258–62.
19. Schnapp BH, Alvarez A, Ham J, Paetow G, Santen SA, Hart D. An interactive session to help faculty manage difficult learner behaviors in the didactic setting. *MedEdPORTAL*. 2018;14:10774.
20. Dzara K, Frey-Vogel AS. Medical education journal club for the millennial resident: an interactive, no-prep approach. *Acad Pediatr*. 2019;19(6):603–7.
21. Touchet BK, Coon KA, Walker A. Journal Club 2.0: using team-based learning and online collaboration to engage learners. *Acad Psychiatry*. 2013;37(6):442–3.
22. Clauss JA, Cawkwell PB, Beach SR. Refreshing a resident-run journal club: a focus on article selection. *Acad Psychiatry*. 2019;43(6):657–8.
23. Parikh SV, Bostwick JR, Taubman DS. Videoconferencing technology to facilitate a pilot training course in advanced psychopharmacology for psychiatrists. *Acad Psychiatry*. 2019;43(4):411–6.
24. Markova T, Roth LM. E-conferencing for delivery of residency didactics. *Acad Med*. 2002;77(7):748–9.
25. Youm J, Corral J. Technological pedagogical content knowledge among medical educators: what is our readiness to teach with technology? *Acad Med*. 2019;94(11S Association of American Medical Colleges Learn Serve Lead: Proceedings of the 58th Annual Research in Medical Education Sessions):S69–S72.
26. Fauville G, Luo M, Muller Queiroz AC, Bailenson JN, Hancock J. Nonverbal mechanisms predict zoom fatigue and explain why women experience higher levels than men. *Soc Sci Res Netw*. 2021. Available at <https://ssrn.com/abstract=3820035> or <http://dx.doi.org/10.2139/ssrn.3820035>.
27. Shockley KM, Gabriel AS, Robertson D, et al. The fatiguing effects of camera use in virtual meetings: a within-person field experiment. *J Appl Psychol*. 2021;106(8):1137–55.
28. FitzGerald JD, Wenger NS. Didactic teaching conferences for IM residents: who attends, and is attendance related to medical certifying examination scores? *Acad Med*. 2003;78(1):84–9.
29. Batalden MK, Warm EJ, Logio LS. Beyond a curricular design of convenience: replacing the noon conference with an academic half day in three internal medicine residency programs. *Acad Med*. 2013;88(5):644–51.
30. Wolpaw JT. It is time to prioritize education and well-being over workforce needs in residency training. *Acad Med*. 2019;94(11):1640–2.
31. Cedfeldt AS, Bower E, Flores C, Brunett P, Choi D, Girard DE. Promoting resident wellness: evaluation of a time-off policy to increase residents' utilization of health care services. *Acad Med*. 2015;90(5):678–83.
32. Arbuckle MR, Travis MJ, Eisen J, et al. Transforming psychiatry from the classroom to the clinic: lessons from the national neuroscience curriculum initiative. *Acad Psychiatry*. 2020;44(1):29–36.
33. Coyle D. *The culture code: the secrets of highly successful groups*. Bantam Books; 2018.
34. Lindeman B, Lipsett PA. Step 6: evaluation and feedback. In: Kern DE, Thomas PA, Hughes MT, editors. *Curriculum development for medical education: a six-step approach*. 3rd ed. Johns Hopkins University Press, Baltimore, MD; 2016. p. 121–67.
35. Kern DE, Thomas PA. Curriculum maintenance and enhancement. In: Kern DE, Thomas PA, Hughes MT, editors. *Curriculum development for medical education: a six-step approach*. 3rd ed. Johns Hopkins University Press, Baltimore, MD; 2016. p. 168–83.



Psychopharmacology Education During Psychiatry Residency Training

12

Ira D. Glick, Matej Markota, and Danielle Kamis

Placing Psychopharmacology in Context

Practicing good psychopharmacology is impossible without a solid background in other non-pharmacologic aspects of psychiatric clinical care. For example, it is hard to imagine effective psychopharmacology without at least some (i) diagnostic accuracy, (ii) ability to gather useful information about previous treatment trials, (iii) evaluation of research studies and comparing how an individual patient fits with previously studied cohorts, and (iv) development of rapport and a treatment alliance with patients who may struggle with motivation, insight, and trust [1]. Psychopharmacology occupies an interesting place between biology and psychotherapy, as medication effects are exerted via biological mechanisms, and at the same time medications are usually only one part of the overall treatment plan. Because time and resources are limited (see below), quality psychopharmacologic education is in large part about striking the right balance

between teaching many different skills and topics that will allow the resident to (among other things) appropriately use psychopharmacologic agents.

Under ideal circumstances, understanding neurobiological abnormalities and underlying mental illness would naturally flow into understanding how psychopharmacological mechanisms correct such abnormalities. There are a few examples of such an easy fit between neurobiology and psychopharmacology today (e.g., methadone treatment in opioid use disorder or understanding why dopamine blockers cause hyperprolactinemia and its downstream side effects). Unfortunately, for many psychiatric disorders, there remains a large gap between the neurobiology underlying the physiology of the disease and pharmacology. While teaching neurobiology should complement teaching psychopharmacology, it is also possible to overemphasize teaching neurobiology at the expense of useful psychopharmacology. It goes against effective learning to teach biological hypotheses that cannot easily be applied to everyday practice and are therefore more likely to be forgotten by learners, whereas practical psychopharmacological topics are more likely to become engrained in the learner's practice. As a hypothetical example of this, a residency program could have excellent basic or psychopharmacological researchers who are poor teachers, and clinical psychiatrists who are not frontline

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researchers but can teach the art of psychopharmacology effectively. Overall, it is unlikely that the gaps in knowledge between neurobiology and pharmacology will be closed rapidly. Therefore, residency programs need to be mindful about offering sufficient neurobiological background, without encroaching on time spent teaching practical psychopharmacology.

We argue that to become good psychopharmacologists, residents must also have competency in delivering psychosocial interventions. Inappropriately neglecting psychosocial interventions is likely to result in reflexive and irrational overuse of medications, which is inconsistent with the principles of good psychopharmacology and evidence-based medicine. In order to be a responsible prescriber, a learner must have some mastery of methods for enhancing medication adherence (particularly motivational interviewing); techniques for obtaining informed consent; building a therapeutic alliance with patients with anosognosia, hostility, irritability, or paranoia; and be able to explain the reasons for pharmacotherapy to patients at different cognitive and educational levels. The opposite can also be true, with inappropriate estimation of the power of psychotherapy at the expense of reasonable use of psychopharmacology.

Finally, the context of psychopharmacologic education for nonpsychiatrists needs to be considered. We argue that during brief opportunities when non-psychiatry trainees rotate in psychiatric departments, the focus should be on useful psychopharmacology of a limited number of medication classes (e.g., selective serotonin reuptake inhibitors, or “SSRIs”), since in practice many psychiatric medications will be prescribed by nonpsychiatrists [2]. Similarly, consultation-liaison (psychosomatic medicine) psychiatry teaching services offer residents an opportunity to practice teaching nonpsychiatrists to prescribe a limited number of psychotropic medications, providing clear and specific prescribing guidelines, and tracking outcomes systematically. Psychiatry residents should clearly master teaching and consulting with nonpsychiatrists about psychopharmacology

Residency Education in Psychopharmacology: ACGME Requirements

The Accreditation Council for Graduate Medical Education (ACGME) requirements indicate that psychiatric residents need adequate education in biological aspects of psychiatry, including neurobiology and psychopharmacology, relevant to both inpatient and outpatient settings, as well as an understanding of evidence-based medicine. Further, the Psychiatry Milestones Project has clearly identified milestone threads in the “Somatic Therapies” sub-competency that relate directly to the practice of psychopharmacology [3]. No specific number of hours are indicated or required by the ACGME for psychopharmacology training and teaching, although some residency programs have specifically tracked resident experience with different pharmacologic agents, other treatments, and diagnostic categories to ensure adequate experience. It is understood that pharmacotherapy will not be the only treatment given to many patients; nonetheless, the experience of long-term medication management is critical for the psychiatric resident. We also suggest that residents be taught how to use the American Psychiatric Association (APA) and other practice guidelines as they pertain to the practice of psychopharmacology. How to use practice guidelines in clinical practice is an important topic that includes an understanding of how the guidelines were developed, how to apply them clinically and when, and knowing when the guidelines are outdated. This would also include a discussion on the limitations of practice guidelines as well as teaching on evidence-based medicine, which is discussed elsewhere in this chapter and this book.

Time and Resources for Teaching Psychopharmacology

Teaching takes an investment of resources, and this is not always an easy fit with a medical environment ruled by efficiency. Since the topic of

how to organize psychopharmacology teaching was last discussed in a series of papers in *Academic Psychiatry* published in 2005, not much progress has been made with regards to creating conditions conducive for psychopharmacology teaching (i.e., classroom and other didactic education) and training (i.e., supervised clinical learning). A 2005 paper by Glick and Zisook concluded "...as grant funding becomes more competitive, academicians must spend proportionately more time writing grant renewals, with less time left for teaching. Only the extraordinarily well funded, the less than 1% of 'superstars,' are able to completely pay for their salaries out of their research funds. And (because) some (faculty) spend more time in their laboratories ... than they do in the classroom.... (much) of the teaching they do is to postdoctoral fellows rather than residents or medical students. In the same vein, less time is allocated for clinician-teachers to teach because most (if not all) have to fund their own salaries, meaning seeing patients to generate revenues. Thus, training programs need help to accommodate the dual issues of (1) more materials to disseminate and (2) less time for faculty to teach" [4]. The following paragraphs describe some realistic approaches that can address these concerns today (at the time of this writing).

One of the responses to suboptimal resources for psychopharmacology education in many academic settings has been to shift more education toward consultation clinics, combining teaching with "second opinion" clinical practice, thereby maintaining fiscal sustainability. By having the faculty "in the room" with the patient and providing real-time supervision to the resident, the clinic may legitimately bill third-party payers while training the resident [5]. This model does create valuable clinical teaching opportunities for psychopharmacology (as well as other aspects of clinical practice such as assessment) [5]. However, residents in such clinics rarely see the results of their psychopharmacologic plans as follow-up appointments, by definition, are rarely done by consultation clinics. We strongly recommend following patients over extended periods of

time when learning psychopharmacology. Longitudinal follow-up is important in order to see the effects of treatment, practice achieving treatment to remission, and manage side effects and treatment resistance as part of an overall treatment course. In fact, there is emerging evidence from the long-term follow-up of patients that treatment outcomes are closely related to patient adherence over the lifetime of their illness [6]. Another limitation of implementing the "second opinion" teaching clinic model is that smaller, newer, and nonacademic programs may face a shortage of faculty, and lack of recognized experts for a sustainable "second opinion" teaching clinic. Smaller programs that sometimes lack faculty members with special expertise in psychopharmacology may benefit from partnering with a larger program to help develop a psychopharmacology curriculum, especially in the era of telemedicine.

Another approach to address limited resources for teaching (and to some degree, to protect psychopharmacology teaching from being influenced by industry interests) has come from professional societies. To decrease the time faculty needed to prepare for teaching, the American College of Neuropsychopharmacology (ACNP) developed, in the 1980s, a psychopharmacology curriculum that was available to all psychiatry residency programs at no cost. However, the uptake of this curriculum by residency programs was low [4]. About a decade later this same curriculum was redone by a committee of the American Society of Clinical Psychopharmacology (ASCP). At the time of this writing, the curriculum continues and is now in its 11th edition [7]. This curriculum provides: (1) a model of how psychopharmacology can be taught and (2) the core content of a psychopharmacology lecture series that extends across the 4 years of psychiatric residency training. It provides a clinically oriented overview of the field aimed at educators, residency directors, and others with a responsibility for educating others and assuring standards of knowledge and practice, i.e., competencies. It also provides teaching materials like rating scales, lists of books and

journals, etc., relevant to a psychopharmacology education. The goal of the curriculum is to fill a unique gap in psychopharmacology education – that is, to provide many of the materials a residency program needs to help trainees learn modern psychopharmacology.

The ASCP Curriculum is now the first international curriculum on psychopharmacology that provides the necessary pedagogy and lectures to support medical education and training in psychopharmacology on a worldwide scale. The curriculum promotes the availability of an educational tool on psychopharmacology globally, while fostering international cooperation to better equip medical educators, trainees, and clinicians on evidence-based psychiatric practice. This is particularly beneficial for regions with few teaching psychiatrists per capita or those with limited access to contemporary educational materials, especially those focused on recent advancements in psychopharmacology. Through this work, the ASCP has been a leader in education on an international scale. In addition to the ASCP Model Psychopharmacology Curriculum, the ASCP has developed other teaching initiatives such as “best practices for teaching” and teaching cases for problem-based learning (PBL) [7]. Furthermore, other professional societies have taken the role of helping residency programs teach psychopharmacology and do faculty development around psychopharmacology. The American Psychiatric Association developed its Focus Program targeting lifelong learning in psychiatry, while the American College of Neuropsychopharmacology (ACNP) has focused on teaching neuroscience and neurobiology.

The ASCP previously partnered with the American Association of Directors of Psychiatric Residency Training (AADPRT) to further develop the curriculum. The first fruit of this collaboration was multimodal teaching modules on schizophrenia and depression which included slide presentations supplemented by a video of a “model” lecture, a video-vignette, problem-based case materials, and Board-style review questions. The module also featured many pedagogic innovations such as key teaching points and lecturer comments on the slides – all of which illustrated

what pedagogic features local programs could add to any presentation.

In addition to model teaching tools, technology has also been helpful in supporting learners. Not only is digital information always at our fingertips, most electronic ordering systems now offer suggestions on dosing, raise alerts on potential drug interactions, and provide quick access to prescribing databases with useful information. Electronic health records can also help delineate which medications are likely to be covered by the patient’s insurance plan, versus those that are out of network. Residency programs can also benefit from having a regularly updated electronic repository of presentations on clinical (and if available, basic) psychopharmacology that faculty and trainees can access virtually. These electronic resources should be available for residents who, because of clinical duties, may occasionally miss the scheduled didactic/classroom sessions.

Psychopharmacology Teachers and Teaching Format

There are no universally accepted metrics to identify effective psychopharmacology teachers. Some programs test resident knowledge, including applied knowledge, before and after specific teaching experiences. Further, the limitations discussed earlier in this chapter often lead to an approach where “any willing/able teacher for any student” is used [8]. While individual supervision is mandated by the ACGME [9], there is very little research available on how to pair optimal resident-supervisor dyads in psychiatric residency training [10]. We do believe that giving (anonymous and de-identified) feedback to teachers is important to allow the teacher to grow and develop. Further, we believe that disseminating learner evaluations of faculty immediately after each teaching encounter is good practice so that learner feedback is collected soon after the teaching sessions or other interaction with faculty (i.e., timely evaluation). Most programs have “teacher of the month/quarter/year” recognitions which may identify effective teachers, though popularity does not necessarily equate to effective teach-

ing. Along these lines, in teaching psychopharmacology (and most other topics), the charisma and perceived prestige of the teacher can perpetuate biases in susceptible learners (e.g., about which pharmacologic strategies are superior to other treatment approaches) [8]. We believe that nurturing a learning culture that welcomes residents to challenge their teachers is the only way to address this problem. A threat of becoming a “naked emperor” in front of residents is uncomfortable to most faculty, and it takes some personal maturity to publicly reach the limits of one’s knowledge and use that opportunity to model lifelong learning.

Each program will need to develop its own style and its own priorities for psychopharmacology teaching and training based on its resources, expertise, and available clinical settings. We have not delineated “priorities vs. the ideal” in the ASCP model curriculum that is discussed in this chapter. We emphasize here that, traditionally, didactic presentations and activities such as literature review/journal club represent the “irreducible minimum” rather than the ideally complete program. The question of which of the below-outlined learning activities ought to be interdisciplinary must be considered, since some beginning residents are reluctant to reveal their limited knowledge of psychopharmacology in front of nurses and other nonphysician teachers. On the assumption that psychiatric residents learn in different ways, at different speeds, and in very different settings, we have presented a variety of formats. Case-based learning and the involvement of senior supervisors, who can model the integration of psychopharmacology into the total treatment plan, underlie the entire model. Of note, spaced repetition is crucial for effective learning [11]. Thus, repetition of appropriate concepts and information at various stages in the residency program is to some degree welcomed. Another important concept of effective learning is “interleaving,” where students mix multiple topics as part of their learning process [12]. Because clinical work itself (particularly clinical practice in acute care settings) tends to present residents with unpredictable challenges that demand retrieval of knowledge (consistent

with interleaving), we believe that psychopharmacology didactics do not need to be designed using interleaving principles.

With regard to the format of teaching, the apprenticeship model is a cornerstone of psychopharmacology education. While the apprenticeship model has downsides, it is hard to imagine residency education without it. The apprenticeship model consists of bedside education and learning to care for patients under appropriate observation and supervision [5]. Relying on the apprenticeship model as a key part of residency education is one of the main reasons that psychiatry training programs start in supervised inpatient settings, and only then progress to outpatient environments, where there is often less direct oversight of residents. In the apprenticeship model, residents ideally observe more experienced clinicians participating in the care of patients. The residents then practice themselves by seeing the patient, writing admission/progress/discharge notes, participating in “bedside” attending rounds, and attending multidisciplinary team rounds (often attended by pharmacists and others with backgrounds outside of clinical psychiatry), all while having the opportunity to receive feedback [5]. These real-life experiences (including integrating basic psychopharmacology with a patient’s idiosyncratic situation, including insurance coverage of medications, transportation, etc.) cannot be fully replicated with didactics, lectures, journal clubs, problem-based learning, or other techniques. The apprenticeship model is universally utilized and we do not see this changing in the near future. A downside of the apprenticeship model is that the quality of the model is dependent on the enthusiasm of teachers (who have many other competing interests), as well as on the appropriate volume and mix of patients. The demands of a busy clinical practice can also make an apprenticeship model quite a hectic learning environment, with insufficient time to learn about the details of evidence-based practice. The apprentice model thus needs to be supplemented by other educational activities such as classroom didactics. All programs are required by the ACGME to have scheduled and protected didactic time,

Historically, lectures or seminars have been the main mode of “non-bedside” teaching. However, retention of lecture-based psychopharmacology content may be poor, particularly when those lectures are not engaging for the learners. Along these lines, didactics are increasingly shifting to more engaging and participatory modes of teaching. More recently, some teachers are using a “flipped classroom” approach in which the residents see the slides before the didactic, and the didactic time is used to discuss cases in the context of a particular subject. Journal clubs can be engaging. However, evidence that journal clubs are an effective way of learning is limited. It is therefore easy to argue that journal clubs are as much about teaching the process of acquiring new and useful knowledge, in addition to learning about specific content. It is therefore reasonable (if not even desirable) to focus at least one journal club on a paper that describes a flawed psychopharmacological study, which gives residents an opportunity to identify “bad science” and learn about methodological pitfalls to look for. Discussing statistics may be the most difficult aspect of journal clubs, however, basic statistical concepts such as effect size, number needed to treat (NNT), and confidence intervals are useful in understanding the literature and interpreting the literature in the context of clinical practice. Residents should also become comfortable discussing basic clinical trial methodology (such as subject selection, dosing, and randomization) and whether published papers have an impact on their clinical practice. Unfortunately, attendee interest in regular journal clubs can be hard to sustain, and longevity tends to be increased by the availability of food during journal clubs, as well as mandatory attendance [13]. Overall, it is hard to imagine that residency programs are educating future practitioners who will be able to critically and independently evaluate new evidence without dedicating effort to quality journal clubs or other methodology to teach residents how to understand literature.

In addition to journal clubs, clinical case conferences should be offered in all years of psychiatric residency training. Case conferences combine clinical practice and scientific informa-

tion in a practical manner that is at the heart of clinical psychopharmacology teaching. Patients are typically selected for case presentations because of problems with their treatment, unusual or interesting aspects of their clinical presentations, or because they illustrate a particular aspect of psychopharmacology. The patient is usually presented formally in the case conference with an emphasis on past psychopharmacological or biological treatment and other relevant clinical variables. Typical topics of discussion in case conferences include differential diagnosis, review of prior psychopharmacological treatment, reasoning for use of current medications and doses, history of short- and long-term side effects, and integration of psychopharmacology into the overall treatment plan. Some case conferences have a strong literature review component, with the goal of learning how to place individual patients in the context of the available evidence base. This requires applying findings of psychopharmacologic studies to guide treatment decisions, while at the same time respecting the uniqueness of each patient, since idiosyncrasies and comorbidities of individual patients in real-life clinical practice are rarely represented in study cohorts of published manuscripts. Said another way, this is an exercise in applying literature to individual patients. In order to do this, the learner must go through a laborious process of understanding how well research participants in influential psychopharmacologic studies correspond to real-life patients with unique problems and comorbidities [1].

Another approach to psychopharmacology didactics, problem-based learning (PBL), is based on gradually evolving clinical problems. In other words, the problems discussed are gradually increased in their complexity until learners reach the limit of their understanding. In between meetings in PBL-based didactics, residents look up relevant psychopharmacologic information in textbooks and the medical literature and report their findings at the next meeting [5]. This approach is engaging and participatory for residents, however, it also requires time from faculty to adequately choose and prepare the topic.

Gamification is a style of teaching that uses games to engage learners, and has previously

been used to teach psychopharmacology, for example, by using multiple-choice questions and flashing buzzers (can be purchased online or with phone applications) to generate excitement and engage learners [5]. Overall, getting residents involved and participating in teaching sessions is crucial, partially because of the motivating social aspects of having to demonstrate knowledge in front of peers as well as requiring them to demonstrate the knowledge they have obtained.

Finally, the direction of teaching should be considered. Because the same medications in psychiatry are used across diagnostic categories and the same disorders can be treated with different agents or combinations of agents, psychopharmacology can either be taught by diagnostic categories or by medication classes. The authors believe that teaching in both directions – by diagnostic category and by medication class – at different times in residency is reasonable. For example, junior residents can focus on the use of psychopharmacology for specific conditions, because such knowledge is easy to apply to inpatient populations of patients. For example, psychopharmacological treatment of mania – such as different combinations of lithium, anticonvulsants, anti-psychotics, and benzodiazepines – is easier to apply to inpatient settings, compared to discussing each of these medication classes separately. Once basic mastery of psychopharmacology is achieved, it is reasonable to focus on more in-depth knowledge of separate medication classes.

Content of Teaching

Based on our experience, we view the didactic presentations in psychopharmacology as being taught at three different levels:

1. A crash course taught in the postgraduate (PG) I year or in the summer of the PG II year (for residencies with a full PG I year of medicine and neurology). This course would stress the basics of inpatient and emergency room psychiatry, emphasizing safety and drug interactions in particular. Careful attention must be paid to these lectures since they may form the

basis for the developing psychiatrist's future clinical practice. In addition, these courses often integrate psychiatric residents into psychiatric training as opposed to other parts of the PG I year which are devoted to medicine and neurology training.

2. A basic course with a full review of the psychopharmacologic agents and disorder-specific topics to be presented in the PG II and/or PG III year. Psychopathology should be folded into this course. This course is shaded toward inpatient psychiatry topics.
3. Advanced courses for residents in the PG III year and advanced neuroscience courses in the PG III or IV year. Some topics from the PG II year (e.g., depression or schizophrenia) can be repeated on a more advanced level. This course is more focused on outpatient psychiatry topics.

In addition to what is listed for the presentation topics in the first and second PG years, emphasis should be placed on the practical implementation of medications as that appears to be the first thing that residents ask their supervisors about (e.g., dosing schedules for fluoxetine, or how often to measure TSH during lithium treatment). We must specifically mention ECT, an evidence-based survivor of the pre-psychopharmacologic somatic therapies for mental illness. In many educational programs, ECT is grouped with psychopharmacology since it is a type of somatic treatment and it remains the backup therapy for some severely mentally ill patients when psychotropic drugs fail. We also suggest an overview lecture on rating scales for specific symptoms or syndromes, as well as on physical and laboratory examinations. We believe in incorporating the reliable assessment of target symptoms and outcomes into routine clinical practice, because this is associated with better clinical outcomes and is also becoming increasingly important in the current climate demanding outcome justification. Thus, rating scales should be introduced early and residents should learn to use the relevant assessments. See Table 12.1 for a proposed model for teaching topics by year of training.

Table 12.1 Example of a psychopharmacology curriculum design

| Year of residency | Topic | Format of teaching | Skills/goals | Total number of hours/duration |
|-------------------|---|--|---|---|
| PGY1 | <p>Psychopharmacology crash course consisting of:</p> <p>The safe use of psychotropic drugs and recognizing side effects (e.g., akathisia associated with antipsychotic use, initial psychomotor activation with SSRIs, or anticholinergic delirium)</p> <p>Basic theoretical models relating current knowledge of the biology of the disorder(s) in relation to the proper use of psychotropic drugs</p> <p>The process of “informed consent,” the duties of physicians in emergency clinical situations (suicide and/or assaultive behavior, etc.), the right of the patients to refuse treatment, as well as their right to participate in experimental protocols if they choose</p> <p>Indications, contraindications, dose regimens, including route of administration and side effects</p> <p>Evaluation and treatment strategies for patients with serious symptoms that require acute treatment before a full diagnosis can be developed (e.g., unspecified psychosis in acutely ill, hospitalized, involuntary patients)</p> <p>Management of acute side effects</p> | <p>Lectures</p> <p>Apprenticeship model</p> <p>Case conference</p> | <p>Stress the basics of inpatient and emergency room psychiatry, emphasizing safety and drug interactions in particular as well as mechanism of action of the medications being prescribed</p> <p>To provide care that is compassionate and competent and which maximizes patient well-being, satisfaction, and adherence</p> | <p>Ideally, the initial contact with patients should have occurred during hospitalization</p> <p>>50 patients for at least 1 year; >5 patients for at least 2 years</p> |

Table 12.1 (continued)

| Year of residency | Topic | Format of teaching | Skills/goals | Total number of hours/duration |
|-------------------|---|--|---|---|
| PGY2 | <p>Knowing when, and which, psychopharmacological agents are the treatments of choice.</p> <p>Knowing appropriate application of augmentation, combination, and switching strategies</p> <p>How to appropriately document</p> | <p>Apprenticeship model</p> <p>Case conference</p> | <p>A basic course with a full review of the psychopharmacologic agents and disorder-specific topics. Psychopathology should be folded into this course. This course is still shaded toward inpatient psychiatry topics</p> <p>Develop the ability to examine critically the relevant psychiatric literature via an understanding of the basic scientific principles required to test hypotheses and evaluate effect sizes</p> | <p>Evaluation and treatment planning with patients in each category:</p> <ul style="list-style-type: none"> Anxiety and Obsessive-compulsive disorders, including panic disorder, social anxiety disorder, and generalized anxiety disorder (GAD) Trauma and stressor-related disorders including posttraumatic stress disorder (PTSD) Mood disorders, including unipolar, bipolar, and persistent depressive disorder, and mixed features Psychotic disorders, including schizophrenia spectrum and other psychotic disorders Comorbid anxiety and depression Comorbid substance use disorder and psychiatric disorder Eating disorders Geriatric depression Neurocognitive disorders Neurodevelopmental disorders Medically ill patients with psychiatric disorders Perinatal and reproductive psychopharmacology Personality disorders Sexual dysfunction Women's mental health Child Psychiatry ADHD |

(continued)

Table 12.1 (continued)

| Year of residency | Topic | Format of teaching | Skills/goals | Total number of hours/duration |
|-------------------|---|--------------------|---|--|
| PGY3 | <p>Understand the limitations of pharmacotherapy and its potential dangers and pitfalls</p> <p>Understand basic theoretical models relating current knowledge of the biology of the disorder(s) in relation to the proper use of psychotropic drugs</p> <p>Dose-response relationships</p> <p>Blood levels: practical uses, misuses</p> <p>Therapeutic trial concept: dose and duration</p> <p>Placebo and nocebo effects</p> | Case conference | <p>Advanced psychopharmacology course, with focus on neuroscience and outpatient psychiatry</p> <p>Develop a systematic approach to gathering diagnostic and treatment outcome data and making accurate chart recordings of these data</p> <p>Develop the ability to perform psychopharmacological consultations efficiently and effectively, particularly for primary care colleagues and nonphysicians</p> <p>ECT</p> <p>Learn the use and practice of symptom monitoring scales to provide measurement-based care and treat to remission</p> <p>We strongly recommend that residents not only keep track of diagnoses of patients whom they have treated, but also the drug classes that they use. The aim is to make sure that they get some exposure to medications that are used much less frequently in a typical resident outpatient clinic (e.g., MAOIs, tricyclic antidepressants, typical (first-generation) antipsychotics, etc.)</p> | <p>Cont. see PGY2</p> <p>A minimum of 8–12 h per week should be devoted predominantly to psychopharmacology</p> <p>At least 2–3 integrated psychopharmacologic-psychotherapy cases are suggested</p> |
| PGY4 | <p>Know when not to use psychotropic drugs</p> <p>Management of side effects during long-term treatment</p> | Journal clubs | <p>Integrate psychotherapeutic, psychoeducational, psychobiologic, and psychopharmacologic aspects of care</p> <p>To develop tools and habits to keep one's skills up-to-date with new and emerging findings</p> | Cont. see PGY2 |

A clinical psychopharmacology program should teach specific skills so that participants will be able to:

- Integrate psychotherapeutic, psychoeducational, psychobiologic, and psychopharmacologic aspects of care.
 - Develop a systematic approach to gathering diagnostic and treatment outcome data and making accurate chart recordings of these data.
 - Develop the ability to perform psychopharmacological consultations efficiently and effectively, particularly for primary care colleagues and nonphysicians.
 - Develop the ability to examine critically the relevant psychiatric literature via an understanding of the basic scientific principles required to test hypotheses and evaluate effect sizes.
 - Provide care that is compassionate and competent and which maximizes patient well-being, satisfaction, and adherence.
 - Develop tools and habits to keep one's skills up-to-date with new and emerging findings.
- Appropriately apply augmentation, combination, and switching strategies.
 - Know when *not* to use psychotropic drugs.
 - Understand basic theoretical models relating current knowledge of the biology of the disorder(s) in relation to the proper use of psychotropic drugs.

The minimum objective of a clinical psychopharmacology program should be to make explicit the required knowledge base of psychopharmacology for educating psychiatric residents in an optimal and standardized fashion. The curriculum should help the trainers and teaching learners to:

- Use psychotropic drugs safely and recognize pseudo-psychiatric symptoms that may represent medication-associated toxicity (e.g., anxiety in the context of short benzodiazepine half-life, akathisia associated with antipsychotic use, initial psychomotor activation by SSRIs, or anticholinergic delirium).
 - Know when, and which, psychopharmacological agents are the treatments of choice.
 - Understand the limitations of pharmacotherapy and its potential dangers and pitfalls.
- We (the Stanford General Psychiatry Residency Program) have also worked to integrate neuroscience into clinical psychopharmacology teaching. The intent is to not just teach current psychopharmacologic approaches, but to speak to the past and possible future development of new treatments. This includes new understandings of how the brain works and our evolving understanding of the biological basis for mental disorders. Rooted in translational neuroscience, the overall aim is to introduce participants to neuroscience research relevant to the practice of psychiatry. The material covered is organized largely by neurobehavioral systems in which abnormalities can be seen in one or multiple psychiatric disorders. Since this course is brain-focused and translational in its nature, this organization keeps topics maximally neurobiologically coherent, but often not Diagnostic and Statistical Manual of Mental Disorders (DSM) diagnosis-restricted. In general, it is the hope of the authors that neuroscience will be an important component of clinical decision-making and that residents will begin to develop a comfort with neuroscience that allows them to discuss it effectively with their patients. As such, one aim is to illustrate how a broad understanding of translational neuroscience presents a different and complementary perspective on mental illness to that offered by DSM or treatment-focused approaches. There are also national initiatives on teaching neuroscience such as the National Neuroscience Curriculum Initiative (<https://nncionline.org>). The NNCI offers self-study materials, teaching videos, clinical vignettes, guides for teachers, and other resources to bolster neuroscience teaching in residency programs.

Evaluation

Learning to be tested is less effective and can even be demotivating and discourage learning in the long run compared to learning with the goal of putting knowledge to use [14]. Self-evaluation should be part of a broader evaluation system that contains evaluations from faculty, peers, and other staff. Standard clinical practice should offer ample opportunity for direct resident observation in real-world settings that can be assessed with structured assessment tools but without standardized tests. One such structured direct observation tool is the Psychopharmacotherapy-Structured Clinical Observation (P-SCO) which evaluates 27 tasks of a pharmacotherapy visit [15]. A few examples of the tasks assessed with the P-SCO are whether rapport was established, whether risk was assessed, and whether response to treatment was assessed. While test scores should not become the primary focus of evaluation in residency, testing does serve important functions, including helping with retrieval practice and thus solidifying knowledge. However, all residents are required to take standardized tests, including the Psychiatry Resident In-Training Examination® (PRITE), that can provide valuable feedback regarding fund of knowledge. Pre- and post-training examinations can offer valuable feedback to residents and teachers. Board pass rates and postgraduate surveys are also opportunities to identify major gaps in programs.

Documentation of training in psychopharmacology should include the number of teachers, curriculum hours, and evaluation instruments. Additionally, with implementation of the Milestones Project, ACGME requires documentation of competency and sub-competency attainment in psychopharmacology. The “Patient Care 5: Somatic Therapies” sub-competency directly addresses milestones related to psychopharmacology, and “Medical Knowledge 4: Psychotherapy” addresses the integrated use of psychopharmacology with psychotherapy [3]. Post-residency the American College of Psychiatrists has developed an assessment called

Psychiatrists In-Practice Exam (PIPE) for practicing psychiatrists that includes some psychopharmacology. In addition, the American Psychiatric Association (APA) has developed several resources for continuing education, which can also be used for Maintenance of Certification (MOC).

Summary and Conclusion

Here in 2021, there has been a gradual evolution and change in how psychopharmacology is being taught. As such, we have updated how psychiatric residencies should teach psychopharmacology. Additionally, we have highlighted the rapid changes in the field, including the difficulties in keeping up with the literature, and most importantly of all, the need to be sure trainees have the clinical competence so that any one of us would feel comfortable to refer a family member for treatment of a psychiatric problem. Education in psychiatry has advanced, but the challenges are far greater than two decades ago. Lifelong learning with dedicated and knowledgeable teachers is necessary – and crucial for good treatment outcomes including quality of life.

References

1. Osser DN, Patterson RD, Levitt JJ. Guidelines, algorithms, and evidence-based psychopharmacology training for psychiatric residents. *Acad Psychiatry*. 2005;29(2):180–6.
2. Barkil-Oteo A, et al. Collaborative care for depression in primary care: how psychiatry could “troubleshoot” current treatments and practice. *Yale J Biol Med*. 2013;86(2):139–46.
3. ACGME. Psychiatry milestones. 2021 [cited 2021 11/17]; Available from: <https://www.acgme.org/globalassets/pdfs/milestones/psychiatrymilestones.pdf>
4. Glick ID, Zisook S. The challenge of teaching psychopharmacology in the new millennium: the role of curricula. *Acad Psychiatry*. 2005;29(2):134–40.
5. Zisook S, et al. Alternate methods of teaching psychopharmacology. *Acad Psychiatry*. 2005;29(2):141–54.
6. Glick ID, et al. Are patients with schizophrenia better off with lifetime antipsychotic medication?: replication of a naturalistic, long-term, follow-up study

- of antipsychotic treatment. *J Clin Psychopharmacol*. 2020;40(2):145–8.
7. Glick I. Model psychopharmacology curriculum for training directors and teachers of psychopharmacology in psychiatric residency programs. American Society of Clinical Psychopharmacology; 2020.
 8. Dubovsky SL. Who is teaching psychopharmacology? Who should be teaching psychopharmacology? *Acad Psychiatry*. 2005;29(2):155–61.
 9. ACGME. ACGME common program requirements (Residency). 2021 [cited 2021 11/17]; Available from: <https://www.acgme.org/globalassets/PFAssets/ProgramRequirements/CPRResidency2021.pdf>
 10. MacDonald J, Ellis PM. Supervision in psychiatry: terra incognita? *Curr Opin Psychiatry*. 2012;25(4):322–6.
 11. Tabibian B, et al. Enhancing human learning via spaced repetition optimization. *Proc Natl Acad Sci U S A*. 2019;116(10):3988–93.
 12. Birnbaum MS, et al. Why interleaving enhances inductive learning: the roles of discrimination and retrieval. *Mem Cogn*. 2013;41(3):392–402.
 13. Alguire PC. A review of journal clubs in postgraduate medical education. *J Gen Intern Med*. 1998;13(5):347–53.
 14. Benware CA, Deci EL. Quality of learning with an active versus passive motivational set. *Am Educ Res J*. 1984;21(4):755–65.
 15. Young JQ, Rasul R, O’Sullivan PS. Evidence for the validity of the psychopharmacotherapy-structured clinical observation tool: results of a factor and time series analysis. *Acad Psychiatry*. 2018;42(6):759–64.



Psychotherapy Education in Psychiatry Residency Training

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Introduction

Psychotherapy is a valuable tool in treating mental illness. Robust psychotherapy training in residency empowers psychiatrists to use a broad variety of psychosocial interventions in addition to psychopharmacology in our efforts to help patients. Addressing the emotional aspects of our patients' lives through the development of an optimized therapeutic alliance and the appropriate use of empathy, instruction, support, and insight improves patient outcomes [1]. In recent decades, however, the practice of psychotherapy by psychiatrists has been threatened by various factors, including the impact of managed care, psychopharmacological advances, and the growth of mid-level mental health practitioners. These factors have changed the office practice of psychiatrists in the United States. Surveys of US office-based psychiatric practice have shown a decrease in the use of psychotherapy by psychia-

trists [2] and an increase in polypharmacy over the same time period [3].

In addition to affecting the care we provide, psychiatrists' decreasing emphasis on psychotherapy also impacts the knowledge, clinical skills, and professional attitudes that are modeled and taught. The diminished focus on psychotherapy might create questions as to whether psychotherapy should remain a central tenet of a psychiatrist's professional identity [4]. While residents may still be taught about psychotherapy, they notice the changing attitude of their faculty members. In a 2010 survey of 15 psychiatry training programs in the United States, most resident respondents perceived that their program director was supportive of their psychotherapy training. Still, nearly one-third of respondents did not feel that other departmental leaders shared this supportive stance [5]. Decreases in psychiatrists' psychotherapy practice strain training programs by producing fewer adequate psychiatric role models for residents to observe and fewer psychiatrists who feel competent to provide psychotherapy supervision. These psychiatrists are also less likely to seek advanced training in psychotherapy, making them better psychotherapy instructors and supervisors [6]. Despite these trends, evidence abounds supporting the continuing role of psychotherapy in psychiatric practice [6], and trainees seem to agree with this sentiment. Data from a survey of 14 US training programs in 2014 demonstrated that residents desire

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more training in psychotherapy than they are receiving [7].

The authors of this chapter firmly believe that psychiatrists should continue to practice both general psychotherapy skills (such as the common elements of psychotherapy) and specific psychotherapeutic modalities. Therefore, this chapter will examine the history and current requirements to teach general and specific psychotherapy skills to residents and will present available resources to help residency training programs teach and trainees develop their psychotherapy skills.

History of Psychotherapy Training in Psychiatry Residency Programs

The twentieth century witnessed significant changes in psychiatric residencies as well as psychiatric practice. There has been a dramatic decrease in psychotherapy training. The percentage of residency training spent learning and delivering psychodynamic psychotherapy may have been as high as 50% in the late 1940s and as little as 2.5% by the late 1980s [8]. Many factors contributed to this decline. Contemporary psychopharmacology began in the late 1950s, accompanied by advancements in genetic and neuroscience-based knowledge. Psychiatry residencies had to make time for teaching and training these newer developments. Leaders in academic psychiatry were also drawn from a much broader range of backgrounds and experiences, reducing the prominence of psychotherapy in academic psychiatry [9].

Within the clinical psychiatric community, there were additional challenges. Psychodynamic psychotherapy had not initially emphasized the randomized controlled trials (RCTs) that became the gold standard for evidence-based medicine [10]. This led to psychodynamic psychotherapy being inaccurately labeled as not evidence-based [11]. Many psychiatrists who had been trained in psychodynamic and psychoanalytic approaches were also slow to embrace emerging forms of therapy such as cognitive-behavioral therapy

(CBT) [8]. Managed care reimbursement rates incentivized medication management and left psychotherapy primarily to nonphysician therapists [9, 12]. Many psychiatrists subsequently gravitated towards emerging biomedical approaches and de-emphasized talking therapies. As a result, psychotherapy was no longer seen as an essential aspect of psychiatric practice by all psychiatrists. And, many residents no longer believed they would spend a significant amount of their clinical time providing psychotherapy [13].

By 2017, the World Psychiatric Association-Lancet Psychiatry Commission on the Future of Psychiatry advised that psychotherapy training should still be included in psychiatry residencies. However, it recommended training the focus on psychotherapy's common factors, such as attending to the therapeutic alliance and empathic listening, rather than providing in-depth training on specific psychotherapeutic modalities [14]. This recommendation was made despite the evidence supporting the benefits of CBT, supportive therapy, and psychodynamic psychotherapy that argued for their remaining a vital part of psychiatry residency training.

Current Training Requirements

Training standards for psychiatry residents in the United States have changed dramatically over the past several decades. During the second half of the twentieth century, these changes corresponded with major shifts throughout medical education. In the late 1970s, the World Health Organization began promoting competency-based training of physicians, requiring standardized, observable objectives and demonstrations of proficiency [15]. The efficacy of training was to be assessed by performance measures rather than time spent in training. In the mid-1990s, the Canadian Royal College of Physicians and Surgeons began work on the CanMeds 2000 Project to delineate key competencies for every medical specialty. Simultaneously the American Association of Medical Colleges (AAMC) initi-

ated the Medical School Objectives Project to define performance-based outcomes for undergraduate medical education. In 1997, the Accreditation Council for Graduate Medical Education (ACGME) committed to using educational outcomes to assess residency training. The ACGME came up with six general competencies – Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Interpersonal and Communication Skills, Professionalism, and Systems-Based Practice. Specialty-specific Review Committees (RC) required that programs begin assessing these general competencies by June 2001, and the RCs started evaluating them the following year. Seeing the future of medical training, by 1998, more than 80% of Chairs of Departments of Psychiatry favored creating specific general psychotherapy competencies [16].

The American Association of Directors of Psychiatric Residency Training (AADPRT) established a Task Force on Psychotherapy in 1994. Two years later, the American Psychiatric Association (APA) created the APA Commission on Psychotherapy by Psychiatrists (APA-COPP). By 2000, the AADPRT Task Force on Competencies also began to look at psychotherapy. Based on this ongoing work, the AADPRT task force identified five psychotherapy modalities for psychiatry residents to become competent. The task force recommended that training programs focus on psychodynamic psychotherapy, CBT, supportive psychotherapy (SPT), brief psychotherapies, and combining psychotherapy with psychopharmacology. AADPRT committees created and distributed learning goals for each of the five competency areas. It was left to individual programs to determine how they would teach and document competency in these psychotherapeutic modalities [12]. These initial AADPRT efforts were incorporated into the ACGME psychiatry program requirements [17]. Psychiatry residency programs were to demonstrate their graduates were competent in brief psychotherapies, combined treatment with medication and psychotherapy, supportive psychotherapy, cognitive-behavioral therapy (CBT), and psychodynamic psychotherapy. By 2007, these

requirements had been simplified to graduates demonstrating competency in brief and long-term psychodynamic psychotherapy, supportive therapy, and CBT [18].

In 2009, the ACGME announced the Next Accreditation System (NAS). The NAS included developmentally based Milestones in each of the six general core competency areas. The announcement led to hundreds of articles discussing the benefits and challenges of the new system. The Milestones provided narrative descriptors of the competencies and sub-competencies along a developmental continuum with varying degrees of granularity. There were anchor points for each of the 1–5 levels of the Milestones. Level 1 was designated as the level of performance demonstrated by a new medical school graduate. As the resident progressed through training and increased their competence, they would gradually meet the more challenging anchor points. Although the Level 4 designation was intended, though not required, for residents who were ready for graduation, there was also a Level 5, which was designed as an aspirational goal for advanced residents [15]. The Milestones served several purposes. They allowed individual resident performance to be assessed with guidance to the resident on what they needed to demonstrate for the next level. The aggregate data also helped the residency program:

- Assess their residents in a standardized and comprehensive manner
- Provide more explicit expectations of residents and fellows
- Assess the efficacy of their curriculum
- Identify underperformers
- Identify advanced learners in order to offer them increased opportunities [15]

In 2020, the ACGME released the second edition of their Psychiatry Milestones [19]. Psychotherapy was addressed in two areas – Patient Care and Medical Knowledge. Anchor points were provided for all levels, but to obtain a Level 4, a resident should display behaviors such as:

- Patient Care
 - Selects appropriate psychotherapeutic modality based on case formulation
 - Provides the three core psychotherapies – cognitive behavior therapy, supportive therapy, psychodynamic psychotherapy
 - Tailors treatment to the patient
 - Provides at least supportive therapy to complex patients
- Medical Knowledge
 - Compares selection criteria, potential risks, and benefits of the three core psychotherapies
 - Identifies the techniques of the three core psychotherapies
 - Summarizes the evidence base for the three core psychotherapies
 - Explains theoretical mechanisms of therapeutic change of the three core psychotherapies

While it may not have the prominence it once did, these Milestones maintain psychotherapy training within psychiatry residency programs, ensuring that trainees become competent in both general and specific psychotherapy skills.

Although every residency program is free to create its own structure, many programs use the “Y-Model” of psychotherapy training to focus residents’ attention on general psychotherapy skills before moving to more specific forms of psychotherapy.

Y-Model

The ACGME-required areas of competency in psychotherapy for general residency training can be conceptualized using the Y-Model [20]. This model incorporates supportive psychotherapy, CBT, and psychodynamic psychotherapy using the letter “Y” as a visual representation of the different psychotherapies and their relationship to each other. In this model, the base of the Y represents supportive psychotherapy and elements that are shared among psychotherapies, while the two arms of the Y build upon this stem and represent

the unique traits of CBT and psychodynamic psychotherapy.

Elements common to multiple psychotherapies, located in the stem of the Y-model, include developing a therapeutic alliance and formulation, an empathic stance, boundaries and confidentiality, and identifying treatment goals matched to the patient’s needs and background. The Y stem also includes identifying repeated maladaptive patterns, a strategy common to different theoretical frameworks in multiple therapies, though utilized differently. Supportive psychotherapy envisioned and taught as a psychotherapy that draws heavily upon shared common elements among all psychotherapies also resides on the base of the Y. Likewise, brief psychotherapy and combined treatment with both medication and psychotherapy rest in the stem of the Y, reflecting their use in multiple schools of psychotherapy.

Above the stem, one arm of the Y represents core features of psychodynamic psychotherapy while the other represents CBT. Core features located on the psychodynamic arm include an emphasis on affect, discussing a patient’s attempts to avoid difficult topics and situations, and exploring a patient’s dreams and fantasies. Psychodynamic approaches use uncovering and attempt to understand unconscious processes more often than CBT or supportive therapy. While transference issues are addressed when necessary within supportive psychotherapy, a focus on transference and countertransference is more often at the forefront of psychodynamic work, and these elements are therefore included on the psychodynamic arm of the Y. They are seen as a way of understanding the patient’s relationships with others through the lens of significant past relationships. The final core elements of the psychodynamic arm of the Y include an emphasis on how the past experiences impact the present and a focus on the patient’s interpersonal relationships and experiences [20, 21].

The CBT arm of the Y similarly signifies core elements of this modality. These elements include a more directive and structured approach to individual therapy sessions and to the course of therapy more broadly. CBT therapists provide

psychoeducation about cognitive theory and the benefits of behavioral modification, active prioritization of problems/issues, collaboration within sessions, teaching and practicing concrete coping skills, and assigning and assessing out-of-session homework. CBT focuses less on the patient's past and more on developing new skills to manage maladaptive thought patterns and behaviors. The "cognitive" portion of CBT involves instruction about the intimate connection between thoughts and emotions and helps patients identify and challenge thought patterns that lead to continuing emotional distress. For example, a patient who tends to believe that his spouse is no longer interested in him would be asked to describe and evaluate the evidence that supports and contradicts that conclusion. Once the patient has demonstrated the ability to complete this exercise, they are asked to examine similar thoughts they experience between sessions. As the patient demonstrates increasing competence, they will complete these exercises more rapidly and accurately. The behavior component often leads to patients facing feared or avoided situations in a structured and systematic fashion. They will subsequently write down and subsequently discuss their responses to these exercises [22]. Similar to psychodynamic psychotherapy, the Y-model includes both the unique elements of CBT represented on the arm and features that CBT shares with other therapies, as represented on the stem.

How can the Y-Model be used for teaching psychotherapy? The Y-model encompasses all core competencies in psychotherapy as identified by the ACGME and places them within a visual framework that highlights psychotherapy's shared and unique elements. By explicitly sharing this model with trainees at the beginning of their psychotherapy training, psychotherapy educators can help residents better identify each psychotherapy modality's core conceptual frameworks and skills, differentiate one psychotherapy from the others, and ultimately put them all into practice.

Once residents have been introduced to the Y-model as a conceptual framework for understanding core psychotherapy competencies, skills located on the stem of the Y offer a useful entry

point for residency learners new to psychotherapy. These common elements of psychotherapy are often more intuitive to learners, can be applied across different clinical settings, and will form the foundation upon which more specialized CBT and psychodynamic skills can be built. Both didactics and early residency clinical rotations, including inpatient settings, provide opportunities to introduce residents to these common elements and practice them with patients.

The Y-model can also be a helpful framework for residency faculty to demonstrate where their own psychotherapeutic practices and techniques lie within a resident's overall trajectory of psychotherapy training. The Y-model can become a program's shared conceptual model of its overall psychotherapy education, assisting faculty of all backgrounds in identifying how and where they can contribute to residents' psychotherapy education. As an example, review of the Y-model in a faculty development workshop can facilitate an inpatient psychiatrist's recognition of their role in teaching common elements early in training in inpatient units. Such an approach can also remind an outpatient psychopharmacology supervisor of the integration of psychotherapy techniques with psychopharmacologic practice. Additionally, it can help a CBT educator understand their teaching as a specialized contribution likely occurring later in training and building upon common elements of psychotherapy that the resident has already learned. A video explaining the Y-model is available through the Austen Riggs Center website at augstenriggs.org. It may help provide further context on the model for both faculty and trainees.

While the original Y-model limited its focus to the core psychotherapy modalities required by the ACGME, it also can serve as a scaffold for trainees to conceptualize and integrate other evidence-based psychotherapies. For example, dialectical-behavioral therapy (DBT) or mindfulness-based cognitive therapy (MBCT) may be envisioned as a branch growing off the CBT arm of the Y-model. In contrast, mentalization-based treatment (MBT) may be seen as a branch off the psychodynamic psychotherapy arm. This growing arborization of the

Y-model can help trainees understand how different and emerging therapies are related to each other historically and in their theoretical framework and approach to the patient. Additionally, there are evidence-based therapy modalities such as interpersonal therapy (IPT), which do not fit clearly on one specific branch, and which represent an opportunity for us to reconceptualize the Y-model as a “brush” model, wherein common elements are at the base, with a range of evidence-based psychotherapy modalities extending from there, each with their unique theoretical perspectives and distinctive features.

For programs with specialty psychotherapy programs or residents interested in other psychotherapies beyond the core psychotherapies, the arborization of the Y-model or a conceptualization of a “brush” model can provide a structure for conceptualizing where and how education in these psychotherapies may complement their education in the core competencies. Once the trainees understand the basic concepts, the training program can emphasize general and specific psychotherapy approaches and skills.

General Psychotherapy Skills

Even as some were questioning the relative importance of psychotherapy for modern psychiatrists, a growing body of evidence has continued to demonstrate that strong relationship-centered communication skills improve patient care outcomes within all medical specialties. A basic foundation of general psychotherapy skills is useful for all physicians [23]. The way that patients experience their relationship with a physician positively impacts patient care outcomes [24]. For example, it has been shown that primary care providers who exhibit more empathy with their patients have patient panels with lower hemoglobin A1c values [25]. Providers whose patients were more satisfied with the doctor-patient relationship demonstrate better adherence to their antihypertensive medications [26]. What is true in medicine, in general, is certainly true in psychiatry. Within psychiatry, the therapeutic

relationship (or therapeutic alliance) strongly impacts patient adherence to pharmacotherapy [27, 28].

General psychotherapy skills include effectively conveying empathy, developing and maintaining a strong therapeutic alliance, and establishing and maintaining appropriate boundaries. For psychiatrists specifically, it is important to remember that decades of psychotherapy research have consistently shown that the common elements of psychotherapy, including empathy and the therapeutic alliance, have a significant impact on psychotherapy outcomes [29]. Therefore, providing the common elements of psychotherapy becomes a vital foundation for our trainees as they grow to become competent psychiatrists and practitioners of psychotherapy.

Empathy Using empathy effectively in clinical encounters requires that trainees carefully attend to the patient’s emotional cues and use this information to imagine the patient’s emotional state. The resident then must be able to connect with this emotional state and make use of both verbal and nonverbal behaviors to convey a genuine and caring response. For some trainees, developing the ability to express empathy appropriately in the clinical setting may require expanding their own emotional vocabulary in order to help patients accurately identify and name their feelings [30].

Therapeutic Alliance Developing trainees’ ability to optimize the alliance will improve patient care outcomes. Important elements of the therapeutic alliance include mutual agreement on the goals and tasks of the therapeutic work and the development of a collaborative bond between therapist and patient. Learning to collaborate with the patient and reach a consensus on realistic treatment goals can sometimes present a challenge, particularly if the patient’s initial reasons or goals for coming to therapy are unrealistic. Tools such as the Working Alliance Inventory and the Vanderbilt Therapeutic Alliance scale are available to assist supervisors in assessing trainees’ progress in this important domain of clinical work [31].

Boundaries The ability to establish and maintain appropriate boundaries, also called the “frame” of the therapy work, is also a vital skill set for trainees. Residents must learn to effectively attend to important boundary considerations with patients, such as the physical setting and time of the therapeutic work, therapist self-disclosure, and a clear understanding of the differences between boundary crossings and boundary violations [30].

Specific Psychotherapy Skills

Specific psychotherapy skills usually arise from one particular therapeutic discipline and require additional training. While general psychotherapy skills can be helpful for most physicians in most patient interactions, specific skills are typically more selective. There are, however, opportunities for all physicians to use some specific psychotherapy skills, such as supportive psychotherapy or motivational interviewing (MI). These skill sets are valuable and appropriate in other medical settings, including primary care [32, 33].

Supportive Psychotherapy (SPT)

Brief supportive therapy interventions can benefit a broad variety of patients [34]. The tasks of the supportive psychotherapist have been organized by the acronym HOPE to remind our trainees that we can assist our patients anytime we can find an opportunity to do the following:

- **H**ear and understand their emotions and feelings
- **O**rganize their experience and narrative
- **P**romote adaptive psychological functioning (focusing on coping and self-esteem), and
- **E**ffect changes by collaborating with the patient (to increase support and reduce stressors)

Supportive psychotherapy interventions can be organized and presented within the above framework. The HOPE framework can assist

physicians, including residents, with conceptualizing and utilizing basic interventions within various patient care encounters and clinical settings, including during brief patient care encounters [35].

Some examples of supportive therapy interventions include empathic validation, encouragement to elaborate, praising effective choices and behaviors, and providing anticipatory guidance. Integrating these interventions can significantly enhance our patients’ functioning and reduce current distress [34].

Cognitive-Behavioral Therapy (CBT)

CBT has been used to effectively treat a broad range of common mental illnesses. There is a structure to CBT that many patients and therapists appreciate. CBT techniques are usually based on challenging and modifying maladaptive thought patterns and behavior. When presented as a series of cognitive and behavioral experiments, patients often feel that CBT is more active and interactive. CBT is usually conceptualized as brief therapy lasting for several months [36].

Psychodynamic Psychotherapy

A psychodynamic understanding and foundation also provide an important framework for thinking and conceptualizing our patient’s current behavior and problems. By training residents to become competent psychodynamic psychotherapists, we empower them to work with patients to examine patterns within personal relationships, reflect on how the past helps shape present behaviors, understand defenses and resistance, and address transference issues within the treatment relationship [37].

Additional Specific Psychotherapy Skills

With an increase in the number of psychotherapies considered “empirically supported,” determining which modalities to prioritize can be overwhelming [38]. Unfortunately, there is no broad international consensus concerning the most important therapies in which psychiatry residents should gain competency [39].

Individual programs' choices about what subspecialty psychotherapy training to offer are typically guided by the needs of the patients seen by the programs' trainees, the expertise of the program's faculty, and local resources for psychotherapy training. Common choices for additional therapy training include interpersonal psychotherapy, dialectical-behavioral therapy, motivational interviewing, family and couples therapy, and group psychotherapy. Training in these psychotherapies may occur later in residency, after – and building upon – education in the core psychotherapies. It is also reasonable to sequence the training earlier in residency when appropriate to the opportunities present in the learning environment, such as rotating on a DBT-focused inpatient unit.

Structuring Training in Psychotherapy

The organization and oversight of psychotherapy training vary, but each program must develop its own approach for managing this important aspect of their residents' training. At some institutions, the program director or associate program director(s) will manage or share these duties. Alternatively, some training programs designate a Director of Psychotherapy Training (sometimes referred to as an Associate Training Director for Psychotherapy) who oversees the residents' psychotherapy training experiences. Finally, based on available resources, some training programs may need to partner with nonphysicians for oversight of the residents' psychotherapy education, such as having a psychologist serve as the Director of Psychotherapy Training. When this approach is utilized, it remains vitally important that physicians still participate in the training and supervision of residents to provide adequate role models and physician perspectives on the utilization of psychotherapy skills by psychiatrists.

Teaching complex skills like psychotherapy require a variety of modalities and approaches and should be informed by adult learning principles. Adults learn best when they perceive a distinct need for learning and when the instruction is

active, engaging, and longitudinal [40]. In addition, the impact of training in adults is optimized when that training includes the following:

- Two-way communication
- Discussion and class interaction
- Opportunities to practice the skills being taught
- Obvious practical application [41]

Training programs should ensure that resident instruction in psychotherapy frequently includes active participation, such as discussions of clinical cases, role-play, brainstorming, or practicing the skills they have been taught. Psychotherapy can be taught through a combination of didactic coursework, supervised clinical experiences, and psychotherapy case conferences.

Didactic Coursework

Didactic coursework is required to provide the basic concepts and terminology of psychotherapy. Lectures are a convenient method to share the history and theory of the therapy being taught. Some therapy approaches will have specific diagnostic considerations and conceptualizations that must be understood for the resident to assess patients. Instructors can also review specific therapeutic interventions and discuss theoretical mechanisms of change. Creating a lecture is an efficient approach to giving information but may not be the most effective way of instilling knowledge and changing behavior. Classroom learning can be enhanced by adding a structured discussion of the shared materials or practicing specific skills. In addition, mentally manipulating the information trainees have read or heard helps instill the targeted psychotherapy concepts permanently.

Example – A lecturer assigns readings covering the basic psychological defenses. The class starts with the instructor answering any questions the residents had from the assigned readings. Following this, she asks each resident to describe one of the defenses from the readings and give an example. The example could be theoretical but would be better if it came from recent clinical material. She

then distributes some clinical vignettes. Each resident writes down which defense they believe was being demonstrated in each vignette. The answers are then compared. The participants discuss discrepancies until a consensus is reached.

Sequencing of Content in Psychotherapy Didactic Coursework

Presenting more than one psychotherapy modality at a time can be overwhelming to learners and ultimately counterproductive [42], so it is important to establish a linear progression of general and specific psychotherapy skills. As referenced above, the Y model provides a framework for sequencing didactic content in a logical order of gradually increasing theoretical complexity, allowing coursework to meet our trainees' growing understanding and competence as psychotherapy practitioners. An example of such an approach would be teaching about the common elements of psychotherapy before progressing to supportive psychotherapy, then CBT, and then psychodynamic psychotherapy, and potentially including other selected modalities such as motivational interviewing (MI), interpersonal therapy (IPT), and dialectical-behavioral therapy (DBT).

The University of Colorado's Psychotherapy Scholars Track is an example of such an approach, placing a significant initial focus on teaching the common psychotherapy factors [38]. After establishing this strong foundation of general psychotherapy approaches and skills, specific psychotherapy modalities are then introduced.

The context of the residents' clinical assignments during each training year should also inform sequencing decisions. For example,

introducing motivational interviewing and supportive psychotherapy to junior residents rotating on inpatient units and consult-liaison settings allows them to utilize these strategies in their current clinical assignments. It also enables the residents providing these therapy interventions to be observed by their supervising faculty in real-time and receive feedback from supervising faculty trained in these modalities, complementing their didactic experiences. Another example is introducing the basic principles of group psychotherapy to residents rotating on inpatient psychiatry units, partial hospital programs, or intensive outpatient programs to promote their understanding of this aspect of their patients' care. This can also provide them with an opportunity to partner with a skilled group therapist and work in a co-therapist role. The opportunity to have real-time observation and feedback from a more experienced co-therapist can enhance the trainee's development as a psychotherapy practitioner [43, 44].

Table 13.1 provides a model of a potential 4-year longitudinal psychotherapy didactic curriculum.

Clinical Experiences

Competency in specific psychotherapies is developed from supervised clinical experiences working with many patients from differing backgrounds. Most of these specific psychotherapy experiences are found in either psychotherapy clinics or general outpatient clinics.

Table 13.1 Model of a potential 4-year longitudinal psychotherapy didactic curriculum

| Year 1 | Year 2 | Year 3 | Year 4 |
|---|---|--------------------------------------|---|
| Common elements (basic listening skills, empathy, therapeutic alliance, and boundaries) | Introduction to CBT | Advanced CBT | Advanced elective psychotherapy training |
| Supportive psychotherapy (SPT) | Introduction to psychodynamic psychotherapy | Dialectical-behavioral therapy (DBT) | Teaching psychotherapy to junior residents and medical students |
| Motivational interviewing (MI) | Interpersonal therapy (IPT) | Advanced psychodynamic psychotherapy | Instruction and practice in psychotherapy supervision |
| Introduction to group therapy | Introduction to couples and family therapy | Mindfulness | |

Psychotherapy Clinics

Psychotherapy clinics prioritize talking therapies. There will be a screening process to ensure that the patient is appropriate for psychotherapy. The screening process may exclude some patients with severe mental illness (e.g., schizophrenia, bipolar disorder), active substance use disorder, or prominent safety concerns. These patients might benefit from supportive psychotherapy, but they typically require a breadth of services not available within residency psychotherapy clinics. Exceptions may be made for those demonstrating prolonged stability. Most residency psychotherapy clinics will encourage at least weekly individual sessions and have the option for group, family, couples, or twice-a-week psychotherapy. Residents will often be encouraged to provide different psychotherapy modalities depending on their training and the expertise of their supervisors. Within these specific clinic settings, residents may or may not be allowed to prescribe medications in addition to providing psychotherapy.

Funding psychotherapy clinics is challenging. Since therapy billing is based on time, many payers require that supervisors be present in the session for the amount of time associated with the charge for the visit. This is difficult to arrange and interferes with many aspects of the treatment, including transference, countertransference, and boundaries. An alternative is creating a fee-for-service program where patients are expected to pay cash but contact their insurance for reimbursement. If fees are set low enough, patients might even afford to pay out of pocket, although this format risks limiting the diversity of the patients seen in the clinic.

Outpatient Psychiatry Clinics

The alternative to designated psychotherapy clinics is to engage in psychotherapy in a general psychiatric outpatient clinic. The majority of these patients will receive psychotropic medications and be seen for 30 minutes or less. However, even with the limited time, there is ample opportunity to practice supportive therapy and specific CBT techniques. Therapists in community mental health centers can emphasize themes such as

rejecting images of incapacity and worthlessness, enhancing social empowerment, increasing functioning, maximizing autonomy, developing a strong therapeutic alliance, and using family therapy to manage expressed emotions. In addition, clinicians might role-play social skills training or practice decision-making to help patients adapt more effectively to their numerous psychosocial stresses [45]. While skills can be practiced, a full course of CBT or psychodynamic psychotherapy generally would not be possible in the time allotted. To combat this limitation, clinics can set aside a small percentage of 45–60-minute appointments that will permit routine psychotherapy. While this can provide residents some experience with psychotherapy, it is unlikely to provide an adequately thorough training experience. When psychotherapy is provided in these general outpatient psychiatry clinics, combined therapy is the norm.

Combined Therapy

For many residents combining psychotherapy with psychopharmacology has become their primary opportunity to practice psychotherapy. Although it might be a consequence of where they practice, it is also based on the recognition that neither psychotherapy nor psychopharmacology alone may be adequate for many patients. For example, patients with severe mental illnesses such as schizophrenia and bipolar disorder require psychopharmacology but receive additional benefits from adjunctive psychotherapy [46, 47]. With these practices in mind, there is growing recognition of the importance of a psychodynamic understanding in all psychiatric interactions.

Psychodynamically Informed Prescribing

Opportunities for psychodynamically informed prescribing abound in general psychiatric practice. Psychodynamically informed prescribing starts with the recognition that non-pharmacologic factors determine much of an individual's response to medication. The strength of the therapeutic alliance with the prescriber may be more important than the chosen medication, as effec-

tive psychiatrists often see significant responses even when they are prescribing placebos [48].

Psychodynamic issues arise throughout the prescribing process, such as why the medication is being prescribed, why the patient agrees to the medication, expectations of the medication's effects, and treatment adherence. Patients may arrive in the psychiatrist's office with the expectation that "I am coming to get a pill," but prescribers should reflect on why they are prescribing. Is there convincing evidence that this medication will be helpful, or are they prescribed for other reasons? Other reasons may be: (1) "I do not trust psychotherapy or my skills as a psychotherapist," (2) "I want the patient to like me, so I am giving them what they want," or (3) "I feel helpless in the face of their illness and this way I am at least doing something." Prescribers should also consider why the patient is agreeing to take the medication. Do they accept that they have an illness? Have they been convinced of the potential benefits of the medication? Are they trying to please the clinician or prevent the practitioner from abandoning them? Does the medication present an unrealistic hope for a better future? Does it solidify their identity as a "sick person"? Does taking a medication mean that they are not responsible for making changes in their life? Psychiatrists should take time to explore the patient's experiences with medication in the past and how these experiences impact their current decisions. Issues of non-adherence may also have a psychodynamic basis. Is the non-adherent patient defying the will of an authority figure? Does their illness provide an identity that successful treatment would strip away? Are they afraid of dependence or addiction to the medication [48–50]? These issues should be considered routinely in any outpatient clinical setting.

Split Versus Integrated Therapy

Patients receiving both medication and psychotherapy participate in either split therapy or integrated therapy. Split therapy occurs when a patient sees one clinician for psychotherapy and a different one for psychopharmacology. Classically this involves a psychiatrist prescribing medications and a nonphysician providing

psychotherapy, but other variations occur. For example, the patient might be receiving therapy from a psychiatrist and medications from their primary care provider, or rarely, seeing one psychiatrist for medication and another for therapy. Integrated therapy occurs when the same psychiatrist is providing psychotherapy and psychopharmacology.

Split therapy became more prominent as two trends coincided. First, a growing number of non-psychiatrists, including primary care providers, physician assistants, nurse practitioners, and, in some jurisdictions, even psychologists, felt increasingly comfortable prescribing psychotropic medications. At the same time, psychologists, social workers, and master's level therapists and counselors were gaining a foothold within managed care organizations. These organizations hoped that split therapy involving psychiatrists combined with nonphysician therapists offered less expensive but equally effective care [51, 52]. Other benefits were touted. Patients could choose any therapist they wanted, increasing their autonomy. Patients might find it easier to share information with one of their practitioners than with the other. With good communication, both psychiatrists and therapists will get the information they would not have uncovered personally. It also gave the appearance that psychiatrists were being used more efficiently. Psychiatrists would manage the complicated medication regimens of the sickest patients while leaving more routine care to other clinicians. Despite these promises, concerns were recognized from the beginning of the practice. What if the clinicians were competitive or non-supportive? What if the patient splits the practitioners, effectively making the team work against itself? What if the patient divulges different or contradictory information to the clinicians? Who would handle emergencies when they arose? It was hoped that regular communication between the clinicians would resolve those problems [51, 53].

Although split therapy has probably become the norm in the twenty-first century, few data-based studies have examined the efficacy and impact of this transition. The limited published studies do not support cost savings with split

therapy [51]. The overall increase in the number of appointments outweighs the decreased cost of the nonphysician therapist. Effective communication between clinicians occurs less frequently than anticipated. Both practitioners tend to see the other as relatively uninterested in communication. Because of their increased patient load and the decreased time they spend with individual patients, psychiatrists appear to know their patients less well [54]. Despite these concerns and efforts to improve parity in the treatment of mental illness, this trend does not seem likely to change soon.

In addition to split therapy, many psychiatry residents experience split supervision. This can occur when the clinical management of therapy patients is managed by one supervisor while the psychotherapy aspects are supervised by another. The clinical supervisor is the “supervisor of record” and signs off on the chart confirming the trainee’s assessment, diagnosis, and treatment plan. The psychotherapy supervisor will then discuss therapeutic conceptualizations of the same patient based on the type of therapy provided by the resident. The psychotherapy supervisor’s name will likely not appear in the medical record. Medication management of the patient may be handled by either or both supervisors. Managing disagreements between these two supervisors are rarely discussed before there is a problem. The medical literature currently does not provide clear boundaries between these roles or discuss the medical-legal liability of the psychotherapy supervisor in relation to the clinical supervisor.

Opportunities for Psychotherapy in Hospital or Acute Care Settings

The significant pressures within the inpatient practice environment to stabilize and discharge patients rapidly can erroneously reinforce the impression that the provision and teaching of psychotherapy belong only in the outpatient setting. The volume of material to teach residents about patient evaluation, risk assessment, biological treatments, and systems may also contribute to the perception that there is no place for psychotherapy learning in these settings. However, many opportunities exist to teach residents about psychotherapy in acute

services settings such as inpatient psychiatry, consult-liaison, or psychiatric emergency services. Attending psychiatrists teaching residents in these settings may, in fact, already be incorporating and role modeling the integration of psychotherapy techniques into their care. Still, they may not be aware that they are doing so or may not explicitly identify and model psychotherapy opportunities when working with resident learners.

With these barriers in mind, programs have several pathways for integrating psychotherapy into acute services settings. First, programs may have access to dedicated inpatient psychotherapy programs, such as an intensive DBT-based inpatient unit, and residents may be able to rotate on these services. However, many programs do not have access to these services and may not have the institutional resources to build such a service. Therefore, a practical pathway for these programs is to identify, highlight, and augment the use of psychotherapies in the program’s acute services settings as they currently exist. The inpatient service does not have to develop a formal, daily psychotherapy program if it lacks the resources. Instead, faculty can identify opportunities for integrating and teaching therapy techniques or “micro-therapies” that are already being used on the service. Examples of this are as follows:

- An inpatient attending demonstrates the use of empathic statements and reflective listening to build the treatment alliance and establish shared treatment goals with the patient (common elements of evidence-based psychotherapies)
- A resident rotating on the consult-liaison service is prompted by their attending to help guide a patient recovering from an overdose in constructing a narrative of what led to the overdose and identifying existing supports that they have in their faith community (supportive psychotherapy)
- An inpatient teaching team caring for a patient admitted for suicidality following a break-up helps the patient identify that he is making the cognitive error of overgeneralization, assuming the break-up means he is unlovable and

will never have a satisfying relationship (cognitive behavioral therapy)

- In safety planning with a patient presenting for transient suicidal ideation and non-suicidal self-injury, a psychiatric emergency services attending and resident teach the patient concrete distress tolerance skills before discharging her (dialectical-behavioral therapy)
- A consult-liaison psychiatrist discusses with the resident the impact of a patient's early life traumatic experiences on her mistrust of the treatment team (psychodynamic psychotherapy)

As illustrated by the examples, elements of all core psychotherapies can be found and taught in acute services settings. Programs interested in bolstering their residents' psychotherapy education in these settings may benefit from holding faculty development sessions to help acute care services faculty recognize when and how they are already doing psychotherapy. These sessions may utilize realistic vignettes like those listed above and offer faculty the additional opportunity to brainstorm and share their strategies for psychotherapy teaching on their services. Faculty development may also focus on familiarizing faculty supervisors with schools of psychotherapy with which they are less familiar.

For programs with limited expertise in specialized therapies, supportive psychotherapy and common elements of psychotherapy can still be taught in virtually any clinical service. The Three-Step Supportive Psychotherapy Manual is an accessible guide for programs interested in increasing psychotherapy teaching on their acute services. The manual can also be used as the basis for faculty development for clinician-educators teaching in acute services settings [55].

Other Modalities

Traditionally psychiatry residents could expect to run group, couples, and family therapy on inpatient units and in intensive outpatient or partial hospitalization programs. These modalities still exist, but they are less prominent within psychiatry residency training. When inpatient hospitalization lengths of stay were measured in weeks, individual and group therapy was a staple of

inpatient treatment. With inpatient hospitalizations in most facilities now lasting only a few days, those opportunities are less likely as the resident is consumed with admission notes, acute medication management, and discharge planning. Changes in residency requirements have also played a role.

In 2004, psychiatry residencies were required to provide their residents "sufficient experiences in the major types of therapy, including...family/couples therapy, group therapy...[17]." By 2007, that requirement had dropped to simply "exposure" to family, couples, and group therapy. By 2015, the requirements no longer mentioned any of these modalities. Residency program directors overwhelmed with other demands could hardly be expected to maintain this focus when it was no longer required. Of course, motivated programs, faculty members, and residents will seek out these experiences, but it is no longer required for psychiatry residents in training.

Supervising Clinical Experiences

Supervised clinical experiences are essential in developing as a psychotherapist, since learning about therapy cannot take the place of providing supervised therapy. In fact, the gold standard for psychotherapy training is didactic coursework along with a supervised clinical experience [56].

The goals of the didactics and supervision can be integrated as if they were a lecture and laboratory. The experiential laboratory component reinforces the class lecture. The didactic lesson offers a more comprehensive and theory-based understanding of what is observed and experienced in therapy. This approach allows for further integration of the classroom learning environment with clinical learning. It also requires that psychotherapy supervisors are familiar with the current content of the residents' didactic coursework, allowing the supervisor to reinforce the concepts learned in the classroom during the supervision discussion of clinical work when applicable [57].

Example – Following a didactic session on psychological defenses, the supervisor and supervisee watch the video of an eventful session looking for the patient's use of psychological defenses.

Supervision of CBT can also include tools developed and validated in assessing competency

in CBT. For example, instruments have been created to measure declarative and procedural knowledge, i.e., what they know about CBT and how they provide CBT. Perhaps the most widely used instrument is the Cognitive Therapy Scale (CTS) (also known as the Cognitive Therapy Rating Scale). The CTS includes 11 items which are scored from 0 to 6. Raters will observe a recording of a session and rate the 11 areas. Generally, a score of 40 is required for the therapist to be considered competent [58].

Maximizing Learning Within the Supervisory Relationship

Supervision Agreements

Supervisory agreements can assist both residents and supervisors, and can also improve trainee and supervisor satisfaction with the supervisory relationship [59]. The supervision agreement should ideally outline the duration of the supervisory relationship (most often one academic year), how cases will be presented (ideally using audio or video recordings), when notes will be expected to be routed to the supervisor for co-signature, and how patient emergencies will be handled. Ideally, a supervision agreement should also outline how challenges in the supervisory relationship will be addressed, as having this discussion at the outset of the relationship greatly increases the likelihood that any challenges that arise will be effectively approached and managed [60].

Therapy Video and Audio

Traditionally, supervision has utilized summaries of the resident's notes and recollection of the session, which allows the supervisor to understand the resident's experience, but does not provide the supervisor with objective information about the resident's performance. Having access to objective data (such as video or audio recordings) allows the supervisor to assess the therapy work more accurately, including observation of non-verbal behavior. This greatly enhances the learning in supervision by allowing for more behaviorally specific feedback to the trainee [61]. In fact, it has been demonstrated that feedback on objective data provides greater development of

competence compared to the traditional approach of reviewing process notes and a general discussion of case material [62, 63]. For this reason, review of therapy audio or video recordings is considered a supervisory best practice and is encouraged by the British Royal College of Psychiatrists [39].

Supervisors may use the recordings in different ways. As the supervisee-supervisor dyad watches the video together, the supervisor can stop the recording and ask the resident pertinent questions, e.g., "How would you describe your intervention? What other options did you have?". This process is one of reflective learning, a key element to adult learning. The supervisor and supervisee can discuss alternative interventions. As they learn more about the patient, the dyad can role-play situations that might occur.

Despite these educational benefits, it has been noted that "evaluation during training is often based on an apprenticeship model and narrative reports by trainees with subjective judgments of supervisors in clinical supervision rather than observed therapist behaviors" [1]. One reason that therapy recordings may not be utilized is residents' anxiety about the idea of recording their therapy sessions, including discomfort with viewing their own performance objectively, as well as fear of criticism from the supervisor. Therefore, supervisors must develop a supportive and positive relationship with their supervisees to foster trust in the process and confidence that feedback will be delivered constructively. It can also be helpful to establish video review as an expectation within supervision sessions and ensure that trainees feel confident with the recording process and the available recording equipment at their clinical site(s) [64].

Although the review of objective data in supervision can significantly enhance our trainees' educational experience, we must keep in mind the relevant ethical considerations, including patients' rights to privacy. Before any recording, patients must provide informed consent. Residents must be prepared to approach the topic of recording sessions with their patients to ensure that their patients understand the purpose of the recording request (for training), who will

see the recording (their supervisor only, or their supervisor and fellow residents if the recordings are used for learning purposes in seminar), how the recording will be stored, and the time frame during which the recording will be deleted (ideally within 1–2 weeks, after review by the resident and the supervisor). Patients also need to be fully informed that recording is optional and that their ability to receive psychotherapy will not be hindered if they elect not to give consent for recording [61, 65].

Webcams are an effective and affordable tool for recording therapy videos, and careful selection of software for secure storage of therapy videos is vitally important for patient privacy. Ideally, recordings can be stored on a secure shared drive accessible only by the supervisor and the supervisee. Training programs must work with their Information Management Department to ensure that all recording and storage processes are HIPAA-compliant [66].

For programs with limited ability to video record, audio recordings can be substituted to review session content. A plan to obtain patient consent for recording and procedures for secure storage, educational use, and destruction of recorded content should be reviewed with institutional compliance and privacy officers, as guidelines for recording may vary among institutions and geographic regions.

Supervisor Development

Psychotherapy supervisors for general psychiatry residents have a variety of professional backgrounds. They may be very senior faculty or new faculty fresh out of residency themselves. They may be psychiatrists, or they may be psychologists or experts with other academic backgrounds. They may specialize in a particular school of therapy, or they may be comfortable with multiple approaches. Supervisors may be members of a program's employed faculty who practice in the same clinics as the residents they supervise, or they may be "volunteer" faculty with practices elsewhere in the community who provide supervision in exchange for an academic appointment and relationship with the residency or medical school. There are also differences between vari-

ous fields in the way that supervisor competencies are addressed. Historically psychiatry residency training programs have viewed psychiatrist faculty members as ready to supervise based on their competency as a therapist. In contrast, the field of psychology has taken a more rigorous approach for outlining specific competencies for clinical supervisors [67].

With this range of backgrounds, supervisors for a single training program may have different needs for faculty development. Unfortunately, many programs have insufficient time and resources to offer a multitude of different faculty development opportunities. While programs may wish to have a small number of focused trainings for supervisors from specific demographics, such as a session providing an overview of the current resident clinic's population for volunteer faculty, training leaders can often use tools already at their disposal to identify high-yield topics that are relevant to all supervisors. These resources may include the program's annual ACGME surveys, residents' rotation, and supervisor evaluations, anecdotal feedback from residents or faculty, or expert guidance or external program requirements suggesting an area for growth. On a practical level, training program leaders must also decide on appropriate venues for supervisor development once topics have been identified. Critical issues in planning include the frequency and number of sessions, duration, timing, and format for content delivery. The following examples illustrate a variety of ways in which programs can match identified areas for growth with venues for faculty development:

After five supervisors retire in two years, a program brings in six new supervisors who have just recently completed their own training. The program director polls the new supervisors on their availability and sets up a supervision group specifically for them. The group takes place on the first Tuesday of every month at the end of the workday. The program director provides articles on core topics in supervision, and the new supervisors discuss these articles and provide peer supervision to each other on their work supervising residents. A Director of Psychotherapy Training notes comments in the residents' annual evaluation of their psychotherapy clinic suggesting they do not feel they are getting sufficient feedback on their work

as therapists. She sets up three faculty development sessions for psychotherapy supervisors over the academic year. In the first, core principles in giving feedback are reviewed; in the second, supervisors role-play giving each other feedback; in the third, she reviews the AADPRT-Milestones Assessment of Psychotherapy (A-MAP), a tool available on the AADPRT Virtual Training Office which can be used for providing feedback on core psychotherapy competencies, and faculty members review and rate video vignettes of simulated psychotherapy to practice using the tool.

A program director for a rural residency program can rarely get her psychotherapy supervisors together in one place, as they are geographically spread out and supervise primarily via telesupervision. Based on verbal feedback from her residents, she would like to support the supervisors' growth in diversity, equity, and inclusion (DEI). She plans quarterly meetings for all supervisors via videoconferencing over a lunch hour, and the supervisors use this time to discuss scenarios illustrating key points about DEI in psychotherapy supervision. She also sends a monthly email to supervisors providing a suggested "paper of the month" on DEI in the fields of medicine and psychotherapy.

As illustrated by the final example, topics related to diversity, equity, and inclusion are particularly important areas for supervisor development. While some supervisors have lived experience as members of minority communities themselves and may have expertise in diversity, equity, and inclusion, many supervisors do not and will need support from their training program to develop in this area. Within the psychotherapeutic relationship, trainees may experience a wide variety of racist, homophobic, or microaggressive statements and behavior from patients. Examples are numerous and may include overtly racist statements, intrusive questioning about a trainee's perceived racial/ethnic or cultural background, and comments that the patient perceives as positive but are actually microaggressive, e.g., a white patient stating, "I love Black people!" to her Black resident psychotherapist. Focused faculty development workshops can play an essential role in helping supervisors prepare for these experiences among their supervisees, including the supervisor's role in creating a supervisory space in which the resident can share these con-

cerns and preparedness for direct action to address the behavior with the patient [68, 69].

Faculty supervisors and other members of a resident's clinical learning environment are also not immune to implicit biases, and to the possibility of committing microaggressions towards trainees themselves. Examples may include using incorrect pronouns to reference a trainee, making assumptions or uninvited comments about a resident's perceived cultural background, and over-assumption of familiarity or expertise in the resident's culture. Framing microaggressive content from patients as purely representative of psychodynamic processes such as transference and resistance also can cause additional harm to trainees if their experiences of racism, homophobia, transphobia, etc., are not recognized and directly addressed. Again, focused faculty development on these topics is important and may take many forms, including workshops for psychotherapy supervisors, individual implicit bias training, Grand Rounds, and bystander or upstander training specific to the clinical learning environment.

More broadly, supervisors should also be prepared to help residents of all backgrounds recognize, respond to, and feel supported when they experience inappropriate or aggressive behavior from psychotherapy patients. Many residents will already have gained basic familiarity with this topic from prior clinical experiences in acute psychiatry settings, such as inpatient environments, before starting work with psychotherapy outpatients. Psychotherapy supervisors can continue this conversation with their supervisees as a natural extension of core learning about boundaries in psychotherapy. Supervisors should be prompted to ask residents directly about any experiences they may have had with these behaviors from their psychotherapy patients, as residents may be hesitant to bring up examples on their own based on assumptions that the patient's behavior is "normal" for psychotherapy or may be reflective of something that they, the resident, are doing incorrectly.

Psychotherapy Case Conference

A third major source of psychotherapy training is the psychotherapy case conference. Although there are considerable variations, we will describe a single example structure. The residents from all 4 years are divided into several case conferences in mixed class groups. Having groups with trainees of different training levels allows senior residents to teach junior residents. When junior residents ask questions about the case, the senior residents should be given a chance to answer the question. This process helps solidify the knowledge base of the residents approaching graduation. Even though first-year residents may not be seeing long-term therapy cases, they should be included in the conferences so that they can learn by watching their peers in action. On a rotating basis, residents are selected to present a history and an in-depth case formulation. Presenting to their peers ensures that the resident will take the writing of the formulation seriously. The other residents and faculty will provide a fresh perspective on the patient. The faculty can lead a discussion of the adequacy and accuracy of the formulation. They can also ask residents to hypothesize about the patient based on what they have heard, e.g., “Based on this patient’s relationship history, how do you expect that they will relate to Dr. X. as their therapist.” After completing this discussion, the resident will display segments of their psychotherapy. Often it is helpful for them to discuss the case with their supervisor to choose the most instructive portions of the session. The case conference members will be asked to watch the psychotherapy and comment on what they observe.

The conversation can be enhanced with questions from the faculty member, e.g., “How would you rate the therapeutic alliance?”, “Do you see examples of resistance?”, “Have you heard anything that would indicate transference is an issue here?”. Attendees can also be asked about alternatives, “What else could Dr. X do at this point?”, or predict what will happen next. The case conference conveys advantages that cannot be found with didactics or individual supervision. There are opportunities for peer support, and residents

are given a chance to develop supervisory skills. They will learn to evaluate therapy objectively, ask questions, and make comments to peers more productively.

Although residents are typically anxious about presenting in front of their peers, faculty members can assist with making the experience a valuable and formative opportunity for feedback by adopting a nonjudgmental tone of inquiry wherein different options are explored. This allows learners to take the risk of critiquing themselves and each other within a supportive and educational environment. Faculty members’ ongoing involvement in case conferences should be based on their ability to maintain an appropriately helpful and productive learning environment in this setting; tendencies toward excessive criticism and direction should be addressed by the residency training team. Self-assessment and identification of areas for growth are key components of lifelong learning. Ideally, the didactics, supervised clinical experiences, and psychotherapy case conferences are integrated and mutually supportive, enhancing the learning potential.

Personal Psychotherapy

Historically, participation in one’s own psychotherapy was also considered a cornerstone of a resident’s education in psychotherapy. Within the framework of modern general psychiatric training, personal psychotherapy may still be valuable for both personal mental health needs as well as educational benefits [70]. However, personal psychotherapy is a medical treatment, and as such, it carries both potential risks and benefits and cannot be universally required by a training program. Potential benefits of personal psychotherapy for residents include support for the resident during the stressors of training and treatment of a resident’s own mental health concerns, if present. Improvement in one’s own skills as a psychotherapist is also a potential benefit. Literature evaluating the positive impact of personal psychotherapy on residents’ skills as psychotherapists has described enhanced empathy, improved ability to manage one’s own emotional responses

to patients, a better understanding of transference and countertransference, understanding of therapeutic technique, and genuineness as a therapist as potential benefits. Potential risks may include worsening of mood symptoms, blurring of boundaries or overidentification with patients, transient experiences of difficult or painful affective states, and negative impact on relationships or professional performance. Financial stresses may also be significant, particularly if costs are incurred that are not covered by a resident's health insurance policy [70, 71].

Faculty with whom a resident has a trusting relationship, including program directors, Directors of Psychotherapy Training, and psychotherapy supervisors, may have important roles in helping individual residents think through and identify appropriate referrals, likely benefits, and potential downsides in personal psychotherapy for that individual's situation. Residents' personal primary care providers and institutional Employee Assistance Programs may also help with referrals when needed, and in some cases, residents may feel more comfortable having these conversations with their personal providers rather than training faculty; when this occurs, it should be respected as it relates to residents' own personal health information. In reality, the difference between personal psychotherapy for education and personal psychotherapy for distress is not clear-cut and should be handled with discretion.

ACGME program requirements mandate that all training programs give trainees time for medical, mental health, and dental appointments, including appointments scheduled during working hours [72]. In practice, it will likely not be possible for program directors to determine whether a resident is pursuing psychotherapy for educational benefit, personal mental health concerns, or both; this also may change over the course of a resident's work with a personal therapist. With this in mind, protecting personal therapy for residents who choose to pursue it is a prudent approach, as it ensures programs will comply with ACGME requirements and allows for appropriate protection of and boundaries around requests for residents' personal health

information. However, if appointments are regular, e.g., weekly therapy, it is reasonable to talk with residents about utilizing appointment times that are not routinely disruptive to workflow or learning, such as times outside of daily rounds for residents on inpatient services.

Resources for Teaching SPT, CBT, and Psychodynamic Psychotherapy

Resources are available to training programs for crafting a comprehensive psychotherapy didactic curriculum and providing faculty development to supervisors. These resources include professional organizations, core textbooks and articles, mentorship from national colleagues, existing model curricula, and online resources. Professional organizations offering resources for psychotherapy training include both organizations focused on psychiatry education and those focusing on psychotherapy or specific modalities of psychotherapy. The American Association of Directors of Psychiatric Residency Training (AADPRT) has an active Psychotherapy Committee, which typically sponsors multiple workshops each year on psychotherapy teaching and curricula at the AADPRT annual meeting. AADPRT maintains a database of psychotherapy teaching resources in the organization's Virtual Training Office (VTO); resources include training videos, materials from prior annual meeting workshops, descriptions of recommended competencies in psychotherapy, and additional teaching tools. The VTO also contains a guide to suggested resources curated by the AADPRT psychotherapy committee; this guide includes suggested texts, teaching institutes, websites, and mentors for teaching the core psychotherapies, interpersonal psychotherapy, dialectical-behavioral therapy, psychoanalysis, and child and adolescent psychotherapy.

The AADPRT VTO, Academic Psychiatry, and MedEdPORTAL® all offer model curricula or reviews of curricular innovation in psychotherapy education that can be helpful for programs seeking to augment their didactics teaching. AADPRT also co-sponsors the annual Victor

Teichner Award with the American Academy of Psychoanalysis and Dynamic Psychiatry (AAPDP). This award promotes the development and improvement of psychodynamic teaching in training programs by matching selected training programs with expert faculty scholars to enhance the program's psychodynamic education. Once a training program is selected for the award, the program directors can choose their visiting scholar from amongst a pool of Teichner Scholars and then work with this individual to craft a schedule for the visit which will meet the unique educational needs of that particular training program. This schedule will typically include didactics, grand rounds, faculty development seminars, case conferences, and live patient interviews and can also include opportunities for mentorship for program directors [4].

The Association for Academic Psychiatry (AAP) holds an annual conference including workshops and plenaries that focus on pedagogical techniques and general psychiatric education at all training levels, including topics relevant to resident education in psychotherapy. Other organizations that offer learning opportunities to support psychotherapy curricula include the American Academy of Psychodynamic Psychiatry and Psychoanalysis (AAPDPP), the American Psychoanalytic Association (APsA), the International Society for Interpersonal Psychotherapy, the Association for Behavioral and Cognitive Therapy (ABCT), and the American Psychiatric Association (APA) Psychotherapy Committee. These organizations offer specialized training opportunities and opportunities to network with and learn from other psychotherapy educators and practitioners. In addition, many professional organizations focusing on specific schools of psychotherapy also have links to helpful educational materials and teaching resources on their websites.

Local and national training institutes can be an additional source of support for training programs' didactic curricula. Examples of such institutes include multiple local psychoanalytic training institutes, the Beck Institute (CBT), and Behavioral Tech (DBT). Similar to professional organizations, training institutes may offer addi-

tional online resources for psychotherapy education and continuing education for teaching faculty. Training institutes may also have faculty interested in providing guest lectures or consultations on psychotherapy didactics. In addition, the advent of videoconferencing may facilitate broader use of their expertise for geographically distant training programs. Finally, training institutes and professional organizations are also valuable resources for training programs seeking to augment their curriculum beyond the core ACGME-required competencies, again facilitating access to teaching resources and colleagues with expertise in psychotherapeutic subspecialties.

Table 13.2 outlines some of the commonly used psychotherapy textbooks used within psychiatry residency training programs.

Resources for Psychotherapy Supervisors

As psychotherapy has been given less emphasis during training, finding psychiatrists to supervise psychotherapy has become more difficult. Younger psychiatrists with less experience as psychotherapists are sometimes asked to train and supervise psychiatry residents. Many programs have chosen to use nonphysician supervisors for psychotherapy. In a survey of 72 psychiatry chief residents, 61% said that resident competency in psychotherapy was assessed by nonphysician psychotherapy supervisors in their programs [73]. Nonphysician supervision allows residents to receive training and supervision by well-trained professionals, but further embeds the belief that psychotherapy is no longer a central skill for psychiatrists. There are a number of resources available for those programs and individuals who want to become more proficient at supervision. *Academic Psychiatry*, published monthly by Springer, and other journals have produced a small number of articles describing techniques to improve supervision. An example published by one of the authors describes a pilot program of monthly supervisor peer support groups. The group consisted of a brief didactic

Table 13.2 Commonly used psychotherapy textbooks in psychiatry residency training

| Core psychotherapy modality | Commonly used core textbooks |
|---|--|
| Common elements of psychotherapy and Supportive psychotherapy | Beitman BD and Yue D. <i>Learning psychotherapy: A time-efficient, research-based, and outcome-measured psychotherapy training program</i> . New York (NY): WW Norton & Company; 2004. Bender S, and Messner E. <i>Becoming a therapist: What do I say, and why?</i> . New York (NY): Guilford Press; 2003. Brenner A, and Howe-Martin L. <i>Psychotherapy: A Practical Introduction</i> . Philadelphia (PA): Lippincott Williams & Wilkins; 2020. Novalis PN, Singer V, Peele R. <i>Clinical manual of supportive psychotherapy</i> . Washington (DC): American Psychiatric Publishing; 2019. Winston A, Rosenthal RN, Roberts LW. <i>Learning supportive psychotherapy: An illustrated guide</i> . Washington (DC): American Psychiatric Publishing; 2019. |
| Psychodynamic psychotherapy | Cabaniss DL, et al. <i>Psychodynamic Psychotherapy: A clinical manual</i> . West Sussex (UK): John Wiley & Sons; 2016. Gabbard GO. <i>Long-term psychodynamic psychotherapy: A basic text</i> . Washington (DC): American Psychiatric Publishing; 2017. Summers RF and Barber JP. <i>Psychodynamic therapy: A guide to evidence-based practice</i> . New York (NY): Guilford Press; 2010. McWilliams N. <i>Psychoanalytic psychotherapy: A practitioner's guide</i> . New York (NY): Guilford Press; 2004. |
| Cognitive behavioral therapy | Beck, JS. <i>Cognitive Behavioral Therapy: Basics and Beyond (2nd ed.)</i> New York (NY): The Guilford Press; 2011. Sudak DM. <i>Cognitive behavioral therapy for clinicians</i> . Philadelphia (PA): Lippincott Williams & Wilkins; 2006. Sudak, DM, et al. <i>Teaching and supervising cognitive behavioral therapy</i> . Hoboken (NJ): John Wiley & Sons; 2015. Wright JH, et al. <i>Learning cognitive-behavior therapy: An illustrated guide</i> . Washington (DC): American Psychiatric Publishing; 2017. |

discussion followed by a general discussion and peer support for challenges experienced in supervision. Specific tools and techniques would be reviewed and role-played by the group. The vast majority of attendees (85%) found these sessions to be very or extremely useful, and all said that they used at least one of the tools [74]. Another recently published resource is *Supervision in Psychiatric Practice: Practical Approaches Across Venues and Providers*, edited by Sallie G. De Golia MD. MPH and Kathleen M. Corcoran Ph.D. and published by American Psychiatric Association Publishing. Its 50 chapters provide practical instructions for the new or experienced supervisor. The AADPRT Virtual Training Office (VTO) is also a valuable resource for up-to-date resources for supervision, including a Supervision Resources folder that contains a series of brief practical guides on core topics in supervision developed by a workgroup of the AADPRT Psychotherapy Committee. These

practical guides cover core topics in supervision, including structuring supervision, monitoring progress in supervision, videotaping, and an overview of psychiatrist training for psychologist supervisors of residents. A bibliography of over 25 additional print and multimedia resources on diversity, equity, and inclusion is also included

Rating Scales and Feedback Tools

The Psychotherapy Committee of the American Association of Directors of Psychiatric Residency Training (AADPRT) has produced valuable resources for supervisors. Over the last 7 years, they have produced several instruments meant to assist in assessing psychotherapy and providing impactful feedback to trainees. A common thread in the instruments is that the supervisor will watch a segment of therapy (either live or recorded) and then use the tools to start a discussion. The tools are as follows:

- AADPRT-Milestones Assessment of Psychotherapy (A-MAP)
 - The *A-MAP* focuses on three common elements of psychotherapy – Boundaries, Empathy, and Therapeutic Alliance. One unique aspect of this form is that it includes observable anchor points and then scripted questions to start a conversation with the trainee.
- AADPRT Supportive Therapy Rating Scales (ASTRS)
 - *ASTRS – A (Attitudes)* – The *ASTRS-A* focuses on five domains – Alliance, Empathy, Nonjudgmental Acceptance, Respect, and Active Listening. Each of these has a list of anchor points for a 1–5 rating
 - *ASTRS – S (Skills)* – The *ASTRS-S* is a list of 16 interventions typically used in Supportive Therapy. The rater notes if the intervention was used properly, used expertly, or if an opportunity to use the intervention was missed.
- AADPRT Foundations of Psychodynamic Psychotherapy
 - The *AADPRT Foundations of Psychodynamic Psychotherapy – Priorities* uses categories that have been described as being common to all psychodynamic approaches [21]. The supervisor rates the trainee’s performance in the following domains:
 - Focusing on affect and expression of emotions
 - Exploring attempts to avoid distressing thoughts and feelings
 - Identifying recurring themes and patterns in relationships
 - Discussing past experiences, Focusing on the therapy relationship
 - Exploring fantasy life
 Again, there are anchor points that will allow the rater to assign a 1–5 rating.
 - *AADPRT Foundations of Psychodynamic Psychotherapy – Interventions* is similar to the *ASTRS-S* in using a list of interventions

commonly used in psychodynamic psychotherapy. The observer notes which opportunities were missed and which interventions were used skillfully.

These forms could be used to “give a grade” to the trainee, but that is not their intent. Instead, they are meant to provide a standardized, systematic review of the conduct of therapy and to use those observations to provide meaningful feedback to the trainee. This standardized assessment and observation-based feedback is a key to improving performance.

As has been described above, there are many tools available to help in the assessment of CBT, such as the Cognitive Therapy Scale (CTS), which assesses general psychotherapy skills as well as CBT-specific skills [58].

Summary

When building a thorough, meaningful, and comprehensive psychotherapy training experience for psychiatry residents, training programs encounter numerous challenges. These can include difficulties in funding psychotherapy clinics, maintaining an adequate number of psychiatry faculty who supervise and model the use of psychotherapy by psychiatrists, and in some instances, bridging resource gaps for teaching and supervising specific modalities of psychotherapy. However, psychotherapy is an effective treatment for psychiatric patients, and psychiatry training programs must maintain a strong focus on psychotherapy as a core practice component of psychiatrists. There are many resources available through various professional organizations that can empower training programs to overcome barriers and successfully develop these vitally important training experiences for their residents. When trainees understand the indispensable nature of these vital skillsets in their daily clinical practice and develop their competence in these areas, they graduate from our training programs ready to provide the best possible care to their patients.

References

- Ravitz P, Lawson A, Fefergrad M, Rawkins S, Lancee W, Maunder R, Leszcz M, Kivlighan DM. Psychotherapy competency milestones: an exploratory pilot of CBT and psychodynamic psychotherapy skills acquisition in junior psychiatry residents. *Acad Psychiatry*. 2019;43(1):61–6.
- Mojtabai R, Olfson M. National trends in psychotherapy by office-based psychiatrists. *Arch Gen Psychiatry*. 2008;65(8):962–70.
- Mojtabai R, Olfson M. National trends in psychotropic medication polypharmacy in office-based psychiatry. *Arch Gen Psychiatry*. 2010;67(1):26–36.
- Katz DA, Downey JI. Visiting psychodynamic scholars enhance psychodynamic learning for psychiatric residents. *Psychodynamic Psychiatry*. 2019;47(3):257–74.
- Calabrese C, Sciolla A, Zisook S, Bitner R, Tuttle J, Dunn LB. Psychiatric residents' views of quality of psychotherapy training and psychotherapy competencies: a multisite survey. *Acad Psychiatry*. 2010;34(1):13–20.
- Kay J, Myers MF. Current state of psychotherapy training: preparing for the future. *Psychodynamic Psychiatry*. 2014;42(3):557–73.
- Kovach JG, Dubin WR, Combs CJ. Psychotherapy training: residents' perceptions and experiences. *Acad Psychiatry*. 2015;39(5):567–74.
- Wallerstein RS. The future of psychotherapy. *Bull Menn Clin*. 1991;55(4):421.
- Mellman LA. How endangered is dynamic psychiatry in residency training? *J Am Acad Psychoanal Dynamic Psychiatry*. 2006;34(1):127–33.
- Rodenhauser P. Psychiatry residency programs: trends in psychotherapy supervision. *Am J Psychother*. 1992;46(2):240–9.
- Shedler J. The efficacy of psychodynamic psychotherapy. *Am Psychol*. 2010;65(2):98.
- Mellman LA, Beresin E. Psychotherapy competencies: development and implementation. *Acad Psychiatry*. 2003;27(3):149–53.
- Zisook S, Mcquaid JR, Sciolla A, Lanouette N, Calabrese C, Dunn LB. Psychiatric residents' interest in psychotherapy and training stage: a multi-site survey. *Am J Psychother*. 2011;65(1):47–59.
- Bhugra D, Tasman A, Pathare S, Priebe S, Smith S, Torous J, Arbuckle MR, Langford A, Alarcón RD, Chiu HF, First MB. The WPA-lancet psychiatry commission on the future of psychiatry. *Lancet Psychiatry*. 2017;4(10):775–818.
- Edgar L., McLean, S., Hogan, S.O., Hamstra, S., Holmboe, E.S. The Milestones Guidebook. By the Accreditation Council for Graduate Medical Education (ACGME) 2020; Accessed at <https://www.acgme.org/Portals/0/MilestonesGuidebook.pdf> on 5 July 2021.
- Miller SI, Scully JH, Winstead DK. The evolution of core competencies in psychiatry. *Acad Psychiatry*. 2003;27(3):128–30.
- ACGME. Program requirements for residency training in psychiatry (2004) found at acgme/www.acgme.org accessed 16 July 2021
- ACGME. Program requirements for residency training in psychiatry (2007) found at acgme/www.acgme.org accessed 16 July 2021.
- Macaluso M, Kinzie M, Cowley D, Houston LJ, DeJong S, Janssen F, Bentman A, Edgar L, Campbell B, Bowen L, Aronowitz J. The psychiatry milestones 2.0: how did we get from 1.0 to 2.0 and what can users expect? *Acad Psychiatry*. 2020;44(6):779–84.
- Plakun EM, Sudak DM, Goldberg D. The Y model: an integrated, evidence-based approach to teaching psychotherapy competencies. *J Psychiatr Pract*. 2009;15(1):5–11.
- Blagys MD, Hilsenroth MJ. Distinctive features of short-term psychodynamic-interpersonal psychotherapy: a review of the comparative psychotherapy process literature. *Clin Psychol Sci Pract*. 2000;7(2):167–88.
- Sudak DM. Core competencies in cognitive behavioral therapy training. In: Sudak DM, Codd RT, Ludgate JW, Sokol L, Fox MG, Reiser RP, Milne DL, editors. *Teaching and supervising cognitive behavioral therapy*. Hoboken: Wiley; 2016. p. 67–84.
- Truong A, Wu P, Diez-Barroso R, Coverdale J. What is the efficacy of teaching psychotherapy to psychiatry residents and medical students? *Acad Psychiatry*. 2015;39(5):575–9.
- Epstein RM. Virtual physicians, health systems, and the healing relationship. *J Gen Intern Med*. 2003;18(5):404.
- Hojat M, Louis DZ, Markham FW, Wender R, Rabinowitz C, Gonnella JS. Physicians' empathy and clinical outcomes for diabetic patients. *Acad Med*. 2011;86(3):359–64.
- Mahmoudian A, Zamani A, Tavakoli N, Farajzadegan Z, Fathollahi-Dehkordi F. Medication adherence in patients with hypertension: does satisfaction with doctor-patient relationship work? *J Res Med Sci: Off J Isfahan Univ Med Sci*. 2017;22:1–6.
- Thompson L, McCabe R. The effect of clinician-patient alliance and communication on treatment adherence in mental health care: a systematic review. *BMC Psychiatry*. 2012;12(1):1–2.
- Weiss KA, Smith TE, Hull JW, Piper AC, Huppert JD. Predictors of risk of non-adherence in outpatients with schizophrenia and other psychotic disorders. *Schizophr Bull*. 2002;28(2):341–9.
- Wampold BE. How important are the common factors in psychotherapy? An update. *World Psychiatry*. 2015;14(3):270–7.
- Brenner AM. How to begin: empathy, alliance, and boundaries. In: Brenner AM, Howe-Martin LS, editors. *Psychotherapy: a practical introduction*. Philadelphia (PA): Wolters Kluwer; 2021. p. 69–101.
- Elvins R, Green J. The conceptualization and measurement of therapeutic alliance: an empirical review. *Clin Psychol Rev*. 2008;28(7):1167–87.
- VanBuskirk KA, Wetherell JL. Motivational interviewing with primary care populations: a sys-

- tematic review and metaanalysis. *J Behav Med.* 2014;37(4):768–80.
33. Rockland LH. A review of supportive psychotherapy, 1986-1992. *Psychiatr Serv.* 1993;44(11):1053–60.
 34. Welton RS, Crocker EM. Supportive therapy in the medically ill: using psychiatric skills to enhance primary care. *Prim Care Companion CNS Disord.* 2021;23(1):20nr02758.
 35. Crocker EM. Supportive psychotherapy. In: Black DW, editor. *Psychotherapy.* Scientific American Psychiatry; 2017.
 36. Wright JH, Sudak DM, Turkington D, Thase ME. High-yield cognitive-behavior therapy for brief sessions: an illustrated guide. Washington, DC: American Psychiatric Pub; 2010.
 37. Thornton L. Psychodynamic psychotherapy. In: Brenner AM, Howe-Martin LS, editors. *Psychotherapy: a practical introduction.* Philadelphia (PA): Wolters Kluwer; 2021. p. 165–210.
 38. Feinstein R, Heiman N, Yager J. Common factors affecting psychotherapy outcomes: some implications for teaching psychotherapy. *J Psychiatr Pract.* 2015;21(3):180–9.
 39. Weerasekera P. The state of psychotherapy supervision: recommendations for future training. *Int Rev Psychiatry.* 2013;25(3):255–64.
 40. Ravitz P, Silver I. Advances in psychotherapy education. *Can J Psychiatry.* 2004;49(4):230–7.
 41. Stolovitch HD, Keeps EJ. Adult learning principles. In: *Telling Ain't training: updated, expanded, and enhanced.* Danvers: American Society for Training and Development; 2011. p. 49–69.
 42. Gastelum ED, Hyun AM, Goldberg DA, Stanley B, Sudak DM, Cabaniss DL. Is that an unconscious fantasy or an automatic thought? Challenges of learning multiple psychotherapies simultaneously. *J Am Acad Psychoanal Dynamic Psychiatry.* 2011;39(1):111–32.
 43. Steinberg E, Gedzior J, Mervis P, Lulof P. Group cotherapy in a training clinic. *Group.* 2013;37(3):229–37.
 44. Dagg PK, Evans JB. The synergy of group and individual psychotherapy training. *Am J Psychother.* 1997;51(2):204–9.
 45. Brenner AM. Psychotherapy in the community mental health setting. In: Brenner AM, Howe-Martin LS, editors. *Psychotherapy: a practical introduction.* Philadelphia (PA): Wolters Kluwer; 2021. p. 239–60.
 46. White M, Koehler H. Integrating medication and therapy. In: Brenner AM, Howe-Martin LS, editors. *Psychotherapy: a practical introduction.* Philadelphia (PA): Wolters Kluwer; 2021. p. 343–62.
 47. Beitman BD, Blinder BJ, Thase ME, Riba M, Safer DL. Psychotherapy during pharmacotherapy. In: *Integrating psychotherapy and pharmacotherapy: dissolving the mind-brain barrier.* New York: W.W. Norton & Company; 2003. p. 35–71.
 48. Mintz DL, Flynn DF. How (not what) to prescribe: nonpharmacologic aspects of psychopharmacology. *Psychiatr Clin.* 2012;35(1):143–63.
 49. Mintz D. Psychodynamic Trojan horses: using psychopharmacology to teach psychodynamics. *J Am Acad Psychoanal Dynamic Psychiatry.* 2006;34(1):151–61.
 50. Beitman BD, Blinder BJ, Thase ME, Riba M, Safer DL. Research in combined treatments. In: *Integrating psychotherapy and pharmacotherapy: dissolving the mind-brain barrier.* New York: W.W. Norton & Company; 2003. p. 3–11.
 51. Balon R. Positive and negative aspects of split treatment. *Psychiatr Ann.* 2001;31(10):598–603.
 52. Goldman W, McCulloch J, Cuffel B, Zarin DA, Suarez A, Burns BJ. Outpatient utilization patterns of integrated and split psychotherapy and pharmacotherapy for depression. *Psychiatr Serv.* 1998;49(4):477–82.
 53. Riba M, Balon R. The challenges of Split treatment. In: *Integrating psychotherapy and pharmacotherapy: dissolving the mind-brain barrier.* New York: W.W. Norton & Company; 2003. p. 141–60.
 54. Gitlin MJ, Miklowitz DJ. Split treatment: recommendations for optimal use in the care of psychiatric patients. *Ann Clin Psychiatry.* 2016;28(2):132–7.
 55. Kane AS, Lenet AE, Cabaniss DL. Psychotherapy in the emergency room / crisis clinical encounter. In: Brenner AM, Howe-Martin LS, editors. *Psychotherapy: a practical introduction.* Philadelphia (PA): Wolters Kluwer; 2021. p. 291–311.
 56. Weissman MM, Verdelli H, Gameraff MJ, Bledsoe SE, Betts K, Mufson L, Fitterling H, Wickramaratne P. National survey of psychotherapy training in psychiatry, psychology, and social work. *Arch Gen Psychiatry.* 2006;63(8):925–34.
 57. Cabaniss DL, Arbuckle MR. Course and lab: a new model for supervision. *Acad Psychiatry.* 2011;35:220.
 58. Sudak DM. Measures of competence in cognitive behavioral therapy. In: Sudak DM, Codd RT, Ludgate JW, Sokol L, Fox MG, Reiser RP, Milne DL, editors. *Teaching and supervising cognitive behavioral therapy.* Hoboken: John Wiley & Sons Inc; 2016. p. 25–36.
 59. Lawton B, Feltham C. Taking supervision forward: enquiries and trends in counselling and psychotherapy. London: Sage; 2000.
 60. Crocker EM, Sudak DM. Making the most of psychotherapy supervision: a guide for psychiatry residents. *Acad Psychiatry.* 2017;41(1):35–9.
 61. Haggerty G, Hilsenroth MJ. The use of video in psychotherapy supervision. *Br J Psychother.* 2011;27(2):193–210.
 62. Weerasekera P, Antony MM, Bellissimo A, Bieling P, Shurina-Egan J, Spencer A, Whyte R, Wolpert-Zur A. Competency assessment in the McMaster psychotherapy program. *Acad Psychiatry.* 2003;27(3):166–73.
 63. Weerasekera P. Psychotherapy update for the practicing psychiatrist: promoting evidence-based practice. *Focus.* 2010;8(1):3–18.
 64. Topor DR, AhnAllen CG, Mulligan EA, Dickey CC. Using video recordings of psychotherapy sessions in supervision: strategies to reduce learner anxiety. *Acad Psychiatry.* 2017;41(1):40–3.
 65. Funkenstein AB, Kessler KA, Schen CR. Learning through the lens: ethical considerations in videotaping psychotherapy. *Harv Rev Psychiatry.* 2014;22(5):316–22.

66. Manring J, Greenberg RP, Gregory R, Gallinger L. Learning psychotherapy in the digital age. *Psychotherapy*. 2011;48(2):119.
67. Falender CA. Clinical supervision—the missing ingredient. *Am Psychol*. 2018;73(9):1240.
68. Taneja E, Sehgal P, Greenlee A, Frank AA. To dodge or disclose: a faculty development workshop to promote discussion of racial/ethnic minority trainee cultural identity. *Acad Psychiatry*. 2019;43(2):239–43.
69. Goldenberg MN, Cyrus KD, Wilkins KM. ERASE: a new framework for faculty to manage patient mistreatment of trainees. *Acad Psychiatry*. 2019;43(4):396–9.
70. Hahl S, Mintz DL, Bailey A. The role of personal therapy in psychiatric residency training: a survey of psychiatry training directors. *Acad Psychiatry*. 2010;34(1):21–6.
71. Brenner AM. The role of personal psychodynamic psychotherapy in becoming a competent psychiatrist. *Harv Rev Psychiatry*. 2006;14(5):268–72.
72. Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Psychiatry. 2021. Accessed 11/26/2021.
73. Khurshid KA, Bennett JI, Vicari S, Lee KL, Broquet KE. Residency programs and psychotherapy competencies: a survey of chief residents. *Acad Psychiatry*. 2005;29(5):452–8.
74. Welton R, Nelson S, Cowan A, Correll T. Supporting and training psychotherapy supervisors. *Acad Psychiatry*. 2019;43(4):464–5.



Teaching and Evaluating Professionalism

14

Sandra M. DeJong

Introduction: Defining Professionalism

In the United States graduate medical education (GME), the Accreditation Council for Graduate Medical Education (ACGME) introduced Professionalism as one of the six Core Competencies for all medical specialties in 1999 and as a competency to be evaluated under the New Accreditation System (NAS) in 2013 [2–4]. The importance of effectively teaching and assessing professionalism lies in its potential to address perceived threats to medicine and psychiatry—loss of professional identity, decline in quality of care, commercialization, increasing use of technology, and decreasing humanism. Teaching professionalism during residency may prevent future disciplinary actions for physicians [5–13]. Professionalism is also increasingly recognized as key to high-quality psychiatric care for diverse patients [14].

However, defining professionalism has proven challenging; as a result, how to teach and assess it remains a subject of much discussion. Professionalism norms and perceptions vary by an individual’s developmental stage, gender, age, generation, and by geographic, ethnic, and insti-

tutional cultures [11, 15, 16]. Over the course of healthcare careers, views of professionalism may shift [17, 18]. A 2014 systematic review and qualitative meta-synthesis of the medical professionalism literature that set out to establish an optimal definition of professionalism concluded that no such single definition existed: Some theories, like Swick’s, emphasize values, ethics, and morality [11]; others focus on humanistic qualities such as empathy and emotional intelligence [19]; still others, such as the Physicians Charter, speak of professionalism as based on a “social contract” [20].

Given the lack of a consensus definition, a broad-brush model of conceptualizing professionalism in residency training is to think about it in terms of: (1) *characteristics of an individual* (e.g., integrity, clinical excellence); (2) *characteristics of a resident physician in the context of relationships* with faculty, colleagues, and patients (e.g., maintains appropriate boundaries; is altruistic, culturally humble, and curious); and (3) *characteristics of the resident physician in the larger healthcare system and community* (e.g., advocate, public servant) [20, 21].

Such characteristics can be difficult to measure; ACGME focuses instead on a *behavior-based model*, with milestones such as “Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations” and “Independently develops a plan to promote personal and professional well-being” [22].

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The *professional identity formation* approach to conceptualizing professionalism combines psychological concepts of identity formation with social learning theory. It posits that each individual develops in a unique fashion from layperson to physician in the context of a “community of practice,” where a *socialization* process—including role modeling, direct instruction, coaching, assessment, and feedback—occurs [1]. This developmental approach suits the lengthy training process of physicians from undergraduate through graduate and continuing medical education (CME). The task of the residency program director is to keep in mind this long trajectory and contextual approach while working on the day-to-day details of residency training. Doing so often requires combining aspects of the Professionalism Identity Formation approach with other approaches.

ACGME has recently “harmonized” Psychiatry’s Professionalism core competency with the sub-competencies and milestones of other medical specialties. The result was four sub-competencies [23]:

1. PROF 1 Professional behavior and ethical principles
2. PROF 2 Accountability and conscientiousness
3. PROF 3 Well-being
4. PROF 4 Professional identity and development

A Supplemental Guide offers specific examples and resources [24].

While principles of professionalism largely transcend differences between medical specialties, as evidenced by the recent “harmonizing,” the nature of psychiatric practice may require a higher standard of professionalism for psychiatrists [25]. Psychiatrists are their own instruments in understanding and helping patients, and must engage in self-reflection at the highest level, including exploring and understanding their countertransference. The potential social-emotional and cognitive vulnerabilities of psychiatric patients require heightened attention to the power differential of the doctor-patient rela-

tionship and respect for boundaries. Confidentiality and privacy are particularly important in mental healthcare given the stigma still associated with mental disorders. As a field, rather than barring self-interest or personal feelings or cultural self-expression, we may work to acknowledge and understand these facets of both doctor and patient and integrate them in a self-aware manner into the work that we do.

Thus, professionalism in psychiatry encapsulates behavioral conduct and a conceptual approach to situations in which one’s role is that of a psychiatrist. It is also a way of being in the work setting and the world. Educators cannot assume that residents will know about and understand professionalism in all its behavioral, conceptual, and identity aspects. Professionalism must be taught.

What Is Core Professionalism Content?

“Professionalism” in a didactic curriculum may be conceptualized as a Venn diagram of intersecting circles: professionalism principles, biomedical ethics concepts, and federal and state laws as they pertain to mental health [26–30]. The intersection represents areas where professionalism, ethical principles, and legal requirements overlap; for example, respecting the confidentiality of patient information is professional, ethical, and required by law. Content in each of these three areas will need to be explicitly taught during residency. Such teaching might include the Physician Charter on professionalism in the new millennium, the American Medical Association (AMA) Principles of Medical Ethics with Annotations Especially Applicable to Psychiatry, and the Code of Ethics from the American Academy of Child and Adolescent Psychiatry (AACAP) [20, 29, 30]. Research ethics can be taught as part of clinical scholarship or research literacy seminars. Legal requirements about confidentiality (the Health Insurance Portability and Accountability Act, HIPAA), mandated reporting, and civil commitment are important to understand in terms of the principles behind them, and the tensions

between autonomy/ individual rights and our duty as physicians to protect. Residents also will need to know about institutional policies regarding professionalism issues such as dress codes and social media expectations. This content should be repeated and underscored throughout the residency didactic curriculum.

The far greater challenge is teaching professionalism in the clinical learning environment (CLE). Learning to apply professionalism principles to practice is both an explicit and an implicit process. Developing trainees will need to practice self-reflection in understanding their own attributes and behaviors in their clinical work. They will concurrently be absorbing the implicit messages about professionalism from their teachers and mentors and from the clinical learning environment as a whole. Research emphasizes the importance of the alignment between what residents are *taught* about professionalism and what they *witness* every day in their faculty and senior resident and fellow role models. A “do-as-I-say-not-as-I-do” culture frustrates new learners who report that such experiences can negate the compassion they felt when they entered the field and undercut explicit professionalism teaching [31–33].

Program directors will also need to practice self-reflection, engaging in ongoing monitoring of their own personal role modeling of professionalism and that of their faculty. Program directors can collaborate with departmental and institutional leadership to set standards of professionalism for faculty in the clinical learning environment with a “growth” rather than a “performance” mindset. An example might be the process in which Departments and training programs have recently engaged in self-inventories of diversity, equity, and inclusion and efforts to address cultures of systemic racism [34]. Professionalism slips and lapses are best when identified by the perpetrator and worked through in a collegial or supervisory relationship with a view toward improvement rather than punishment. However, sometimes disciplinary or other action may be necessary depending upon the level of egregiousness of the lapse. The Professionalism Identity Formation model can

help in providing a nonjudgmental, growth-focused approach.

Certain topics have risen in importance in recent thinking about professionalism education in psychiatry. These include digital technology and “e-Professionalism”; diversity, equity, inclusion, and structural competency; and interprofessional collaboration.

As the digital revolution has rapidly advanced and permeated medical service and education, so too have digital professionalism concerns: online professionalism lapses [35, 36]; challenges to standards such as privacy and boundaries [24, 36]; inconsistent evidence for online and app-based treatments [38, 39]; cybersecurity [40]; and professional standards for providing electronic psychiatric care (e.g., telehealth), and curating an online identity [41–44]. The rise of telepsychiatry and other technologies, especially during the COVID-19 pandemic, has brought with it additional professionalism issues largely addressed in telepsychiatry guidelines and textbooks [45, 46]. While “Digital Health” is included as a sub-competency under Patient Care for Internal Medicine, it is not in the Psychiatry Milestones 2.0 (2021) [4]. Training in the professionalism aspects of digital media use is needed, including appropriate use of the electronic medical record and online portals, social media, and emerging digital care modalities and health tools such as apps and sensors. Artificial intelligence and virtual roles are expected to become an increasing part of residency education [47]. Competencies are being defined and educational resources developed [48, 49].

With changing demographics and increasing social awareness, key elements of professionalism now include culture, diversity, equity, inclusion, and structural competence. Looking at the structural elements in which any patient is embedded, MetzI described “structural competency” as including five core competencies [50]:

1. Recognizing the structures that shape clinical interactions
2. Developing an extra-clinical language of structure

3. Rearticulating “cultural” formulations in structural terms
4. Observing and imagining structural interventions
5. Developing structural humility

The practice of psychiatry inherently involves developing an intimate understanding of people from all races, ethnicities, cultures, and backgrounds [25]. Awareness of healthcare disparities, including in mental health, has grown [51]. Understanding these disparities and advocating for social justice are current tenets of professionalism and professionalism education [52, 53]. Implicit bias includes stigma against mental disorders; even mental health professionals may harbor negative biases about those with mental or substance use disorders, which may impede psychiatrists from accessing help for personal mental health concerns [54].

Finally, the importance of learning to work in multidisciplinary teams, long integral to psychiatry training and clinical experience, is more pressing given current workforce shortages and the advent of integrated and collaborative care, accountable care organizations, and other healthcare delivery systems. See Chap. 10 for more on this topic.

While in training, professionalism standards are largely enforced through the residency office. However, residents need to understand that state and federal legal systems, American Psychiatric Association national and District Branch ethics committees, malpractice insurers, Boards of Registration in Medicine, and institutional compliance officers and ethics committees also enforce professionalism standards. The “real world” consequences of professionalism violations can include lawsuits, loss of employment, loss of licensure, and emotional distress.

How to Teach Professionalism in Your Program?

As described above, professionalism is taught both explicitly, through didactic sessions, and implicitly through faculty and staff role modeling

of behaviors and practices while residents rotate through clinical services within the clinical learning environment. Professionalism teaching can be integrated into virtually every professional experience and interaction, as well as studied independently through reading and online learning.

Principles of professionalism, ethics, and the law can be taught in devoted seminars on these topics or as part of classes on leadership and administration. Defining professionalism itself can be a reflective session; learners may be asked to generate examples of “professionalism mentors,” as well as negative examples from their own education and training. For example, a word cloud can be generated and grouped into categories for thinking about different aspects of professionalism. After introducing professionalism standards such as the Physician Charter and the APA or AACAP ethics codes, teachers can ask learners to apply the concepts to vignettes raising professionalism concerns; naming the concerns and relating them to specific principles or concepts promotes a fluency in discussing these issues and raises awareness [55]. Avoiding judgment and discussing what may have led to a lapse in an otherwise professional physician helps promote a growth-oriented culture and relates professionalism to important concepts such as self-care and well-being. Promoting antidotes to professionalism breaches, such as self-monitoring for signs of burnout, can be discussed. Other didactic teaching methods supported by qualitative research include case conferences and discussions with multidisciplinary experts.

Specific approaches to ethics training are outlined in the Romanell Report [56] and a variety of MedEd Portal curricula. The latter includes a vignette-based curriculum by members of the AACAP Ethics Committee [57]. Research ethics can draw upon key reports such as the Nuremberg Code (1947), the Declaration of Helsinki (1964), The Belmont Report (1979), and The Common Rule (1991). Narratives about research ethics lapses such as the Tuskegee syphilis study, (which resulted in the Belmont Report), and the development of the HeLa cell line, used for decades in international research without the

patient's or the family's consent, illustrate concerns about the abuse of vulnerable populations, in these cases African-Americans [58]. For child and adolescent psychiatry training, cases for discussion include the death of 20-year-old Jesse Gelsinger in a gene therapy study (1999), resulting in conflict-of-interest guidelines; the Willowbrook Studies (1950s–1970s) in which children with intellectual disability were exposed to hepatitis infection, and the thalidomide tragedy (1960s) which led to Drug Amendments of 1962 requiring informed consent for experimental drugs. The Gelsinger case can lead to a broader discussion of conflict of interest, consideration of the Institute of Medicine Reports on Conflict of Interest (2009), and the requirement for reporting under the Physician Payments Sunshine Act (2010), also known as Section 6002 of the Affordable Care Act.

The law as it pertains to psychiatry is often state-based; thus, resources with a state focus, such as Behnke and Hillard's *Essential of Massachusetts Mental Health Law* [59], can be very helpful. Forensic psychiatrists may be able to provide a didactic session on this topic, preferably drawing upon cases from their practice. Other landmark legal cases can be drawn from textbooks on legal and ethical issues in psychiatry and psychology, such as Koocher's *Ethics in Psychology and the Mental Health Professions: Standards and Cases* [60].

While explicit didactic teaching is important, a systematic review of the best evidence for how to teach professionalism concluded that *role modeling* and *personal reflection* under faculty guidance are broadly considered most effective [6]. Didactic sessions may also be devoted to experiential learning and reflection through prompts from art and literature or even news stories; panel discussions with experts; and whole-class simulation and role-play [61–63]. Learners can develop a portfolio of reflections based on prompts or on their own experiences.

Proponents of the Professional Identity Formation model advocate for *situated learning theory*. According to this theory, teaching is tailored to the institutional environment, is practical not theoretical, incorporates critical reflection,

and follows a “cognitive apprenticeship” model [64]. Situated learning can be accomplished by integrating professionalism teaching into clinical experiences. For example, faculty-trainee interviews as a follow-up to a critical incident report can be used to debrief, reflect, and develop professional identity [65]. Discussing clinical cases with particular attention to the professionalism, ethical, and legal issues in supervision helps learners develop their own thought processes; supervisors can model seeking resources or consultation for particularly thorny questions. Clinical skills examinations and other observed clinical interactions of actual patients can focus specifically on professionalism. Role-plays and simulations based on real-life cases with de-identified data allow educators to focus the content on particular issues that may arise in the program. Observed Structured Clinical Encounters (OSCEs) build on case-based teaching and simulation by providing a platform for developing peer feedback skills [66].

Certain clinical rotations lend themselves particularly well to specific professionalism topics. For example, an Emergency Department rotation provides opportunities to learn about involuntary treatment/commitment and mandated reporting laws/ethics. Outpatient psychotherapy may be an opportune clinical setting to think about appropriate boundaries such as when to maintain or breach confidentiality or accept gifts. Rotations in community clinics may provide opportunities for learners to consider when they need to advocate for individual patients within the clinic or with third-party payers, as well as advocating for the needs of those with severe and persistent mental disorders within the state, the community, or the country.

Learners can further practice professionalism such as advocacy skills by joining national organization advocacy days, such as APA's Federal Advocacy Conference. Becoming active in a hospital ethics committee, local APA District Branch, or AACAP Regional Organization serves as training experience in professionalism and healthcare advocacy. Experiences in the community such as in schools and prisons and through telepsychiatry to remote sites provides different

clinical situations from those in a hospital or healthcare setting that can be opportunities for learners to apply familiar principles to new settings.

The Professional Identity Model of professionalism emphasizes how the learner is socialized in a community of practice, what ACGME has termed the clinical learning environment (CLE). As with all socialization processes, the newcomer to the community is susceptible to both positive and negative learning experiences from the more longstanding members of the community and those in greater positions of power. Thus, program directors will need to be attuned to the culture of their own clinical learning environment and its faculty members, who are an integral part of the teaching and assessment of professionalism in residents [67–69].

On an individual level, faculty development can increase the knowledge, skills, and attitudes required to teach professionalism as a core competency. Within a healthcare or training system, faculty development may help in the creation of the organization’s desired culture of professionalism and identify factors that may enhance and impede its development. Self-care and well-being can be discussed as important factors in protecting against professionalism lapses. Faculty retreats and continuing medical education (CME) activities such as Grand Rounds can be used to focus on this topic. Examples of faculty development workshops in psychiatric professionalism are available in the literature [70].

How professionalism lapses are reported and addressed is key to determining the level of professionalism in the CLE. Reporting lapses is an expectation of most ethics and professionalism guidelines; being supported in this process without retribution is vital for residents. Learners will need to observe such professionalism incident reports being taken seriously, lack of retaliation on reporters, and appropriate measures taken to address the concern, regardless of status or seniority. Again, the approach can be similar to that of addressing structural racism in the CLE [34]. Systems issues in the CLE may limit the capacity of learners to demonstrate their own professionalism and to report

systems problems or faculty professionalism lapses [71]. Instruments to assess the extent to which CLEs support reporting concerns about unprofessional behavior are being developed [72]. Professionalism educators may need to draw upon the experience of faculty and learners to have a frank discussion about the hidden curriculum when it comes to professionalism lapses and how to handle professionalism concerns in the setting of perceived systems failures [73].

Assessing Professionalism —See Table 14.1

Professionalism may be more obvious in its breach than in its observance. Psychiatric residents may be more likely to receive feedback about their professionalism lapses than their exemplary professional behavior. In practice, concerning behaviors in residents often fall under the “Professionalism” core competence when the other core competencies fail to adequately capture the nature of the concern. While professionalism breaches are important learning opportunities for program directors and residents to discuss professionalism, it is imperative that professionalism is assessed in an ongoing way throughout psychiatric training, including demonstrated strengths.

In general, professionalism may be best evaluated by examining data from multiple sources in a variety of contexts over time. Such data should be systematically collected, carefully analyzed, and should lead to appropriate interventions. Assessors should clearly define the assessment as “formative,” designed to promote growth and improvement, or “regulatory,” required to comply with specific standards such as a departmental policy, or both. The feedback should occur in a safe, nurturing learning environment in which faculty development on professionalism is also included, establishing a level playing field for professionalism accountability to mitigate the negative impact of a hidden curriculum. Cultural and generational differences must also be considered [27].

Table 14.1 Sample instruments for assessing professionalism in psychiatry residency [79, 98]

| Instrument | Format | Additional comments |
|---|--|---|
| Barry Challenges to Professionalism Questionnaire [99] | 6 patient-based multiple-choice questions | Brief assessment of professionalism knowledge |
| Conscientiousness index [100] | Assessment of key student behaviors (e.g., attendance at sessions), compliance with paperwork requirements (e.g., immunizations) | Evidence that measures predict professional behavior |
| Critical Incident Technique (CIT) [101] | Critical incident brief summary and reflection; analysis and group discussion | Knowledge assessment |
| Entrustable Professional Activities (EPAs) [98] | Observable core skills across core competencies | Certain EPAs address issues of professionalism |
| Jefferson Scales [102] | Series of questions with rating scales used to assess empathy, teamwork, lifelong learning | Strong psychometrics |
| Pangoro's Performance Level [77] | 5-item patient survey on communication and professionalism of clinician | Studied in medical students with demonstrated predictive reliability in residents |
| Professionalism-Mini Clinical Evaluation Exercise (P-MEX) [75] | Rating of observed behaviors following a brief clinical encounter; feedback and plan for improvement | Evidence of construct and content validity and reasonable inter-rater reliability; replicated across cultures |
| Situational Judgment Test (SJT) [103] | Videotaped or written hypothetical scenarios with responses to be ranked | Strong predictor of work-related outcomes; used in medical school and residency application process |
| Standardized patients (SPs) [104] | Actor-patient clinical encounters scored according to defined professionalism competencies | Validated measure |
| Test of Residents' Ethics Knowledge for Pediatrics (TREK-P) [105] | 23-item test on ethics knowledge | Knowledge assessment; potential model for psychiatry |
| 360-degree evaluations | Collated multisource feedback on professionalism criteria from peers, coworkers, colleagues, patients | Improved validity and reliability with increased range of sources |

The developers of the Professional Identity Formation model have adapted Miller's pyramid—a schematic of the progression in learning from *knows*, (the base of the pyramid), through *knows how*, *shows how*, and *does*—to include a fifth level for professionalism—*is* (*top of the pyramid*) [74]. This approach underscores the notion that psychiatric residents who are competent in professionalism don't just “dress professionally” or “act professionally”; rather, they carry a specific core identity as a psychiatric professional. Capturing that core identity using evaluation tools is difficult, but not impossible.

Authors of a systematic review of observer-based instruments for medical professionals identified ten instruments that met their quality and utility standards. The Education Outcomes Services (EOS) Group Questionnaire and the

Professionalism Mini-Evaluation Exercise (P-MEX) had the best psychometric properties, and the P-MEX scored higher on utility [7, 75] (see Table 14.1). For a thorough review of professionalism assessment approaches and instruments, see Davis et al. 2012, particularly Table 8 [76].

In general, the type of assessment will depend on the model of professionalism being used. The model of professionalism that conceptualizes a Venn diagram of intersecting circles of professionalism, ethics, and the law lends itself to a pragmatic monitoring of adherence to these principles. Such adherence would include maintaining standards of dress, punctuality, boundaries; appropriate management of real and potential conflicts of interest; meeting legal requirements about confidentiality, informed consent, and

mandated reporting, and so on. Such topics are likely to come up in feedback to trainees about their work with patients and in the educational setting. This compliance or “conscientiousness” model may also assess participation in accreditation processes and maintenance of certification. For clinical investigators, certification using the Collaborative Institutional Training Initiative (CITI) program might be used (<https://about.citiprogram.org/>). Knowing ethical, legal, and professionalism principles can similarly be tested using multiple-choice questions such as the Psychiatry Residency In-Training Examination (American College of Psychiatrists, <https://www.acpsych.org/prite>).

Hodges et al.’s definition of professionalism in the individual, interpersonal, and societal/institutional “scopes” lends itself to different assessment methods in each scope [27]. For the individual scope, the authors emphasize that behaviors are only proxy measures assumed to reflect underlying knowledge, values, and attitudes. If behavior-based measures are used, valid and reliable quantitative (e.g., observation-based instruments) and qualitative measures (e.g., Medical Student Performance Evaluations) are supported by evidence. Triangulating measures with data from multiple observers and contexts over time likely increases validity: The interpersonal scope of professionalism involves how a learner responds to interpersonal and complex situations in terms of their decisions and behavior; multiple informants in different contexts over time are needed.

How do students and trainees feel about various assessment measures of professionalism? A study by Marrero et al. found that psychiatry residents preferred clinical supervision over oral examinations, short-answer questions, essays, and standardized patient interactions for professionalism assessment [77]. Respondents also preferred direct faculty observations of their clinical work with actual patients and team members. The authors noted that the validity and effectiveness of these evaluation techniques need to be studied.

Finally, given that professionalism and professional identity pervade virtually all aspects of

becoming a psychiatrist, a multimodal and continuous system of assessment is needed. Such a system needs to inform both the learner and the evaluator and help make such high-stakes decisions as to whether a resident should progress from one level of training to the next [78]. Norcini and Shea and others argue that such a system must be comprehensive, (take a range of approaches), coherent (be aligned with curriculum objectives and teaching methods), and continuous (be ongoing, with regular feedback regarding progress toward desired outcomes) [79]. “Programmatic assessment,” as such an approach is now termed, has been used in psychiatry [80, 81].

Monitoring for and Addressing Professionalism Lapses

When programs teach professionalism both explicitly and implicitly and focus on professionalism as an identity that develops over time shaped by role modeling and the learning environment, monitoring for professionalism lapses becomes less a matter of policing and more a matter of group responsibility. Gabbard et al. warn of the potential abuse of power when the term “unprofessional” is used to describe behaviors that do not conform to certain fixed expectations and are used to “marginalize and exclude those who think differently than we do” [25, p. 173].

Clear expectations need to be set, including that professionalism and professionalism lapses will be prioritized. Training programs and medical institutions need to agree on a set of “egregious violations,” behaviors which are unacceptable under any circumstances. For example, the American Academy of Pediatrics lists willful misrepresentation of clinical data; providing care while under the influence of alcohol or drugs; involvement in illegal activity; physical or verbal abuse directed toward patients, families, colleagues, or staff; sexual misconduct or violation of appropriate physician-patient boundaries; humiliation or harassment; prejudicial behavior; failing to notify supervisors of

inability to work; falsification of research data; failure to disclose ties to industry; and coercion of a patient to join a research study [82]. Institutions may choose to have policies around professionalism in general; examples are available online [83]. They may also choose to have specific policies around areas of concern, such as academic honesty or online and social media activity. See, for example, the policy on social media from Emory University School of Medicine [84]. Such policies should be consistent with institutional values and mission and the successful implementation of these policies should be monitored regularly at all levels—training program, department, and institution.

Monitoring Professionalism in Individual Residents

Like medical schools, residency programs may use a variety of approaches to identify professionalism lapses in residents and fellows, including incident-based reporting, routine individual evaluations, 360 or multi-informant evaluations, separate professionalism courses and evaluations, formal peer assessments, and anonymous reporting. However, these tools often focus more on observed behaviors than on their underlying causes. Individual lapses in professionalism may spring from an array of issues, including struggles with well-being (e.g., exhaustion and burn-out); unresolved psychological issues (e.g., conflict and anger regarding medical training); mental health and addictions problems; cultural and generational differences; failure of team members to support each other; lack of professional identity formation at earlier stages of training; issues of fit with the clinical context; and personality issues. Program directors often hear about professionalism issues orally in sidebar conversations with faculty members or program administrators and are left with the challenging job of moving from the specific behavioral allegation to understanding the underlying factors.

In approaching an individual learner about a potential lapse in professionalism, the following

12 tips from colleagues at Brown University and their associated phrases can be helpful [85]:

1. Model professional behavior with learners
2. Acknowledge the hidden curriculum
3. Know your policies
4. Gather evidence and objective data
5. Know your “one phone call” (i.e., who to call in an emergency)
6. Utilize your colleagues for support
7. When you meet with the learner, be a good listener
8. Create a safe environment
9. Provide direct and explicit feedback
10. Make connections to help facilitate change
“The reason this kind of behavior is problematic is because it has the following impact on the patients/team/learning environment ...”
11. Know when you’re in over your head
12. Establish a clear follow-up “I would like us to meet again in a month”

In exploring a professionalism lapse with a learner, engaging in a process of facilitated self-reflection is often necessary. Barnhoorn et al. describe a “multilevel professionalism framework” to help facilitate this process and to pave the way for potential remediation [86]. They outline 5 questions drawn from Korthagen’s stages of change model for teacher training that can provide a framework for questions the resident and program director can think about together:

1. What am I [the resident] doing? (focuses on a description of the behavior)
2. What *can* I do? (focuses on the presence or absence of competencies)
3. What do I believe in? (focuses on learner’s beliefs and values that affect their motivation)
4. Who am I? (focuses on learner’s characteristics, values, and norms in comparison to those of the profession)
5. Why do I do what I do? (explores the learner’s driving force; meaning for them of wanting to become a doctor, a psychiatrist; self-image)

Any lapse in professionalism will need to be understood in the context of complex, often hidden, variables such as the learner's interpersonal relationships, social norms, and culture. The Theory of Planned Behavior draws on a socio-cognitive psychology approach to link attitudes to behavior that Jha et al. use to help determine a learner's fitness to practice [87].

Often it is helpful to consider an individual learner's professionalism lapse in the context of the systems surrounding that learner. As the Brown Tip #2 above suggests in acknowledging the "hidden curriculum," factors in the clinical learning environment (CLE) that may be affecting the learner need to be addressed. To this end, thinking about a critical incident of professionalism lapse may draw upon the "fishbone" or cause-and-effect models of analysis used in quality improvement efforts [88]. A chain analysis of factors that led to the problematic behavior may help the resident understand the different forces acting upon them, both individual and systemic, allowing professionalism lapses to be seen less as personal deficits and more as human response to a "perfect storm" of contributing factors. This method also helps the program director hold both the resident and the faculty and learning environment accountable. Thus, professionalism must be taught to faculty and all those in the CLE, who must in turn be monitored for professionalism lapses as well.

Monitoring and teaching Professionalism to Faculty

In a study of faculty attitudes on teaching and assessing professionalism, Bryden et al. (2010) concluded [89]:

All faculty expressed that teaching and evaluating professionalism posed a challenge for them. They identified their own lapses in professionalism and their sense of powerlessness and failure to address these with one another as the single greatest barrier to teaching professionalism, given a perceived dominance of role modeling as a teaching tool. (p. 1031)

As a result, the faculty in this study described the feeling that, along with their institutions that failed to address professionalism lapses successfully, they were colluding in failing to address professionalism lapses. These findings suggest that professionalism needs to be an ongoing part of faculty development.

Several examples of faculty development programs are available in the literature. Steinert et al. describe a case model of innovations in a single program, including workshops on teaching and evaluating professionalism and an action plan for each department [90]. Another example describes an orientation workshop followed by workshops and lectures on a variety of topics, including discussion of professionalism vignettes with guided questions [91]. Bursch et al. used de-identified vignettes from clinical settings and an audience response system for anonymous expression of opinions [70]. Lu et al. used the Objective Structured Teaching Exercise (OSTE), a series of videotaped scenarios and two performance rubrics, to train faculty on how to teach professionalism and ethics in clinical settings with reported positive outcomes in faculty confidence to teach and manage professionalism issues [91].

Monitoring Professionalism in the Clinical Learning Environment (CLE)

In order to create a culture of professionalism in the learning environment, a systematic approach is needed. Fryer-Edwards et al. at the University of Washington describe a systematic approach to faculty development that includes workshops with faculty on how to facilitate professionalism discussion, discuss cases, debrief clinical scenarios, mentor, give formative and summative feedback, and teach about cultural diversity [92]. Humphrey et al. [6] describe efforts to achieve an "ecology of professionalism" through curricular innovation by bringing attention to professionalism at all levels of the institution. They involved participants from all levels and sectors of the uni-

versity in workshops and evaluations. The annual review of the clinical learning environment (CLE) provides an opportunity for residents and faculty to provide feedback on professionalism in the program: how it is taught, evaluated, and modeled.

Innovations and Best Practices

As the field of medical professionalism education continues to evolve, some of the following areas may move to the forefront of improvement efforts:

(a) *Developmental stage assessments of professionalism*

As the Professional Identity Formation model of professionalism becomes more prevalent, the question arises of how we should approach professionalism across the developmental spectrum in psychiatric education, from medical student to intern to resident to fellow. Establishing clear priorities for each developmental stage and instruments to define them, seems important. Educators could then assess learners as being relatively less or mature in their identity formation and suggest interventions to meet the learner at what Vygotsky has called “the zone of proximal development,” that area of learning in which learners are challenged, but meeting that challenge is within their grasp [92].

(b) *Contextual approaches including cultural context*

The literature in psychiatric education has begun to recognize that much of what has been historically taught has been subject to the implicit biases of a social structure that has empowered some over others [93]. The White European male perspective appears to have dominated. Recognizing that community, institutional, and practice cultures differ opens the door for a more complex examination of what professionalism means in those particular settings (see, e.g., Ho

et al. 2011) [94]. What is the cultural context of the program? What values does the training program want to model and prioritize? How should those values be reflected in professionalism metrics? Reflecting on these questions can help programs not only improve their professionalism training, but also potentially clarify the program’s identity.

(c) *Individual and group well-being*

Recent developing concerns about burnout in physicians and other healthcare professionals have highlighted the need to incorporate well-being into our concepts of professionalism, as reflected in the addition of this sub-competency in the ACGME Milestones. Physicians’ need to monitor themselves and each other for negative impacts of stress and even potential impairment has long been viewed as a professional responsibility; however, what part of that responsibility lies with the system rather than the individual is under active discussion [95]. In addition, the COVID-19 pandemic, primarily through failures to protect the well-being of healthcare professionals, underscored the role of groups, communities of practice, and institutions to address well-being. What is the responsibility of one team member to another? Traditionally, the professionalism literature has emphasized the need for peer reporting on professionalism lapses. What about the peer responsibility to be attuned to the well-being of others and provide mutual support? Should team-based clinical activities include this function as a professionalism metric? Perhaps doing so would foster community, reduce burnout, and promote a sense of reciprocal responsibility for each other’s well-being.

(d) *Clinical frontiers as vehicles for teaching professionalism*

Innovations in clinical education practice can test professionalism in those starting to use them. Social media in the second decade of this century, for example, has quickly become a testing ground for professional behavior and fodder for the media [37]. Other categories might include

genetic interventions, virtual practice, efforts to improve diversity, equity, and inclusion; structural competence; interprofessional collaboration. While these areas may represent potential areas of vulnerability and slipups in professionalism, they can also provide excellent examples to learn from. They can be opportunities not just to learn specific professional behaviors, but also key professional principles in general. Learners can then be invited to apply these principles to a wide variety of clinical settings and circumstances.

(e) *Impact on patients*

As Kirkpatrick has proposed, the gold standard for assessing any intervention in medicine, including educational, is the impact on patients [96]. Multisource evaluations can include patient input, and specific instruments assessing professionalism can be filled out by the patient (e.g., Davis et al. 2012). According to Tay et al., none of the instruments for assessing curricula currently seem to have an impact at the level of patient benefit, which is the highest level (Level 4B) of Kirkpatrick's model of assessment [97]. Demonstrating that professionalism and *becoming a professional* are vital to patient care, and quality outcomes may be the next step in professionalism assessment and a vital part of the new movement toward value-based care.

tically and clinically have been reported in the literature, role modeling and reflection remain critical tools for teaching professionalism. The significance of role modeling underscores the need for program directors to teach both residents and faculty about professionalism, hold everyone in the CLE (including themselves) to professionalism standards, and treat professionalism lapses in a consistent manner according to a written policy. Such an effort requires a continuous process of both teaching and multisource assessment.

Newer areas of professionalism include e-professionalism; diversity, equity, inclusion, and structural competency; and interprofessional collaboration. These are areas in which professionalism standards are currently being defined. Looking to the future, additional questions might include the following: How can a program director determine which developmental stage a resident is at in their Professional Identity Formation; as we think about diversity, equity, and inclusion, how should different cultural approaches be considered in assessing professionalism; how can we better define and promote well-being at the level of the individual resident, the residency group or clinical team, and even the institution; how can we harness the frontiers of clinical innovation to teach professionalism in new ways; and finally, how can we determine whether and how professionalism affects patient outcomes?

Conclusion

Evidence and expert consensus support the idea that professionalism is a vital competency in medical and psychiatric education. However, there remains no single definition, model, or assessment tool for teaching and assessing professionalism in psychiatric residency. Instead, program directors are advised to consider a variety of approaches; for example, the arc of the Professional Identity Formation model may be the backdrop to more daily concerns about behavioral concerns such as unprofessional dress or tardiness.

Professionalism needs to be both implicitly and explicitly taught. While multiple innovative methods for teaching professionalism both didac-

References

1. Cruess RL, Cruess SR, Boudreau D, Snell L, Steinert Y. A schematic representation of the professional identity formation and socialization of medical students and residents: a guide for medical educators. *Acad Med.* 2015;90:718–25.
2. Rider EA. Competency 6: professionalism. In: Rider AR, Natowtniak RH, Smith G, editors. *A practical guide to teaching and assessing the ACGME core competencies.* Marblehead: HCPro; 2007. p. 189–236.
3. Edgar L, McLean S, Hogan SO, Hamstra S, Holmboe ES. *The milestones guidebook.* 2020. <https://www.acgme.org/Portals/0/MilestonesGuidebook.pdf>. Accessed 18 Aug 2021.
4. Accreditation Council on Graduate Medical Education and the American Board of Psychiatry and Neurology 2015. *The Psychiatry Milestones*

- Project. <https://www.acgme.org/Portals/0/PDFs/Milestones/PsychiatryMilestones.pdf?ver=2015-11-06-120520-753>. Accessed 18 Aug 2021.
5. Krupat E, Dienstag JL, Padrino SL, Mayer JE Jr, Shore MF, Young A, Chaudhry HJ, Pelletier SR, Reis BY. Do professionalism lapses in medical school predict problems in residency and clinical practice? *Acad Med.* 2020;95:888–95. <https://doi.org/10.1097/ACM.0000000000003145>.
 6. Birden H, Glass N, Wilson I, Harrison M, Usherwood T, Nass D. Defining professionalism in medical education: a systematic review. *Med Teach.* 2014;36:47–61. <https://doi.org/10.2109/0142159X.2014.850154>.
 7. Cruess R, McIlraoy JH, Cruess S, Ginsburg S, Steinert Y. The professionalism mini-evaluation exercise: a preliminary investigation. *Acad Med.* 2006;81(10 Suppl):S74–8.
 8. Irvine D. The performance of doctors: the new professionalism. *Lancet.* 1999;353:1174–7.
 9. Relman AS. Medical professionalism in the commercialized healthcare market. *JAMA.* 2007;298:2668–70.
 10. Rothman D. Medical professionalism – focusing on the real issues. *N Engl J Med.* 2000;342:1284–6.
 11. Swick HM. Viewpoint: professionalism and humanism beyond the academic health center. *Acad Med.* 2007;82:1022–8.
 12. Woodruff JN, Angelos P, Valaitis S. Medical professionalism: one size fits all? *Perspect Biol Med.* 2008;51:525–34.
 13. Papadakis MA, Teherani A, Banach MA, Knetter TR, Rattner SL, Hodgson CS. Disciplinary action by boards and prior behavior in medical school. *NEJM.* 2005;353:2673–82.
 14. Powers BW, White AA, Oriol NE, Jain SH. Race-conscious professionalism and African American representation in academic medicine. *Acad Med.* 2016;91(7):913–5. <https://doi.org/10.1097/ACM.0000000000001074>.
 15. Jain S, Hoop JG, Dunn LB, et al. Psychiatry residents' attitudes on ethics and professionalism: multisite survey results. *Ethics Behav.* 2010;20:10–20.
 16. Paauw DS, Papadakis M, Pfeil S. Generational differences in the interpretation of professionalism. In: Byyny RL, et al., editors. *Medical Professionalism – Best practices in the modern era*; 2018. <https://alphaomegaalpha.org/pdfs/Monograph2018.pdf>. Accessed 08-18-2021.
 17. Nath C, Schmidt R, Gunel E. Perceptions of professionalism vary most with educational rank and age. *J Dental Educ.* 2006;70:825–34.
 18. Wagner P, Hendrich J, Moseley G, Hudson V. Defining medical professionalism: a qualitative study. *Med Educ.* 2007;41(3):288–94. <https://doi.org/10.1111/j.1365-2929.2006.02695.x>.
 19. Marcus ER. Empathy, humanism, and the professionalization process of medical education. *Acad Med.* 1999 Nov;74(11):1211–5. <https://doi.org/10.1097/00001888-199911000-00014>.
 20. American Society of Internal Medicine (ACP-ASIM Foundation & European Federation of Internal Medicine). *Medical professionalism in the new millennium: a physicians Charter.* *Ann Intern Med.* 2002;136:243–6. <https://abimfoundation.org/wp-content/uploads/2015/12/Medical-Professionalism-in-the-New-Millennium-A-Physician-Charter.pdf>. Accessed 18 Aug 2021.
 21. DeJong SM. What is professionalism? In: *Blogs and tweets, texting and friending: social media and online professionalism in health care.* San Diego: Elsevier; 2014. p. 1–10.
 22. Accreditation Council for Graduate Medical Education. *Psychiatry milestones, 2nd revision, 2020.* Available at <https://www.acgme.org/Portals/0/PDFs/Milestones/PsychiatryMilestone2.0.pdf?ver=2020-03-10-152105-537>. Accessed 07-08-2021.
 23. Edgar L, Roberts S, Holmboe E. Milestones 2.0: a step forward. *J Grad Med Educ.* 2018;10:367–9.
 24. Kinzie JM, DeJong SM, Edgar L, Houston LJ, Janssen F, Macaluso M, Aoun EG, Bowen L, Keepers G, Bentman AL, Cowley DS. Psychiatry milestones 2.0: using the supplemental guide to create a shared model of the development of professional identity and expertise. *Acad Psychiatry.* 2021; <https://doi.org/10.1007/s40596-021-01455-6>. PMID: 33864231
 25. Gabbard GO, Roberts LW, Crisp-Han H, Ball V, Hobday G, Rachal F. *Professionalism in psychiatry.* Washington DC: American Psychiatric Publishing; 2012.
 26. Kao A. Ethics, law and professionalism: what physicians need to know. In: Stern DT, editor. *Measuring medical professionalism.* Oxford, UK: Oxford University Press; 2005. p. 366–70.
 27. Hodges BD, Ginsburg S, Cruess R, Cruess S, Delpert R, Hafferty F, Ho M-J, Holmboe E, Holtman M, Ohbu S, Rees C, Ten Cate O, Tsugawa Y, Van Mook W, Wall V, Wilkinson T, Wade W. Assessment of professionalism: recommendations from the Ottawa 2010 conference. *Med Teach.* 2011;33(5):354–63. <https://doi.org/10.3109/014259X.2011.577300>.
 28. DeJong SM. Professionalism and technology: competencies across the tele-behavioral health and e-behavioral health spectrum. *Acad Psychiatry.* 2018;42:800–7.
 29. American Psychiatric Association. *Principles of medical ethics with annotations especially applicable to psychiatry.* 2013. <https://www.psychiatry.org/psychiatrists/practice/ethics>. Accessed 18 Aug 2021.
 30. American Academy of Child and Adolescent Psychiatry. *Code of Ethics.* 2014. https://www.aacap.org/App_Themes/AACAP/docs/about_us/transparency_portal/aacap_code_of_ethics_2012.pdf. Accessed 07 Aug 2021.
 31. Wear D, Zarconi J. Can compassion be taught? Let's ask our students. *J Gen Intern Med.* 2008;23:948–53.
 32. Stephenson AE, Adshead LE, Higgs RH. The teaching of professional attitudes within UK medical

- schools: reported difficulties and good practice. *Med Educ.* 2006;40:1072–80.
33. Gupta M, Forlini C, Lenton K, Duchon R, Lohfeld L. 2016. The hidden ethics curriculum in two Canadian psychiatry residency programs: a qualitative study. *Acad Psychiatry.* 2016;40:592–9.
 34. Rohrbaugh RM, DeJong SM. The role of the program director in promoting diversity, equity and inclusion. *Acad Psychiatry.* 2021. Online ahead of print. <https://doi.org/10.1007/s40596-021-01474-3>.
 35. Chretien KC, Greysen SR, Chretien JP, Kind T. 2009. Online posting of unprofessional content by medical students. *JAMA.* 2009;302:1309–15.
 36. Greysen SR, Chretien KC, Kind T, Young A, Gross CP. Physician violations of online professionalism and disciplinary actions: a national survey of state medical boards. *Res Letter JAMA.* 2012;307:1141–2.
 37. Gabbard G. Digital professionalism. *Acad Psychiatry.* 2019;43:259–63. <https://doi.org/10.1007/s40596-018-0994-3>.
 38. Bakker D, Kazantzis N, Rickwood D, Richard N. Mental health smartphone apps: review and evidence-based recommendations for future developments. *JMIR Mental Health.* 2016;1:3(1).
 39. Larsen ME, Huckvale K, Nicholas J, Torous J, Birrell L, Li E, Reda B. Using science to sell apps: evaluation of mental health app store quality. *NPJ Digit Med.* 2019;2:18. <https://doi.org/10.1038/s41746-019-0093-1>. Accessed 18 Aug 2021
 40. Hilty DM, Crawford A, Teshima J, Chan J, Sundehi N, Yellowlees PM, et al. A framework for telepsychiatric training and e-health: competency-based education, evaluation and implications. *Int Rev Psychiatry.* 2015;27(6):569–92.
 41. Maheu MM, Drude KP, Hertlein KM, Lipschutz R, Wall K, Hilty DM. Correction to: An interdisciplinary framework for telebehavioral health competencies. *J Technol in Behav Sci.* 2018;3:108–40. <https://doi.org/10.1007/s41347-018-0046-6>.
 42. Hilty DM, Chan S, Torous J, Luo J, Boland RJ. Mental health, smartphone/device, and apps for psychiatry and medicine: competencies, training, and faculty development issues. In: Liu HY, Hilty DM, editors. *Professional development for psychiatrists, Psychiatric clinics of North America*, vol. 42; 2019. p. 513–34.
 43. Liu HY, Beresin EV, Chisholm MS. Social media skills for professional development. In: Liu HY, Hilty DM, editors. *Professional development for psychiatrists, Psychiatric clinics of North America*, vol. 42; 2019. p. 483–92.
 44. Shore JH, Yellowlees P, Caudill R, Johnston B, Turvey C, Mishkind M, Krupinski E, Myers K, Shore P, Kaftarian E, Hilty D. Best practices in videoconferencing-based telemental health April 2018. *Telemed J E Health.* 2018;24(11):827–32. <https://doi.org/10.1089/tmj.2018.0237>.
 45. American Telemedicine Association (ATA). Practice guidelines for telemental health with children and adolescents. March 2017. https://higherlogicdownload.s3.amazonaws.com/AMERICANTELEMED/618da447-dee1-4ee1-b941-bf3db5669a/UploadedImages/Practice%20Guideline%20Covers/NEW_ATA%20Children%20&%20Adolescents%20Guidelines.pdf. Accessed 18 Aug 2021.
 46. Yellowlees P, Shore JH, editors. *Telepsychiatry and health technologies – a guide for mental health professionals.* Washington DC: American Psychiatric Association Publishing; 2018.
 47. Judah R, Allen S, Rabinowitz D, Piltsch M, Karlinskaya O. The future of behavioral health. Deloitte Insights. 2021. <https://www2.deloitte.com/us/en/insights/industry/health-care/future-of-behavioral-health.html>. Accessed 18 Aug 2021.
 48. DeJong S, Benjamin S, Anzia J, Boland R, John N, Lomax J, Rostain A. Professionalism and the internet in psychiatry: what to teach and how to teach it. *Acad Psychiatr.* 2012;36:356–62.
 49. Zalpuri I, Domakonda M, Wrzosek M, DeJong S. Trainees on technological terrain: a video vignette-based tool to teach e-professionalism. *Acad Psychiatry.* 2021;45:224–30. <https://doi.org/10.1007/s40596-020-01325-7>.
 50. Metzl JM, Hansen H. Structural competency: theorizing a new medical engagement with stigma and inequality. *Soc Sci Med.* 2014;103:126–33. <https://doi.org/10.1016/j.socscimed.2013.06.032>.
 51. Institute of Medicine (US) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. *Unequal treatment: confronting racial and ethnic disparities in health care.* Smedley BD, Stith AY, Nelson AR, editors. Washington (DC): National Academies Press (US); 2003.
 52. Higginbotham EJ. Professionalism in the 21st century: Challenges and opportunities. In: Byyny RL, Paauw DS, Papadakis M, Pfeil, editors. *Medical professionalism best practices: Professionalism in the modern era.* Alpha Omega Alpha Honor Medical Society. 2017.
 53. Bromage B, Encandela JA, Cranford M, Diaz E, Williamson B, Spell VT, Rohrbaugh RM. Understanding health disparities through the eyes of community members: a structural competency education intervention. *Acad Psychiatry.* 2019;43:244–7. <https://doi.org/10.1007/s40596-018-0937-z>.
 54. McLeary-Gaddy AT, Scales R. Addressing mental health stigma, implicit bias, and stereotypes in medical school. *Acad Psychiatry.* 2019;43:512–5.
 55. Boenink AD, de Jonge P, Smal K, Oderwald A, van Tilburg W. The effects of teaching medical professionalism by means of vignettes: an exploratory study. *Med Teach.* 2005;27:429–32.
 56. Carrese JA, Malek J, Watson K, Lehmann LS, Green MJ, McCullough LB, Geller G, Braddock CH 3rd, Doukas DJ. The essential role of medical ethics education in achieving professionalism: the Romanell

- report. *Acad Med.* 2015;90(6):744–52. <https://doi.org/10.1097/ACM.0000000000000715.25881647>.
57. Dingle A, DeJong S, Madaan V, Ascherman L. Teaching ethics in child and adolescent psychiatry: a vignette-based curriculum. *MedEdPORTAL Publications.* 2016; 12:10418. https://doi.org/10.15766/mep_2374-8265.10418.S Accessed 18 Aug 2021.
 58. Skloot R. *The immortal life of Henrietta lacks.* New York: Broadway Books; 2011.
 59. Behnke SH, Hillard JT. *The essentials of Massachusetts mental health law: a straightforward guide for clinicians of all disciplines.* New York: Norton; 1998.
 60. Koocher GP, Spiegel PK. *Ethics in psychology and the mental health professions: standards and cases.* 4th ed. New York: Oxford University Press; 2016.
 61. Brett-Maclean PJ. Use of the arts in medical and health professional education. *Univ Alberta Health Sci J.* 2007;4(1):26.
 62. Stagno S, Blackie M. *From Reading to healing: teaching medical professionalism through literature.* Kent: Kent State University Press; 2019.
 63. Howley S, Gaufrberg E, King B. *The fundamental role for the arts and humanities in medical education.* Washington, DC: Association of American Medical Colleges; 2020.
 64. Cruess RL, Cruess SR, Steinert Y. *Teaching medical professionalism – supporting the development of a professional identity.* 2nd ed. Cambridge, England: Cambridge University Press; 2016.
 65. Baernstein A, Fryer-Edwards K. Promoting reflection on professionalism: a comparison trial of educational interventions for medical students. *Acad Med.* 2003;78:742–7.
 66. Tucker C, Choby B, Moore A, Parker RS 2nd, Zambetti BR, Naidu S, Scott J, Loomer J, Gaffney S, Cianciolo AT, Hoffman LA, Kohn JR, O’Sullivan PS, Trowbridge RL. Teachers as learners: developing professionalism feedback skills via observed structured teaching encounters. *Teach Learn Med.* 2017;29:373–7. <https://doi.org/10.1080/10401334.2017.1365001>.
 67. Steinert Y. Faculty development to support professionalism and professional identity formation. In: Cruess RL, Cruess SR, Steinert Y, editors. *Teaching medical professionalism – supporting the development of a professional identity.* Cambridge: Cambridge University Press; 2016. p. 124–39.
 68. Humphrey HJ, Levinson D. The learner and the learning environment—a complex interaction. In: Bynny RL, Paauw DS, Papadakis M, Pfeil S, editors. *Medical professionalism best practices: professionalism in the modern era.* Alpha Omega Alpha Honor Medical Society; 2017. p. 97–115.
 69. Nordquista J, Hall J, Caverzagie K, Snell L, Chang MK, Thomah B, Razacke S, Philibert I. The clinical learning environment. *Med Teacher.* 2019;41:366–72. <https://doi.org/10.1080/0142159X.2019.156660>.
 70. Bursch B, Piacentini J, Cook IA, Stuber ML. Everyday mishaps and lapses in ethics, professionalism, and self-care: a faculty development workshop. *Acad Psychiatry.* 2016;40:97–9. <https://doi.org/10.1007/s40596-015-0319-8>.
 71. Hodges LE, Tak HJ, Curlin FA, Yoon JD. Whistleblowing in medical school: a national survey on peer accountability and professional misconduct in medical students. *Acad Psychiatry.* 2016;40:530–3.
 72. Martinez W, Etchegary JM, Thomas EJ, Hickson GB, Lehmann LSL, Schleyer AM, Best JA, Shelburne JT, May NB, Bell SK. “Speaking up” about patient safety concerns and unprofessional behaviors among residents: validation of two scales. *BMJ Qual Saf.* 2015;24:671–80.
 73. Quaintance JL, Arnold L, Thompson GS. Development of an instrument to measure the climate of professionalism in a clinical teaching environment. *Acad Med.* 2008;83(10 Suppl):S5–8. <https://doi.org/10.1097/ACM.0b013e318183e3d4>.
 74. Cruess RL, Cruess SR, Steinert Y. Amending Miller’s pyramid to include professional identity formation. *Acad Med.* 2016;91:180–5. <https://doi.org/10.1097/ACM.0000000000000913>.
 75. Kwan YW, Png K, Phang JK, Leung YY, Goh H, Seah Y, Thumboo J, Ng ASC, Fong W, Lie D. A systematic review of the quality and utility of observer-based instruments for assessing medical professionalism. *J Grad Med Educ.* 2018;10(6):628–38. <https://doi.org/10.4300/JMGE-D-18-00086.1>.
 76. Davis LE, King MK, Wayne SJ, Kalishman SG. Evaluating medical student communication/professionalism skills from a patient’s perspective. *Front Neurol.* 2012;3:98. <https://doi.org/10.3389/fneur.2012.00098>.
 77. Marrero I, Bell M, Dunn LB, Roberts LW. Assessing professionalism and ethics knowledge and skills: preferences of psychiatric residents. *Acad Psychiatry.* 2013;37(6):392–7.
 78. Birenbaum M, Breuer K, Cascallar E, Dochy F, Dori Y, Ridgway J, Wiesemes R. A learning integrated assessment system. *Educ Res Rev.* 2006;1(1):61–7.
 79. Norcini JJ, Shea JA. Assessment of professionalism and progress in the development of a professional identity. In: Cruess RL, Cruess SR, Steiner Y, editors. *Teaching medical professionalism – supporting the development of a professional identity.* 2nd ed. Cambridge, UK: Cambridge University Press; 2016. p. 155–68.
 80. Schuwirth L, van der Vleuten C, Durning SJ. What programmatic assessment in medical education can learn from healthcare. *Perspect Med Educ.* 2017;6:211–5.
 81. Plakiotis C. Programmatic assessment of professionalism in psychiatric education: a literature review and implementation guide. *Adv Exp Med Biol.* 2017;989:217–33.
 82. Boyer D, Woods SK. American board of pediatrics professionalism guide, Chapt 9: When a learner is not meeting expectations. <https://www.abp.org/professionalism-guide/chapter-9/not-meeting-expectations>. Accessed 18 Aug 2021.

83. University of Alberta Faculty of Medicine and Dentistry. Classification of professionalism concerns and levels of intervention. <https://www.ualberta.ca/medicine/resources/faculty-and-staff/professionalism/professionalism-reporting-process/classification-of-professionalism-concerns-and-levels-of-intervention.html>. Accessed 18 Aug 2021.
84. Emory University School of Medicine. Use of social media. <https://med.emory.edu/education/programs/md/student-handbook/academics/professional-conduct/social-media.html>. Accessed 18 Aug 2021.
85. Rougas S, Gentileco B, Green E, Flores L. Twelve tips for addressing medical student and resident physician lapses in professionalism. *Med Teacher*. 2015;1–7. Early online. <https://doi.org/10.3109/0142159X.2014.1001730>.
86. Barnhoorn PC, Houtlosser M, Ottenhoff de Jonge MW, GTJ E, Numans ME, AWM K. A practical framework for remediating unprofessional behavior and for developing professionalism competencies and a professional identity. *Med Teacher*. 2019;41:303–8. <https://doi.org/10.1080/0142159X.2018.1464133>.
87. Jha V, Brockbank S, Roberts T. A framework for understanding lapses in professionalism among medical students: applying the theory of planned behavior to fitness-to-practice cases. *Acad Med*. 2016;91:1622–7. <https://doi.org/10.1097/ACM.0000000000001287>.
88. Institute for Healthcare Improvement. Tools – Cause and Effect Diagram. <http://www.ihl.org/resources/Pages/Tools/CauseandEffectDiagram.aspx>. Accessed 18 Aug 2021.
89. Bryden P, Ginsburg S, Kurabi B, Ahmed N. Professing professionalism: are we our own worst enemy? Faculty members' experiences of teaching and evaluating professionalism in medical education at one school. *Acad Med*. 2010;85:1025–31.
90. Steinert Y, Cruess S, Cruess R, Snell L. Faculty development for teaching and evaluating professionalism: from programme design to curriculum change. *Med Educ*. 2005;39(2):127–36. <https://doi.org/10.1111/j.1365-2929.2004.02069.x>.
91. Al-Eraky MM, Donkers J, Wajid G, Van Merriënboer JJ. Faculty development for learning and teaching of medical professionalism. *Med Teach*. 2015;37(Suppl 1):S40–6. <https://doi.org/10.3109/0142159X.2015.1006604>.
92. Lu WH, Mylona E, Lane S, Wertheim WA, Baldelli P, Williams PC. Faculty development on professionalism and medical ethics: the design, development and implementation of Objective Structured Teaching Exercises (OSTEs). *Med Teach*. 2014;36(10):876–82. <https://doi.org/10.3109/0142159X.2014.916780>.
93. Ho MJ, Yu KH, Hirsh D, Huang TS, Yang PC. Does one size fit all? Building a framework for medical professionalism. *Acad Med*. 2011;86(11):1407–14. <https://doi.org/10.1097/ACM.0b013e31823059d1>.
94. Fryer-Edwards K, Van Eaton E, Goldstein EA, Kimball HR, Veith RC, Pellegrini CA, Ramsey PG. Overcoming institutional challenges through continuous professionalism improvement: the University of Washington experience. *Acad Med*. 2007;82(11):1073–8. <https://doi.org/10.1097/ACM.0b013e3181574b30>.
95. Vygotsky LS. *Mind in society: the development of higher psychological processes*. Massachusetts: Harvard University Press; 1978.
96. Houston LJ, DeJong S, Brenner AM, Macaluso M, Kinzie JM, Arbuckle MR, Janssen F, Cowley DS, Bentman AL. Challenges of assessing resident competency in well-being *Acad Med*: 2021. doi: <https://doi.org/10.1097/ACM.0000000000004220>.
97. Kirkpatrick D. Great ideas revisited: revisiting Kirkpatrick's four-level model. *Training Develop*. 1996;50:54–7.
98. Tay KT, Ng S, Hee JM, Chia EWY, Vythilingam D, Ong YT, Chiam M, Chin AMC, Fong W, Wijaya L, Toh YP, Mason S, Krishna LKR. Assessing professionalism in medicine – a scoping review of assessment tools from 1990 to 2018. *J Med Educ Curric Dev*. 2020;7:2382120520955159. <https://doi.org/10.1177/2382120520955159>.
99. Barry D, Cyran E, Anderson RJ. Common issues in medical professionalism: room to grow. *Am J Med*. 2000;108(2):136–42.
100. McLachlan JC, Finn G, Macnaughton J. The conscientiousness index: a novel tool to explore students' professionalism. *Acad Med*. 2009;84(5):559–65.
101. Rademacher R, Simpson D, Marcdante K. Critical incidents as a technique for teaching professionalism. *Med Teach*. 2010;32(3):244–9.
102. Hojat M, DeSantis J, Shannon SC, Mortensen LH, Speicher MR, Bragan L, LaNoue M, Calabrese LH. The Jefferson Scale of Empathy: a nationwide study of measurement properties, underlying components, latent variable structure, and national norms in medical students. *Adv Health Sci Educ Theory Pract*. 2018;23(5):899–920. <https://doi.org/10.1007/s10459-018-9839-9>.
103. McDaniel MA, Hartman NS, Whetzel DL, Grubb WL III. Situational judgment tests, response instructions and validity: a meta-analysis. *Pers Psychol*. 2007;60(1):3–91.
104. Van Zanten M, Boulet JR, Norcini JJ, McKinley D. Using a standardized patient assessment to measure professional attributes. *Med Educ*. 2005;39(1):20–9.
105. Kesselheim JC, McMahon GT, Joffe S. Development of a test of residents' ethics knowledge for pediatrics (TREK-P). *J Grad Med Educ*. 2012;4(2):242–5.



Interprofessional Education and Teamwork

15

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Background

Managing a psychiatry graduate medical education (GME) program in the twenty-first century demands the involvement of resident and fellow learners, faculty members, and many other non-psychiatrist professionals. This creates challenges and opportunities in many areas of program design, as program directors must consider other learners present on rotations and in didactics as well as the inclusion of faculty members who are not psychiatrists or physicians. Related to clinical care, work done by psychiatry trainees with nonpsychiatrist professionals occurs in many settings, including settings outside of traditional mental health practice areas.

Training in the leadership of interdisciplinary teams and explicit training in interprofessional teamwork are requirements of the Accreditation Council for Graduate Medical Education (ACGME) for psychiatry education (IV.C.5) [1].

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Indeed, the word “interprofessional” appears seven times in these requirements. In working with learners and other professionals as well as in diverse patient care settings, psychiatry trainees benefit from opportunities for interprofessional education and developing skills in interprofessional teamwork. Interprofessional education has been defined as “those occasions when members (or students) of two or more professions learn with, from, and about one another to improve collaboration and the quality of care” [2]. When psychiatry trainees work with students and professionals from other disciplines, opportunities are created for systematic, planned interprofessional education. Psychiatry has a long history of interprofessional teamwork – often referred to as multidisciplinary teamwork – in many practice settings, such as inpatient psychiatry, community mental healthcare, and primary or integrated care (IC) models. While psychiatrists often are expected to assume leadership roles within these teams, explicit training on leadership is needed. In addition, education is needed to promote development of the skills, attitudes, and knowledge of the roles, scope of practice, and unique contributions of teammates from other professions.

Many psychiatry training programs are providing interprofessional education and training opportunities for residents and fellows. In a 2021 survey of psychiatry program directors, nearly two-thirds of respondents provided interprofes-

sional education for their residents or fellows on how to collaborate with teams made up of practitioners from other medical disciplines or other health professions [3]. In most cases, this was informal and experiential and involved working with professionals from other disciplines in clinical settings. However, some program directors reported providing formal didactics, interdisciplinary case reviews, and education on collaborative care models for residents and fellows, as well as faculty development on these same topics. Nearly one-third of survey respondents (29.5%) also reported that their department began or expanded educational programs for other professional trainees within the previous 5 years.

This chapter addresses several aspects of interprofessional education in psychiatry GME. These include educating psychiatry trainees alongside learners from other disciplines, engaging nonpsychiatrists as program faculty, clinical experiences for residents and fellows working with other professionals and in nonpsychiatric settings, and models for explicit education regarding interprofessional practice and teamwork.

Educating Psychiatry Residents and Fellows in the Presence of Other Learners

Just as healthcare does not occur in a vacuum, psychiatry GME generally occurs, both by design and not, in the presence of other learners. With both psychiatric GME and medical student education in psychiatry, teaching methodology is on one hand simple, that is, selecting a teaching method to achieve a desired outcome, and on the other hand complex, as it involves consideration of the teacher, learner, content, and teaching method. When other learners are present, all sets of learners' levels of expertise and needs must be considered.

Psychiatry residents and fellows learn from, teach, and learn in the presence of students and trainees from many other professions, including both undergraduate and graduate professional

learners. In the same 2021 survey of psychiatry program directors reporting interprofessional training of psychiatry residents and fellows [3], other learners included residents and fellows from other medical specialties (reported by 84.8% of respondents), followed by psychology trainees (78.1%), advanced practice nurses (APRNs) or APRN students (50.5%), physician assistants (PAs) or PA students (44.8%), social work students (44.8%), nursing students (40%), and pharmacy students or residents (34.3%). Most program directors reported that interprofessional training was positive for their residents.

In designing educational experiences, however, it is essential that psychiatry residents and fellows have protected learning where they are not competing with other learners for faculty time. Residents and fellows must have a sufficient number and variety of patients, as well as space and time to complete work meant to develop clinical competencies, all of which could be potentially encroached upon by trainees from other disciplines and programs. Faculty must be able to focus directly on supervising and teaching psychiatry residents and fellows for an amount of time sufficient to provide education at an appropriate level for the trainee and to assess their competency in performing clinical skills. This requires the program director to be intimately familiar with each rotation and to advocate for changes in rotations or increased resources when needed. In fact, the ACGME Common Program Requirements (CPRs; I.E.) [1] explicitly state that "The presence of other learners and other care providers, including, but not limited to, residents from other programs, subspecialty fellows, and advanced practice providers, must enrich the appointed residents' education" and that "Programs have a responsibility to monitor the learning environment to ensure that residents' education is not compromised by the presence of other providers and learners." This ACGME requirement can and should be used to secure adequate institutional or departmental support if other learners are encroaching upon psychiatry residents' time, space, or access to teaching faculty [1].

It is also important to keep in mind which other learners might be present through the lens of developing the psychiatrist in training as a future teacher. The ACGME psychiatry program requirements state (IV.D.1.c) that psychiatry residents at all levels must develop competencies in teaching [1] and the presence of other learners such as medical students, predoctoral psychology interns, nurse practitioner students, social work students, nursing students, physician assistant students, occupational therapy students, and many others can provide an opportunity for interprofessional teaching. These experiences can take place in a variety of settings, including inpatient and outpatient psychiatry services as well as on medical services and clinics, and in community settings.

Such teaching must take place in context, however, and must include supervision of what is being taught and to whom. In order to assess what learners already know, residents and fellows need to understand the educational background of the learner being taught. In addition, residents and fellows must themselves have competency in the content they teach others. A critical component is for psychiatry GME trainees to learn how other people learn and to plan the most effective ways to help their learners to learn [3]. Teaching experiences not only assist the resident or fellow to develop as a teacher, they also allow them to consolidate their own knowledge and can assist in the development of supervision and leadership skills [3]. For a detailed discussion of development of residents as teachers, see Chap. 24.

Psychiatry residents and fellows also learn from as well as teach postgraduate trainees in other professions. It is therefore important that they learn from residents and fellows in other fields of medicine as well as postdoctoral psychology trainees, social work interns, and others. Some of this learning takes place during required experiences in psychiatry residency, such as time on medicine and neurology services, while other experiences, such as rotations in primary care clinics or other medical specialty clinics or services, need to be deliberately planned. In institutions where there are training programs other than the psychiatry residency or fellowship pro-

gram, there are many opportunities for psychiatry residents and fellows to teach and be taught that can be deliberately added to the program. For example, a didactic course in community psychiatry might include psychiatry residents as well as social work students. The social work students can share their knowledge of working with families in the context of their communities.

Faculty Members Who Are Not Psychiatrists

Many psychiatry residencies and fellowships utilize faculty members who are not psychiatrists. Utilizing these faculty members can be a way to enhance training, especially when the program is located in a place where there is not a diverse or abundant group of psychiatrists to serve as faculty members. Nonpsychiatrist faculty can be utilized to teach psychopharmacology, research design and methodology, statistics, administrative medicine, patient perspectives on care, and many other topics. As in choosing psychiatrist faculty, utilizing nonpsychiatrists requires care and attention to the expertise and pedagogy of the potential faculty member in their subject area as well as their teaching skills.

The ACGME is clearly in favor of nonphysician education for residents, stating that “The education of residents by non-physician faculty educators ... provides valuable advancement of the residents’ knowledge” [1] (ACGME psychiatry program requirements II.B.3.c). The ACGME also is clear that faculty development must be provided for nonphysician faculty members who have a significant role in residency training. In some cases, significant time must be spent by the program director in educating these faculty members about both undergraduate and graduate medical education in order to appropriately prepare them for their roles. Ultimately, it is the program director’s role to make sure these faculty members understand the context in which they teach.

As APRNs, PAs, and Clinical Nurse Specialists (advanced practice providers) become an increasing proportion of the providers of care to psychiatric patients, the question of whether it

is appropriate for these individuals to teach and supervise psychiatry trainees often arises. Program directors should proceed cautiously in these cases and make sure that they understand the training, experience, knowledge, and skills of these providers. Although some advanced practice providers may have extensive experience and expertise, others may have graduated more recently, and it is important to recognize that their training included fewer clinical hours than even early psychiatry residents have had. In addition, the Centers for Medicare and Medicaid Services (CMS) states specifically in the Medicare Claims Processing Manual (Chap. 12 100.1.3) that the teaching physician supervising a psychiatry resident for outpatient evaluation and management services must be a physician [4] which makes work done by a resident under such nonphysician supervision unbillable. There may be other applicable state or local laws or institutional policies such as hospital bylaws that govern who can supervise residents or fellows and in which scenarios. In general, teaching by these nonpsychiatrist practitioners should be limited to specific instances where the provider has needed expertise not found in the physician faculty in a program. In general, these individuals should not be utilized as supervisors for routine care performed by psychiatry residents and fellows.

Psychopharmacology training has been successfully enhanced in many psychiatry GME programs by clinical pharmacist faculty. In one pilot study that utilized computer simulation [5], third-year psychiatry residents increased their knowledge when debriefed by a clinical pharmacist and were highly satisfied with the pharmacist's involvement in the teaching exercise. Another program [6] described the involvement of a clinical pharmacist in teaching pharmacology as well as attending case review rounds with residents. Utilizing clinical pharmacists as faculty can supplement education provided by psychiatry faculty on clinical teaching services and can teach residents how to work interprofessionally with clinical pharmacists.

Similarly, psychotherapy training has long been provided to psychiatry residents by clinical psychologists, clinical social workers, and other

licensed therapists. Psychiatry residencies rarely have access to enough psychiatrists who are qualified to provide psychotherapy supervision to residents in individual psychotherapy and even fewer psychiatrists are qualified to provide supervision in couples, family, and group psychotherapy. Having sufficient psychotherapy training in most programs requires the use of nonpsychiatrist faculty. Again, it is important to provide education for these faculty members so that they understand how psychotherapy training fits into the matrix of both undergraduate and graduate medical education. Such education might include information on required competencies, certifying board requirements, and nuances of how psychotherapy is employed in different clinical services.

A challenge when working with nonpsychiatrist faculty supervising residents and fellows can be unintended "profession-centrism" [7]. A professional version of ethnocentrism, the concept refers to the teaching of students in silos – encouraging students to learn profession-specific language, terms, values, beliefs, to be socialized in that specific discipline, and to invest in that field. In short, we train students so they have a specific, clear, professional identity – that as a counselor, social worker, marriage and family therapist, etc. To accomplish this professional acculturation, professional differences tend to be maximized and similarities minimized. This profession-centrism is frequently manifested in the supervision requirements for student and pre-license training experiences. When providing interprofessional supervision, supervisors may be unaware of differences between their own professional practice expectations with respect to their supervisees. For example, a psychologist complying with their guidelines may not realize that a social work supervisee is expected to adhere to social work standards. Similarly, nonpsychiatrist supervisors may think that requirements for psychiatry residents and fellows are the same as those for trainees in their own discipline. This reinforces the importance of orienting nonpsychiatrist supervisors to psychiatry education, requirements, and milestones.

Residents and Fellows Working with Professionals Who Are Not Psychiatrists

A day in the life of a psychiatry resident involves working with many professionals who are not psychiatrists. Interactions with psychologists, nurses, social workers, occupational therapists, APRNs, PAs, and others are not only necessary for patient care, but also provide opportunities for residents to learn to work on interprofessional teams. The ACGME requires this work, “to enhance patient safety and improve patient care quality” and the ACGME Psychiatry Program Requirements emphasize that a culture of safety requires this [1]. Residents, of course, learn these skills when they are taught explicitly, as well as when they are taught implicitly, by observation of faculty members engaged in these interprofessional relationships. It is important that psychiatrist faculty keep this in mind when teaching residents in clinical settings and monitor what they are modeling for residents. Simple actions, such as faculty member attendance at meetings and paying attention at multidisciplinary rounds on an inpatient unit, speak volumes to residents. Faculty psychiatrists can also model and reinforce ways of dealing with differences in an interprofessional group. Respect and appreciation for difference allow us to put into practice the values we purport to have and to apply the skills we say are important.

One important shift in recent decades is the increasing numbers of nonpsychiatrist professionals working in mental or behavioral (i.e., inclusive of addiction) health settings [8]. There is also a maldistribution of the psychiatric workforce – so many rural and urban settings do not have access, though telehealth is helping with that [9]. The shortage of psychiatrists is one factor that has led to the hiring of nonpsychiatrist professionals (e.g., psychiatric nurse practitioners, physician assistants, psychologists) to fill the gap [5, 10]. As a result, psychiatry residents and fellows increasingly work with other professionals during their training and afterward, in clinical psychiatric practice. It is more important now than ever that psychiatry faculty and trainees

learn how to collaborate with learners and professionals from other disciplines. It is also important for psychiatry faculty and trainees to understand the roles and skills of other team members – and learn with and from them – to work effectively in interprofessional teams in order to provide high-quality, patient-centered care.

Power dynamics are a key factor in interprofessional collaboration, and it is important to teach residents and fellows to understand how these dynamics impact patient care through such mechanisms as to how and whether team members are offered an opportunity to speak and to be heard. It is essential that residents and fellows understand the ways in which the exercise of top-down authority can lead to “team conflict, poor performance, low morale and inferior decision-making” [11]. On the other end of the continuum, modeling exclusively flattened hierarchy can lead psychiatry trainees to have trouble understanding when their expertise is needed, when to exercise authority, and the concept of respondent superior (a legal doctrine, most commonly used in tort, that holds an employer or principal legally responsible for the wrongful acts). Characteristics of successful interprofessional teams include a shared vision, clear goals and expectations, strong but receptive leadership, interprofessional respect, well-defined roles, clear and frequent communication, periodic reflection and self-evaluation, and adaptability [12].

Residents and Fellows Working in Nonpsychiatric Settings

Residents work in nonpsychiatry services on both required and elective rotations. The ACGME requires that psychiatry residents rotate on “other medical and surgical services” (IV.C.3.k) [1]. Residency and fellowship programs may also offer elective rotations in settings such as outpatient primary care and medical subspecialty clinics (e.g., obstetrics, oncology, transplant, HIV, pain), community mental health clinics, school mental health, correctional facilities, substance use disorder treatment centers, and nursing homes. Such rotations provide opportunities to

work with both healthcare and non-healthcare professionals from a wide variety of disciplines. There are many opportunities to plan educational experiences for residents and fellows in these nonpsychiatric settings [8].

One example of a potential setting for inter-professional education is an outpatient consultation-liaison psychiatry rotation in a primary care clinic. Working, consulting, and teaching in primary care clinics develop skills in consultation that are critical as psychiatrists continue to face the reality that providing direct care to all patients with psychiatric needs is simply not possible due to workforce shortages that lead to time constraints for psychiatrists. A white paper from the Academy of Consultation-Liaison Psychiatry (ACLP) Residency Education Subcommittee reviewed seventeen articles focused on organizing and assessing the impact of outpatient consultation-liaison psychiatry rotations. Benefits of such rotations included exposure to psychiatric conditions in patients with other medical disorders seen longitudinally in ambulatory clinics, the ability to do extended evaluations and interventions over time, exposure to different systems of care delivery, and, of particular relevance to this chapter, the opportunity to provide liaison and education to a wide variety of nonmental health practitioners [13]. Residents and fellows, especially consultation-liaison psychiatry fellows, can learn skills in assisting non-psychiatrist colleagues to care for the psychiatric needs of their patients in a way that extends psychiatric expertise beyond what can be provided in caring directly for patients [14, 15].

As primary care physicians provide increasing amounts of psychiatric care, learning to assist them using many models including co-located, integrated, and collaborative care develops psychiatry trainees' skills in extending the reach of their expertise. Residents and fellows doing such rotations learn to work with other team members with well-specified roles, while also learning the roles of a psychiatrist consultant, educator for other team members, and integrated care team leader [16]. Examples of experiences that could be considered include participation in formal collaborative care services, Project ECHO,

(Extension for Community Healthcare Outcomes), and provider-to-provider telephone consultation programs like The Massachusetts Child Psychiatry Access Project (MCPAP) and MCPAP for Moms [17].

One residency program created a collaborative care consultation rotation for residents in a Veterans Affairs (VA) primary care clinic setting. Residents in this rotation learned the role of the nurse care manager, learned to provide e-consults, and expressed high satisfaction with the rotation [18]. Huang et al. [19] also described the creation of a collaborative care rotation in a psychiatry residency. The collaborative care model has the advantage of being an integrated care model with a robust evidence base and a well-defined team structure consisting of a primary care provider, care manager, psychiatrist consultant, and the patient [20].

The collaborative care model lends itself well to teaching ACGME milestones important in interprofessional teamwork, such as collaboration and leadership within interprofessional clinical teams, training and supervising others, and effective oral and written communication skills [16]. In a survey study, psychiatric consultants working in the collaborative care model identified providing emotional support and attention to group dynamics when working in teams and advising teams, clinics, and organizations more broadly as two critical skills for psychiatrists working in this model to learn [9]. Residents and fellows on collaborative care rotations have the opportunity to learn these interprofessional team skills.

One good example of interprofessional education (IPE) is integrated care training in Canada. Regardless of their intended future practice setting or population, psychiatry residents in Canada receive training in integrated care [21]. In this context, integrated care is a concept which brings together inputs, delivery, management, and organization of services related to diagnosis, treatment, care, rehabilitation, and health promotion. Team members are the patient/family, peer provider, social work, primary care, psychologist, nurse, and psychiatrist. Integration is a means to improve services

in relation to access, quality, user satisfaction, and efficiency. IPE attempts to build capacity for improved quality of mental healthcare, and competencies in interprofessional teamwork, collaborative leadership, knowledge exchange, and program consultation have been suggested. Leadership, shared vision, roles, monitoring, and nurturing are needed. Suggested training includes clinical exposure to primary care and/or community settings, didactic teaching, quality improvement methods, leadership, health systems, and population health [21].

1. Competencies for in-person, collaborative, and integrated care services include technical, administrative, and collaborative skills [16, 22]. A consensus set of integrated care (IC) competencies was developed in Canada [21], since, as noted above, Canadian psychiatrists are required to train in IC, a term which they use to include shared care and collaborative care. Knowledge of evidence-based models of IC and experience with organizations are needed to implement these competencies and care models [21]. Overall, learning these competencies is best done through clinical rotations and core curricula.
2. Competency domains identified in Canada include technical; assessment; relational and communication; collaborative and interprofessional; administration; medico-legal; community psychiatry and community-specific knowledge; cultural psychiatry; and health systems [21]. At the intersection of telepsychiatry and integrated/collaborative care is the skill set to configure a combination of services to meet the needs of a population by leveraging technology and team-based care to overcome distance and time as barriers [23]. It is suggested that residents gain exposure to primary care and/or community agency settings through a longitudinal experience during the transition to the practice stage of training. A core curriculum to augment experiential learning is needed regarding: IC models; population-based care; and health policy, economics, and reform [9, 21].

A case example illustrates one approach to the teaching of some IPE competencies in an integrated care setting (Fig. 15.1). It could represent a paper case or simulation – used in a seminar format to introduce concepts to learners – or it could represent an example of how a faculty member might supervise and teach a learner around a real case. It is organized with assumptions for learners, a case referred for care, questions to facilitate teaching clinical skills, and questions to facilitate the teaching of IPE competencies.

Teamwork and Team-Based Care

There are many settings in which interprofessional care is practiced, one of which is primary care. Primary care practitioners and psychiatry and mental health clinicians contribute to team-based service delivery and system workflow using a variety of models (e.g., stepped, collaborative, integrated care). For systems of care, an approach to competencies – explicit skills, attitudes, and knowledge – helps to align clinical, training, professional development, and administrative missions. Efficient clinical operations match clinician expertise (i.e., working at the “top of one’s license”) and teamwork to meet patient needs at the point of service. For example, care coordinators/managers can manage secure mail, nurse practitioners and physician assistants can initiate e-consults, and behavioral health professionals may evaluate less complex cases. Each of these options preserves the physician time for analysis of data, complex cases, and supervision. Team-based care (TBC) with technology ideally offers a variety of options: learning by patients and clinicians (e.g., curricula); levels for low- to high-experienced members; attitudes and skills in addition to knowledge outcomes; explicit activities for teams to communicate (e.g., huddles); teaching methods with case/practice in addition to lecture/didactic; and perhaps most importantly, supervision for feedback, reflection, and developing good habits (e.g., text to supervisor in time for help).

Assumptions

(1) Typical competency domains:

- (1) values and ethics;
- (2) roles and responsibilities for collaborative practice;
- (3) interprofessional communication; and
- (4) teamwork and TBM.

(2) Context of competency levels

- Novice or advanced beginner (e.g., advanced medical student, early resident, other trainees); Accreditation Council for Graduate Medical Education Milestone levels 1–2; pre-competency
- Competent/proficient (e.g., advanced resident/graduating resident/fellow/faculty/attending/interdisciplinary team member); ACGME Milestone levels 3–4; competency
- Expert (e.g., advanced resident/fellow/faculty/attending/interdisciplinary team member); ACGME Milestone levels 4–5; competency [29]

Information provided by the referral source

Simon is a single 22-year-old Aboriginal male, who lives with his grandparents on a reservation. He has been referred to see the psychiatry resident who is working in a primary care clinic. He is not working and not attending school. His grandmother asked for the referral because she was concerned that Simon had expressed suicidal thoughts. His functioning has declined over the past two years. He dropped out of high school and has not attempted to return. More recently, he has withdrawn socially and spends much of his time in his room. His grandmother has looked in his phone and seen texts that say he wishes his life was over.

Questions to facilitate the teaching of clinical skills

(1) *What is the referral source asking you to do? What do they need from you? What might they need from you that they are not aware of?*

Competency related to Patient Care (Clinical Consultation: PC6)^a

(2) *Who is the best person on the team to reach out to them? Why? What is the goal of the first contact and subsequent one(s)?*

Competency related to Systems-Based Practice (System Navigation for Patient-Centered Care: SBP2)

(3) *Where is the best location for the evaluation? Telephone, emergency department, primary care clinic, or a mental health clinic?*

Competency related to Patient Care (Treatment Planning and Management: PC3)

(4) *What procedures are in place or need to be established before the assessment, given that the patient might present with acute safety risks at the time of the assessment? Who will need to be informed/engaged at that time? What legal mechanisms are possible for you to ensure the patient's safety? What local resources/services are available in the event of acute safety issues?*

Competencies related to Patient Care (Treatment Planning and Management: PC3), Systems-Based Practice (System Navigation for Patient-Centered Care: SBP2 and Physician Role in the Health Care System: SBP3)

Fig. 15.1 Case example: clinical teaching of IPE

The beginning of the assessment

You are one of the clinic nurses. Simon is in a room alone at the primary care clinic. He is wearing a hoodie with the hood up and is backlit, thus obscuring his face from your view. He says in an irritated tone, “What’s with this? My Ma said she was taking me to see my doctor and you’re a nurse!”

Questions to facilitate the teaching of competencies

- (1) *What can you do to clarify his understanding of how the team helps patients? Is he willing to work with a care coordinator, nurse and doctor?*
Competencies related to Patient Care (Clinical Consultation: PC6), Systems-Based Practice (System Navigation for Patient-Centered Care: SBP2), Interpersonal and Communication Skills (Patient and Family-Centered Communication: ICS1)
- (2) *What can you do to engage him, given that he may be a somewhat reluctant participant – in both primary care and behavioral health?*
Competencies related to Interpersonal and Communication Skills (Patient and Family-Centered Communication: ICS1)
- (3) *What are the team members’ roles and responsibilities for collaborative practice?*
Competency related to Systems-Based Practice (System Navigation for Patient-Centered Care: SBP2)

Clinical information further into the assessment

Simon has engaged a bit more – answering questions more easily – he engaged with the nurse better than the initial care coordinator. He has told the nurse that he began feeling down in Grade 10, after his mother had to go to rehab again and he had to move in with his grandparents. He began to skip classes and do more poorly in school, ultimately dropping out in Grade 11. He endorsed most symptoms of depression, but specifically denied ever thinking about suicide. You noticed that he dropped his eye contact when he denied suicidal ideation. You are unsure if he is aware that his grandmother had been looking at his texts on his phone. You are also concerned as he mentioned that he still enjoys hunting and thus assume he has access to firearms. Simon’s affect remains flat throughout the interview, and he speaks in a monotone.

Further questions to facilitate the teaching of competencies

- (1) *What can you do further to assess Simon’s suicidal risk? What are the roles and responsibilities of team members?*
Competencies related to Patient Care (Psychiatric Evaluation: PC1 and Clinical Consultation: PC6), Systems-Based Practice (System Navigation for Patient-Centered Care: SBP2).
- (2) *In what ways does Simon’s cultural background affect: The assessment of his suicidal risk? Your assessment of his mental status? Your assessment of issues in his personal history that might help you further understand why he has developed depression?*

Competences related to Patient Care (Psychiatric Evaluation: PC1 and Psychiatric Formulation and Differential Diagnosis: PC2), Systems-Based Practice (System Navigation for Patient-Centered Care: SBP2), and Interpersonal and Communication Skills (Patient and Family-Centered Communication: ICS1).

^aWhere questions assess ACGME Psychiatry Milestones 2.0 (29), specific sub-competencies are referenced. PC Patient Care, SBP Systems-Based Practice, ICS Interpersonal and Communication Skills

Education regarding team-based care (TBC) is an exceptional example of interprofessional education. The National Academies of Science and Medicine (NAS, NAM) define team-based care as “the provision of health services to individuals, families, and/or communities by at least two healthcare providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across health services” [24, 25]. TBC has been linked to improved patient outcomes and may also be a means to improve clinician well-being [26] and prevent burnout [25]. A team-based model of care strives to meet patient needs and preferences by actively engaging patients as full participants in their care, while encouraging all healthcare professionals to function to the full extent of their education, certification, experience [27], and expertise. Resident and fellow engagement in TBC is also an opportunity to leverage the interprofessional team-based care activities within integrated primary care settings as interactive educational opportunities to build competencies in biopsychosocial care among primary care team members [24].

For residents, fellows, and faculty to be successful with IPE, they should have training for clinical skills development, and there are specialized competencies for IPE. An example is TBC competencies. Overall, TBC competencies and interprofessional collaborative practice [28] incorporate the domains of ACGME core competencies (patient care, interpersonal and communications skills, systems-based practice, professionalism, practice-based learning and improvement, and medical knowledge) featuring teamwork that is so central to training [29].

Teamwork is facilitated by a shared mental model of expectation, roles, and outcomes [30]. Physical (e.g., schedules, huddles), virtual (i.e., on-site and distant member) and other training interventions may substantially improve team-based care – coordination, communication, and teamwork – and lead to decreased length of stay, fewer emergency room visits/readmissions, and better quality and safety [31, 32]. Specifically, teamwork can organize workflow and this may

help organizations offer flexible work schedules without lowering the quality of service or raising the frequency of errors [31, 33].

Leveraging Interprofessional Learning Opportunities for Residents and Fellows in the Program and Departmental Culture

Interprofessional education and teamwork competencies appear in the ACGME Psychiatry Milestones 2.0 [29]. For example, under Patient Care sub-competency 6 (PC6), a level 4 milestone is “Collaborates skillfully with practitioners from other disciplines in medical settings”; under Systems-Based Practice sub-competency 2 (SBP2), one level 4 milestone is “Role models effective coordination of patient-centered care among different disciplines and specialties”; and a level 4 Interpersonal and Communication Skills 2 (ICS2) milestone is “Coordinates recommendations from different members of the health care team to optimize patient care.” There are many opportunities for learning interprofessionally that can educate residents about interprofessional competencies and help them to achieve these milestones. Scholarship in psychiatry graduate-level education needs to be increased in this area, though we can learn a great deal from work in related professions as well as research done at the undergraduate medical education level in psychiatry. Teaching and evaluation methods are suggested for programs to address specific IPE skills (Table 15.1). Importantly, IPE should include instructors from different disciplines and interprofessional faculty panels, as well as interprofessional learners.

Residents and fellows also need mentorship, feedback, and assessment of their interprofessional learning in their day-to-day work. Multi-source feedback assessment (also known as 360-degree assessment) is a recommendation for Clinical Competency Committees (CCCs) by the ACGME and can reveal opportunities for improvement in working with other professionals on medical teams that faculty and program direc-

Table 15.1 Teaching and assessment methods for interprofessional education (IPE) competencies

| Teaching/method | Context/teacher(s) | ACGME competencies addressed | Learner assessment methods |
|-----------------------------------|--|---|---|
| Didactic teaching | | | |
| Brief didactic | Classroom or clinical setting | <i>Systems-Based Practice (SBP)2</i> : <i>System Navigation for Patient-Centered Care</i> ; <i>Interpersonal and Communication (ICS)2</i> : <i>Interprofessional and Team Communication</i> – primarily levels 0–2 To provide overview of research, trends, and relevance of IPE; correct misconceptions about roles and build trust To engage/interest learners in further educational opportunities Provides content knowledge but less effective for developing attitudes and skills Discuss shared values and ethics | Written tests: multiple-choice questions, short-answer questions |
| Grand rounds or longer didactic | Classroom Employ interprofessional panels more than individual lecturers | | |
| Case-based Learning | | | |
| Brief vignettes | Individual learning (in-person or web-based) or in small groups Use co-facilitators across professions or rotate individual interprofessional presenters and facilitators | <i>SBP2</i> ; <i>Professionalism (PROF)2</i> – levels 0–5 depending on complexity of the case Deepens content knowledge and begins to apply and generalize knowledge to real-life examples In-depth cases are a good way to scaffold roles and responsibilities for collaborative practice Good for developing shared goals for treatment/management plans | Case-based written tests: multiple-choice questions, short-answer questions |
| Complex, multi-step cases | | | |
| Patient interviews | | | |
| Observing faculty | Live or previously recorded Rotate interprofessional interviewers, presenters, and facilitators | <i>Patient Care (PC)1</i> ; <i>ICS2</i> – primarily at level 0–1 [Can also be used to demonstrate more complex skills (e.g., coordinating a physical exam)] | Reflection journal |
| Group observed or co-interviewing | Group all in a suite; use separate room or 2-way mirror IPE learners and teachers take turns with assessment Employ group and supervisor feedback | <i>PC1</i> ; <i>ICS2</i> ; <i>PROF2</i> ; <i>SBP2</i> – primarily at levels 0–2 Good context to adapt to teamwork: sequence of events, communication, and coordination Can focus on engagement, interpersonal and communication skills; work toward roles and responsibilities for collaborative practice Allows for group/discussion and reflection so can be used to explicitly address elements of professionalism; and also to reflect on cultural and social factors Builds consensus on pros and cons of IPE for primary and behavioral health teamwork | Mini-CEX (Clinical Evaluation Exercise) completed by faculty on each learner and direct verbal feedback |

(continued)

Table 15.1 (continued)

| Teaching/method | Context/teacher(s) | ACGME competencies addressed | Learner assessment methods |
|---|--|--|--|
| Observed by faculty | Supervisor observes in-time live or via distance by video | <i>PCI; ICS2; PROF2; SBP2</i> – all levels Particularly good for all skills related to patient care Exposure to multiple cases ensures learning to work with various populations and team members Supervisor may identify challenges with communication, coordination, and professionalism Obtain patient feedback as part of the 360-degree evaluation, if possible, with members of the interprofessional team | Mini-CEX completed by faculty and direct verbal feedback Review of completed report |
| Independent with review and/or distance supervision | Learner conducts interview on own and follow-up presentation to preceptor or team | <i>PCI; ICS2; PROF2; SBP2</i> – primarily levels 2–5 Good to practice and solidify competencies once achieved under observation Development and review of management plans Independence/autonomy can aid development of roles of manager, collaborator, and administrator – necessary for establishing own practice patterns | Mini-CEX or Case-based Discussions (CbD) Review of completed report |
| Simulation – with standardized patients | Use of standardized patients or pre-taped video clips | <i>PCI; ICS2; SBP2</i> – primarily levels 2–5 Ability to watch/reflect on own performance and style Ideal for more advanced skills that require start-stop and in-action reflection and feedback (e.g., administering tools; challenges with safety/risk; practicing use of interpreter; troubleshooting communication problems) Establish values and ethics | Feedback in real time OSCE |
| Research and quality improvement on IPE | | | |
| Case Write-Ups | By trainee with mentorship: individual feedback on a case; individual or group submission for conference presentation; team project across professions for publication | <i>SBP2; Practice-Based Learning and Improvement (PBLI)2</i> – all levels Synthesis of complex cases Awareness of policy-oriented factors or areas of more advanced knowledge gaps Good introduction to administration and use of evaluation and outcome metrics Systems-level thinking and health planning and resource allocation | Written or verbal discussion and feedback Feedback through peer review process |
| Literature reviews | | | |
| Quality improvement projects | | | |

Table 15.1 (continued)

| Teaching/method | Context/teacher(s) | ACGME competencies addressed | Learner assessment methods |
|---|---|--|---|
| Role as educator – learning through providing IPE | | | |
| Patient consultations based on IPE | Learner observes/participates/leads with primary care and/or behavioral health teams (e.g., review cases) | <i>PC6; SBP2; PBLI2</i> – level 0–1 for observation, level 2–5 for direct participation Learning to consult with interprofessional teams Systems-based practice skills Collaborative practice models | Reflection journal for observation Mini-CEX for direct participation in consultation Feedback solicited from other team(s) |
| Provide didactic sessions based on IPE | Learner observes/participates/leads with distal primary care teams | <i>SBP2; PBLI2</i> – level 0–1 for observation, level 2–5 for direct participation Learning to work with an interprofessional team Adapting communication to multiple people For more advanced skills, such as enhancing capacity and competencies (e.g., teaching on assessment tools or in physical exam) | Reflection journal for observation Evaluation forms completed by distal participants Mini-CEX adapted for provision of teaching |
| Group and interprofessional learning (e.g., journal club) | Live or via web/social media | <i>SBP2; PBLI2</i> – level 0–1 for observation, level 2–5 for direct participation Can enhance interprofessional and collaborative skills Build professionalism skills Can establish community of practice and outreach for interprofessional relationships | Evaluation forms completed by distal participants Mini-CEX adapted for provision of teaching |

Per ACGME Psychiatry Milestones 2.0, levels 1 to 5 correspond with moving from novice to expert resident in a specialty [29]

tors can review with trainees [34]. Multi-source feedback can reveal trainee blind spots regarding the effect of their behavior on team members and the quality of patient care that results. Such assessments serve to emphasize the importance of these skills in professional development [35].

Conflict management in interprofessional teams also represents a key learning opportunity for psychiatry trainees. Faculty members can model these skills and coach psychiatry residents and fellows in skill acquisition. Inpatient psychiatry services are key places for learning conflict management and resolution skills.

Much work has been done in health professions education outside of psychiatry GME to enumerate interprofessional competencies. Medical students entering residency are expected to be prepared to collaborate as a member of an

interprofessional team. This includes expected behaviors related to identifying team member roles and responsibilities, engaging in bidirectional communication with team members, and maintaining a climate of mutual respect and trust (Entrustable Professional Activity 10) [36]. The Interprofessional Education Collaborative lists four competencies they believe are essential to training health professionals [12]. These include the ability of individuals to maintain a climate of mutual respect and shared values, the knowledge of one's own role and the role of others to promote health, the ability to communicate with patients, families, communities, and other professionals in a responsive and responsible manner, and the ability to apply relationship-building values and the principles of team dynamics to healthcare (Fig. 15.2).

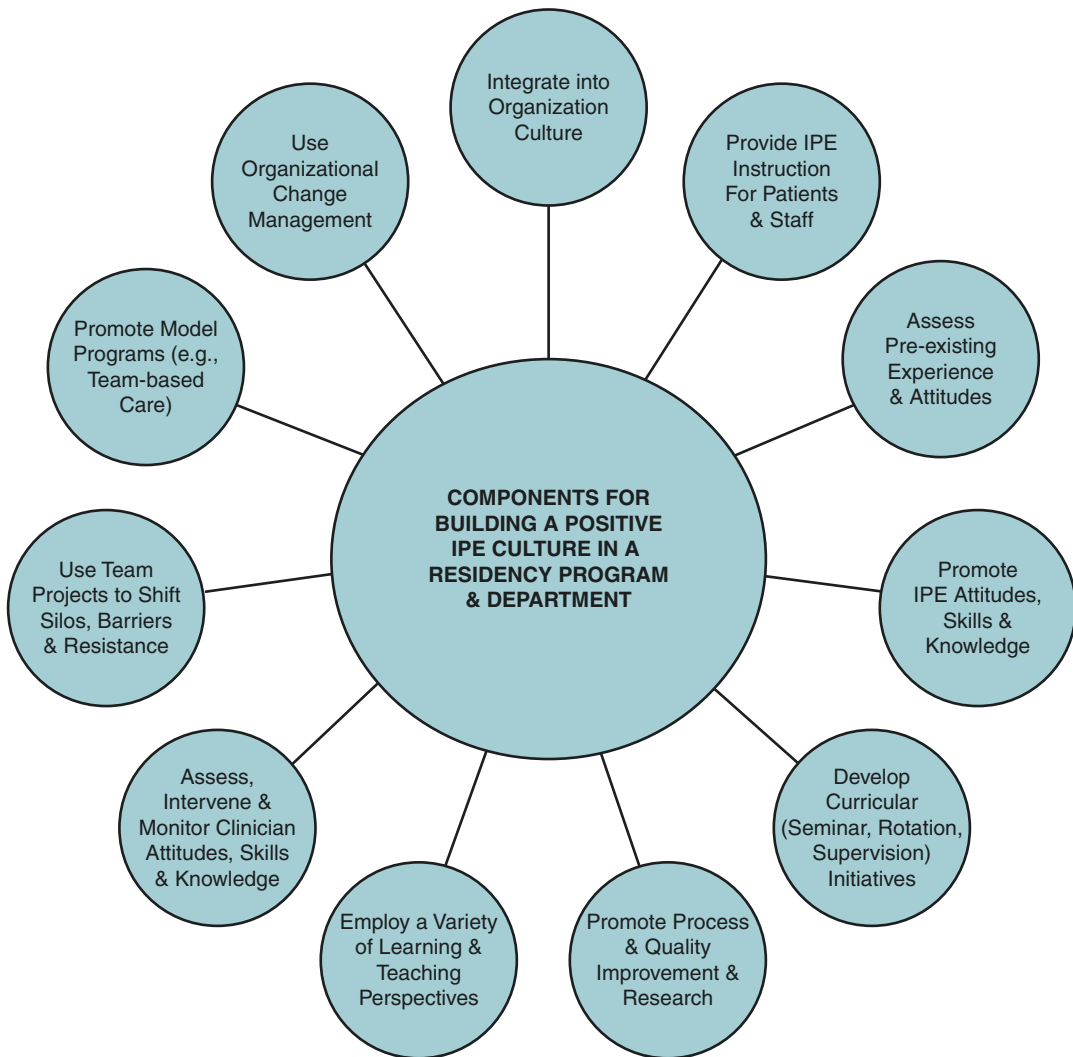


Fig. 15.2 Components for building a positive IPE culture in a residency program and department

Though psychiatry has a long tradition of interprofessional work, there have been calls to teach this work explicitly to psychiatry residents and fellows using these competencies rather than relying on tradition and implicit methods [37]. One group that studied team-based learning with interdisciplinary groups of students has theorized that the act of building social capital in these exercises is itself worthwhile [38], an idea that should be familiar to psychiatrists who have utilized these principles in working in groups.

Interprofessional education and training in telehealth is an example where trainees in psychi-

atric and other health professions can together learn important competencies. Although not typically a component of the curriculum for psychiatric trainees or other health professions [39–42], telehealth education and clinical experiences are increasingly becoming a part of psychiatry training. This has accelerated for all health professionals in training during the COVID pandemic [41] and is likely to become more commonly a part of their education and training experiences in the future. Advocates for IPE for telebehavioral health professionals [43–45] have identified common core telebehavioral health competencies

shared across health professions and how these offer a way to promote IPE across telebehavioral professions [46].

Multiple learning activities have been designed for medical students in concert with other health professions students in psychiatry [47–49], but finding a scholarship that includes psychiatry residents or fellows is challenging. Modifying some of these activities for psychiatry GME is likely possible and evidence-based educational interventions for psychiatry residents and fellows are needed.

A daylong simulation was created for professionals working in an outpatient psychiatry clinic to teach them to involve families and support networks in patient care. Professionals who participated reported valuing their teammates better and feeling motivated to engage in working together and supporting each other [50]. In another simulation-based activity, focused on the complex needs of community-based patients, students were required to rely on colleagues in order to enhance their understanding of the cases. Students reported feeling more confident in understanding the roles of their colleagues and what it meant to engage in holistic care [51]. In an educational activity designed to increase competencies in addressing social, economic, and political determinants of health, participants reported that they felt that this “real world” activity reframed how they thought about patients and led to a reconnection with their original motivations to enter the health professions. Presenting this activity interprofessionally underscored the importance of all members of the team understanding these concepts [52]. Work has begun in creating simulation-based interprofessional teamwork assessment tools that work across specialties in an attempt to distill the core competency [53].

Psychiatrists have been involved in simulation-based training performed with physicians, nurses, and allied health professionals aimed at improving competence in working interprofessionally in the care of patients who have mental health and other healthcare needs. The majority of professionals involved reported changing their practice

in areas of respect for interprofessional roles, improved communication skills, awareness of challenges faced by patients, as well as approaches to use when educating others [54].

Some rotations in graduate medical education are beginning to be designed specifically for teaching interprofessional competence. A pediatrics residency created a 2-week “patient experience” rotation that utilized a combination of experiential learning, simulation, and didactics focused on patient-centered care. Observation of interprofessional collaboration, training in communication, and understanding of patient and family perspectives were the primary goals. One of the major outcomes was a decrease in the resident perception of the physician’s impact on patient care and an increase in resident belief in the importance of communicating with other members of the team [55]. Such rotations could easily be designed and studied in psychiatry programs.

In addition to teaching interprofessional competencies, many things might possibly be taught better in an interprofessional fashion than by psychiatrists alone. Psychotherapy is an example of a competency that, in some cases, can be taught better, at least in part, in a cross-disciplinary fashion.

Seminars can be taught with diverse groups of professions students. An example is a law and psychiatry seminar that was taught at the University of Saskatchewan to law students and psychiatry residents. The seminar involved patient interviews followed by a review of the case law. Instructors in the seminar found that learner acquisition of knowledge as well as scholarly activity were enhanced by the seminar and evaluations from both law and psychiatry participants were positive [56].

Faculty Development and Institutional Support

In order to weave interprofessional education into a psychiatry program in both clinical rotations and didactic education, it is necessary to develop

faculty skills in this area. Faculty can be directly taught about interprofessional practice and teamwork in similar ways to those suggested in the previous section, but they also must be taught to think strategically about where in the curriculum such education belongs. Topor et al. [57] describe a workshop given at their institution to teach health professions educators to develop and implement interprofessional education programs unique to their institutions. Such a workshop could happen at a departmental or program level as well. Ward et al. [58] created an interactive multimedia e-book that also provides instruction for creating these focused training programs.

Another faculty development idea discussed in the literature involves modifying specialty society teacher education programs to be done at institutions and involving faculty from multiple departments and professions to learn together. This was done at the University of Washington and resulted in increased interprofessional collaboration, co-presentation, and feedback [59].

Support from department chairs and program directors for faculty to teach outside of the psychiatry clerkship and GME programs as well as invitations to faculty from other departments to teach within the psychiatry clerkship, residency, and fellowship(s) can speak volumes about what departmental leadership believes about the importance of interprofessional education. Faculty scholarship can also be encouraged by supporting interdisciplinary teams to engage in and write about projects that enhance education and clinical care [60].

Faculty in a psychiatry GME program must also be taught to provide mentorship and feedback, and to assess the extent to which trainees have attained interprofessional competencies, including leadership skills. Faculty also need professional development in assisting learners with large deficits in their ability to work interprofessionally which may include the teaching of coaching skills to faculty members who are assigned to assist with these residents.

Creating a program IPE culture requires evaluation and intervention at individual, team, program, and department levels – but ideally, too, across the institution. This includes a broader look at school(s) and health system culture related to trainee/student needs and roles; faculty clinical, teaching, and leadership roles; teams, professions, and systems within institutions; and organizational structure, process, and finances. In terms of faculty clinical, teaching, and leadership roles, it is helpful to consider communication, well-being, and professionalism and use social science, health service, and business constructs to shift attitudes. IPE champions and recognition of success based on teams, systems, and populations is important and some institutions use faculty development projects for existing and new leaders as a gateway to developing IPE. The Institute of Medicine has looked at individual, institutional, and policy levels for IPE assessment and development, for example, in promoting teamwork and collaboration and developing the interprofessional learner from education to workplace [24] (Table 15.2).

Summary

Teaching psychiatry residents and fellows to work with members of other health professions can increase competency in many areas that are critical to success as they enter their careers. Not only is patient care quality and safety impacted, but residents can also learn clinical, leadership, and teaching skills as well as the ability to find humility in the face of professionals with different educational backgrounds and competencies. Residents can also be exposed to ways of working that are outside of the direct provision of care. Faculty can be taught to interweave interprofessional teamwork skills into their daily teaching and can be supported to engage in scholarly work in this area.

Table 15.2 Strategies for facilitating interprofessional teamwork and collaboration by intervening at individual, institutional, and policy levels

| |
|--|
| Ways to assess and promote teamwork and collaborations in health system or community-based activities at an institutional level (IOM, 2014) |
| Facilitate participatory models of education in communities across the health system for clinical learning experiences, whereby team members feel part of short- and long-term |
| Legitimate service-learning projects with credit versus voluntary projects |
| Engage health system members in decision-making regarding curriculum and design of community-centered learning activities |
| Facilitate IPE teaching/learning with disciplines/providers and health workers beyond disciplines traditionally in health sciences centers |
| Develop longer-term commitments to service learning in the community |
| Collaboratively address community needs beyond clinical care to addressing needs such as social determinants of health |
| Realign financial incentives to help teams to enhance access to patients in community settings in short and long term |
| Collaborate with other universities for development/validation of tools and metrics for team-based, community-based assessments |
| Re-engage learners in social justice, civic responsibility, and reflective praxis |
| A framework for assessing the interprofessional learner from education to workplace at individual, institutional, and policy levels (IOM, 2014) |
| <i>Individual Level</i> |
| Mandate faculty development of IPE training and assessment skills |
| Achieve greater professional satisfaction from working collaboratively |
| Develop longitudinal self-assessment skills |
| Engage patients and families |
| <i>Institutional Level</i> |
| Recognize IPE in guidelines for faculty promotion, credentialing of providers, and human resource issues |
| Use electronic health records as a means for collaboration |
| Engage patients and families |
| Mandate faculty development of IPE training and assessment skills |
| Engage in comparative effectiveness and resource/data sharing across institutions and across practice settings |
| Identify best practices and retro-engineer education from practice (i.e., set learner outcomes and experiences based on clinical practice teamwork and skills rather than curricular acquisition of knowledge and discussions) |
| Build or align regional centers across professions |
| Collect and share best practices from a global perspective and from low-resource settings |
| <i>Policy Level</i> |
| Integrate IPE in accreditation |
| Capitalize on the opportunities offered by healthcare reform |
| Advocate for legislative policies for higher education |
| Encourage institutional recognition of IPE |

References

1. Accreditation council for graduate medical education ACGME program requirements for graduate medical education in psychiatry. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/400_Psychiatry_2020.pdf?ver=2020-06-19-123110-817. Accessed 4 Dec 2021.
2. CAIPE Bulletin Nos. 13 (1997) Interprofessional education: what, how & when? In: CAIPE. 2018. <https://www.caipe.org/resources/publications/archived-publications/caipe-bulletin-nos-13-1997-interprofessional-education-what-how-when>. Accessed 28 Nov 2021.
3. Taylor DCM, Hamdy H. Adult learning theories: implications for learning and teaching in medical education: AMEE Guide No. 83. *Med Teach*. 2013;35:e1561–72.
4. Center for medicare and medicaid services medicare claims processing manual. <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs-Items/CMS018912>. Accessed 4 Dec 2021.

5. Wilkening GL, Gannon JM, Ross C, Brennan JL, Fabian TJ, Marcsisin MJ, Benedict NJ. Evaluation of branched-narrative virtual patients for interprofessional education of psychiatry residents. *Acad Psychiatry*. 2017;41:71–5.
6. Dorevitch A. A psychopharmacology education program for psychiatry residents—the role of a clinical pharmacist. *Isr J Psychiatry Relat Sci*. 1994;31:287–91.
7. Pecukonis E. Interprofessional education: a theoretical orientation incorporating profession-centrism and social identity theory. *J Law Med Ethics*. 2014;42(Suppl 2):60–4.
8. Satiani A, Niedermier J, Satiani B, Svendsen DP. Projected workforce of psychiatrists in the United States: a population analysis. *Psychiatr Serv*. 2018;69:710–3.
9. Sunderji N, Ion A, Huynh D, Benassi P, Ghavam-Rassoul A, Carvalhal A. Advancing integrated care through psychiatric workforce development: a systematic review of educational interventions to train psychiatrists in integrated care. *Can J Psychiatry*. 2018;63:513–25.
10. Miller JG, Peterson DJ. Employing nurse practitioners and physician assistants to provide access to care as the psychiatrist shortage continues. *Acad Psychiatry*. 2015;39:685–6.
11. Nimmon L, Artino AR, Varpio L. Social network theory in interprofessional education: revealing hidden power. *J Grad Med Educ*. 2019;11:247–50.
12. Dobbins MI, Thomas SA, Melton SLS, Lee S. Integrated care and the evolution of the multidisciplinary team. *Prim Care*. 2016;43:177–90.
13. Zimbrea PC, Ernst CL, Forray A, Beach SR, Lavakumar M, Siegel AM, Soeprono T, Schwartz AC. The educational value of outpatient consultation-liaison rotations: a white paper from the academy of consultation-liaison psychiatry residency education subcommittee. *Psychosomatics*. 2020;61:436–49.
14. Irwin SA, Montross LP, Bhat RG, Nelesen RA, von Gunten CF. Psychiatry resident education in palliative care: opportunities, desired training, and outcomes of a targeted educational intervention. *Psychosomatics*. 2011;52:530–6.
15. Khouzam HR. Psychiatry residents' opinions of a substance abuse rotation in a VA Hospital general internal medicine unit. *Subst Abus*. 2000;21:149–54.
16. Ratzliff A, Norfleet K, Chan Y-F, Raney L, Unützer J. Perceived educational needs of the integrated care psychiatric consultant. *Acad Psychiatry*. 2015;39:448–56.
17. Cama S, Knee A, Sarvet B. Impact of child psychiatry access programs on mental health care in pediatric primary care: measuring the parent experience. *Psychiatr Serv*. 2020;71:43–8.
18. Dobscha SK, Dandois M, Rynerson A, Rabin S, Bajrovic E, Corey G. Development and evaluation of a novel collaborative care rotation for psychiatry residents. *Acad Psychiatry*. 2021; <https://doi.org/10.1007/s40596-021-01473-4>.
19. Huang H, Forstein M, Joseph R. Developing a collaborative care training program in a psychiatry residency. *Psychosomatics*. 2017;58:245–9.
20. Team structure | University of Washington AIMS Center. <https://aims.uw.edu/collaborative-care/team-structure>. Accessed 28 Nov 2021.
21. Sunderji N, Waddell A, Gupta M, Soklaridis S, Steinberg R. An expert consensus on core competencies in integrated care for psychiatrists. *Gen Hosp Psychiatry*. 2016;41:45–52.
22. Cowley D, Dunaway K, Forstein M, Frosch E, Han J, Joseph R, McCarron RM, Ratzliff A, Solomon B, Unützer J. Teaching psychiatry residents to work at the interface of mental health and primary care. *Acad Psychiatry*. 2014;38:398–404.
23. Ratzliff A, Sunderji N. Tele-behavioral health, collaborative care, and integrated care: learning to leverage scarce psychiatric resources over distance, populations, and time. *Acad Psychiatry*. 2018;42:834–40.
24. Global Forum on Innovation in Health Professional Education, Board on Global Health, Institute of Medicine (2014) Assessing Health Professional Education: Workshop Summary. National Academies Press (US), Washington (DC).
25. Smith CD, Balatbat C, Corbridge S, et al. Implementing optimal team-based care to reduce clinician burnout. *NAM Perspect*. 2018; <https://doi.org/10.31478/201809c>.
26. Welp A, Manser T. Integrating teamwork, clinician occupational well-being and patient safety – development of a conceptual framework based on a systematic review. *BMC Health Serv Res*. 2016;16:281.
27. Collaboration in Practice Implementing Team-Based Care. <https://www.acog.org/en/clinical/clinical-guidance/task-force-report/articles/2016/collaboration-in-practice-implementing-team-based-care>. Accessed 4 Dec 2021.
28. IPEC Core Competencies. <https://www.ipeccollaborative.org/ipec-core-competencies>. Accessed 4 Dec 2021.
29. ACGME Psychiatry Milestones 2.0. <https://www.acgme.org/globalassets/pdfs/milestones/psychiatrymilestones.pdf>. Accessed 29 Jan 2022.
30. Ross S, Allen N. Examining the convergent validity of shared mental model measures. *Behav Res Methods*. 2012;44:1052–62.
31. Will KK, Johnson ML, Lamb G. Team-based care and patient satisfaction in the hospital setting: a systematic review. *J Patient Cent Res Rev*. 2019;6:158–71.
32. TeamSTEPPS® | Agency for Healthcare Research and Quality. <https://www.ahrq.gov/teamstepps/index.html>. Accessed 28 Nov 2021.
33. Havlovic SJ, Lau DC, Pinfield LT. Repercussions of work schedule congruence among full-time, part-time, and contingent nurses. *Health Care Manag Rev*. 2002;27:30–41.
34. Holmboe E Competency-Based Training. 41.
35. Caretta-Weyer HA, Kraut AS, Kornegay JG, Yarris LM. The view from over here: a framework for multi-source feedback. *J Grad Med Educ*. 2017;9:367–8.

36. Core EPA publications and presentations. In: AAMC <https://www.aamc.org/what-we-do/mission-areas/medical-education/cbme/core-epas/publications>. Accessed 4 Dec 2021.
37. Shaw D, Blue A. Should psychiatry champion interprofessional education? *Acad Psychiatry*. 2012;36:163.
38. Burgess A, van Diggele C, Matar E. Interprofessional team-based learning: building social capital. *J Med Educ Curric Dev*. 2020;7:238212052094182.
39. Sunderji N, Crawford A, Jovanovic M. Telepsychiatry in graduate medical education: a narrative review. *Acad Psychiatry*. 2015;39:55–62.
40. Cruz C, Orchard K, Shoemaker EZ, Hilty DM. A survey of residents/fellows, program directors, and faculty about telepsychiatry: clinical experience, interest, and views/concerns. *J Technol Behav Sci*. 2021:1–11. <https://doi.org/10.1007/s41347-020-00164-5>.
41. Jortberg BT, Beck Dallaghan GL, Schatte D, Christner J, Ryan MS. Expansion of telehealth curriculum: national survey of clinical education leaders. *J Telemed Telecare*. 2021; <https://doi.org/10.1177/1357633X211058330>.
42. Glueckauf RL, Maheu MM, Drude KP, Wells BA, Wang Y, Gustafson DJ, Nelson E-L. Survey of psychologists' telebehavioral health practices: technology use, ethical issues, and training needs. *Prof Psychol Res Pract*. 2018;49:205–19.
43. Maheu MM, Drude KP, Hertlein KM, Lipschutz R, Wall K, Hilty DM. Correction to: an interprofessional framework for telebehavioral health competencies. *J Technol Behav Sci*. 2018;3:108–40.
44. Hilty DM, Maheu MM, Drude KP, Hertlein KM. The need to implement and evaluate telehealth competency frameworks to ensure quality care across behavioral health professions. *Acad Psychiatry*. 2018;42:818–24.
45. Hertlein KM, Drude KP, Hilty DM, Maheu MM. Toward proficiency in telebehavioral health: applying interprofessional competencies in couple and family therapy. *J Marital Fam Ther*. 2021;47:359–74.
46. Drude K, Hertlein K, Maheu M, Hilty D, Wall K. Telebehavioral health competencies in interprofessional education and training: a pathway to interprofessional practice. *J Technol Behav Sci*. 2020; <https://doi.org/10.1007/s41347-019-00112-y>.
47. Steiner JL, Ponce AN, Styron T, Aklin EE, Wexler BE. Teaching an interdisciplinary approach to the treatment of chronic mental illness: challenges and rewards. *Acad Psychiatry*. 2008;32:255–8.
48. Muzyk A, Andolsek K, Mullan P, Tew C, Sanders C, Derouin A, Carter B, Holmer S. Building a Community of Health Professionals to establish a shared learning experience in psychiatry and substance use disorders for health professions students. *Acad Psychiatry*. 2018;42:279–82.
49. Marcussen M. The effects of interprofessional education in mental health practice: findings from a systematic review. *Acad Psychiatry*. 2019;43(2):200–8.
50. Kowalski C, Attoe C, Ekdawi I, Parry C, Phillips S, Cross S. Interprofessional simulation training to promote working with families and networks in mental health services. *Acad Psychiatry*. 2018;42:605–12.
51. Willgerodt M, Sonney J, Liner D, Barchet L. The power of a team: using unfolding video cases in interprofessional education for advanced health trainees. *MedEdPORTAL*. 2018;14:10707.
52. Neff J, Holmes SM, Knight KR, et al. Structural competency: curriculum for medical students, residents, and interprofessional teams on the structural factors that produce health disparities. *MedEdPORTAL*. 2020;16:10888.
53. Bismilla Z, Boyle T, Mangold K, Van Ittersum W, White ML, Zaveri P, Mallory L. Development of a simulation-based interprofessional teamwork assessment tool. *J Grad Med Educ*. 2019;11:168–76.
54. Kelly A, Nirula L, McDiarmid E, Jindani F, Fernando A, Naismith L, Kowalski C. Lessons learned: implementing UK-developed interprofessional simulation training courses in a Canadian setting. *Acad Psychiatry*. 2018;42:659–63.
55. Hopkins A, Dudas R, Quigley P, Ashworth J, Hernandez RG. An interprofessional multimodal patient experience-focused curriculum. *J Grad Med Educ*. 2017;9:384–5.
56. Mela M, Luther G. Law and psychiatry seminar: an interprofessional model for forensic psychiatric training. *Acad Psychiatry*. 2013;37:421–5.
57. Topor DR, Dickey C, Stonestreet L, Wendt J, Woolley A, Budson A. Interprofessional health care education at academic medical centers: using a SWOT analysis to develop and implement programming. *MedEdPORTAL*. 2018;14:10766.
58. Ward H, Card SE, Chipperfield D, Sheppard SM, Bulk F, Giesbrecht W. Interprofessional skills learning guide: a multimedia E-book for small-group or individual learning. *MedEdPORTAL J Teach Learn Resour*. 2016;12:10425.
59. Weppner WG, Fisher AK, Hagman M, Inouye L, King I, Smith CS, Wilper AP, Knight CL. Taking SGIM's teaching educators across the continuum of health care on the road—a local, interprofessional faculty development innovation. *J Grad Med Educ*. 2017;9:378–9.
60. Shoemaker EZ, Myint MT, Joshi SV, Hilty DM. Low-resource project-based interprofessional development with psychiatry faculty. *Psychiatr Clin North Am*. 2019;42:413–23.



Teaching Residents about Advocacy

16

Scott A. Oakman

Prologue – May 25, 2020

On the morning of May 26, 2020, residents and staff of Hennepin Healthcare in Minneapolis, MN awoke to the smell of smoke and the sound of sirens. That is, if they had slept at all.

The mass protests and racial unrest that had been building across the country in the wake of the deaths of Black people during interactions with law enforcement—Michael Brown, Eric Garner, Tamir Rice, and Breonna Taylor, to name a few—had finally struck our own home. We were not, though, strangers to having Black males die at the hands of police. Violent demonstrations had arisen in Minneapolis' fourth precinct in 2015 when Jamar Clark was killed during an emergency medical call, and Philandro Castile was shot by a police officer in a St. Paul suburb in 2017 during a routine traffic stop. Still more names were yet to be added in months to come as young Black men Duante Wright and Winston Smith both died at the hands of law enforcement, all accompanied by public outcry [1, 2].

The death of George Floyd though, coming as tensions of fear, distrust, and segregation

ratcheted upward during a bitterly polarized election season, divided our community even further along racial lines. Hospital systems already reeling from the burden of the COVID pandemic now had to focus on safety, diversity, and inclusivity in their daily staff communications. Routines already disrupted by pandemic precautions now had to be revised to take into account sudden enforced curfew restrictions. Medical students from the University of Minnesota, sidelined by pandemic precautions, were assembling “White Coats for Black Lives” rallies and trying to provide pop-up first aid triage stations at the sites of demonstrations and remembrances.

If residents had hoped to ignore these events, it would prove impossible. Constant emails advised residents to keep their hospital identification at the ready for off-hour comings and goings to work during curfews. A memorial service for Mr. Floyd was held (literally) across the street from the hospital 1 week later, and Officer Chauvin's murder trial and sentencing occurred a mere three blocks away in the spring of 2021, triggering new curfews and fears of violence.

Although news video was aflame with images of burning storefronts and a precinct station, serious damage was confined to a few neighborhoods—mostly in locations that would not even have been noticed by a casual suburban commuter driving past on freeway overpasses. But what also escaped the notice of the national

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media was a widespread volunteer response—brigades of broom- and shovel-wielding community members—of all backgrounds—and truckloads of food, baby supplies, and personal items to meet the needs of people whose primary grocers and pharmacies had been shuttered by looting.

But as demonstrations and rallies died down, and residents and staff returned to work, we began asking ourselves “What else can we do?” What are the root causes of these events, and is there anything that we can do about them? Is there something we can do that transcends institutional “moments of silence and solidarity” that can produce lasting changes in our community such as addressing systemic racism or economic disparities? How should we respond—and how far should we take our actions as physicians and psychiatrists?

For our residency program, these events became a salient reminder of the myriad intersections between events in our community and the lives of our patients, faculty, residents, and medical students—and how the hospital and medical community stand as an integral element of the wider community. As such, we have a responsibility to attend to prevailing social concerns, understand underlying public policies, and know how to influence them if we hope to optimally manage the health of our patients. That process of influence is called advocacy.

Owning Advocacy

According to most dictionaries, “advocacy” is broadly defined as an “act or process of supporting a cause or proposal” [3]. In healthcare, this definition is further refined as “a public voicing of support for causes, policies, or opinions that advance patient or population health” (Vance et al., p 4) and often extended to include those activities which promote systemic social change [4].

Although most physicians would likely agree that the professional role of a physician includes being an advocate for individual patient needs as part of the physician-patient relationship, there

may be less consensus regarding the wider societal role of physicians. Academic medical centers may sometimes appear to be an “ivory tower” culture of social neutrality, avoiding controversies, which might be seen as reflecting adversely on their reputation or prestige. Psychiatrists in particular, especially if steeped in psychoanalytic traditions of the profession, may consider that the intense privacy associated with the physician-patient bond precludes expressions of strong public opinions, or being noted for public visibility around an issue, and may have concerns that engaging in these might even be seen as counter-therapeutic.

However, a resident learning to practice community psychiatry rapidly learns that there are social factors affecting mental health which cannot be addressed by standard psychiatric means of pharmacology or psychotherapy. The psychiatrist who wishes to make gains in advancing the mental health of their patients must be conversant with these social issues, and where possible, begin to take action to help treat these underlying influences on mental illness. These issues are known as social determinants of health and are present in nearly all of our patient encounters, whether we acknowledge them or not. Taking action to address these “causes of the causes,” as named by Dr. Ruth Shim [5], is integral to advancing the health of our patients. These actions are the work of advocacy.

Advocacy in psychiatry begins to engage us in a public health approach to mental health. The World Health Organization (WHO) has stated that there is “No health without mental health”; and as much as mental health is inextricably tied to social determinants of health, it is incumbent upon psychiatrists to take action to address these social determinants at the policy level through advocacy. To fail to do so is the equivalent of an epidemiologist considering their work finished by treating a single affected patient in an epidemic. Parenthetically, this is also the reason that professional medical societies exist: to advocate for patients and the profession.

For a residency program leader or faculty, the charge to develop a generation of psychia-

trists who can effectively take on this task may appear overwhelming. The aim of this chapter is to break this task down into more manageable components: to describe what should be the necessary core knowledge about advocacy, and to suggest concrete actions that might be taken by residency programs and individual residents and faculty. We will also discuss some specific domains for which advocacy by psychiatrists is particularly relevant in the present time. We will address some of the strategic and tactical challenges inherent to advocacy, particularly as we interface with the wider culture of medical education, clinical practice, and processes of government inherent to our healthcare systems.

Finally, as specific programs vary widely in terms of the community populations they serve, institutional resources they have available, and the public policy environments of their respective jurisdictions, we will also discuss how to develop a more generalized program culture which supports advocacy and allows for flexibility in one's approach as new issues and concerns arise.

Curricula for Advocacy: Knowledge and Practice

Competencies and Requirements

The Accreditation Council for Graduate Medical Education (ACGME) requirements for psychiatry programs include advocacy as competency at both individual and systems levels. Common Program Requirements for all specialties state that residents “must learn to advocate for patients within the health care system to achieve the patient’s and family’s care goals, including, when appropriate, end-of-life goals,” and that residents also “must demonstrate competence in advocating for quality patient care and optimal patient care systems.”

Specific to psychiatry, residents are also expected to be competent in “assisting patients in dealing with system complexities and disparities in mental health care resources,” and “advocating

for the promotion of mental health and the prevention of mental disorders,” reflecting advocacy at both systems and individual levels [6].

The 2021 ACGME Milestones 2.0 for psychiatry now delineate these objectives under the Physician Role in Health Care Systems (SBP3), beginning with a Level 2 milestone of identifying barriers to care in different healthcare systems, then proceeding to include engaging with patients in shared decision making, advocacy for appropriate care and parity, mobilizing community resources, and participating in advocacy activities for access to care in mental health and reimbursement. The Treatment Planning and Management milestones (PC3) encompass the understanding and use of community resources in patient care, including incorporation of advocacy groups, and navigation of complex patient management situations, with an aspirational Level 5 goal of participating in the creation or administration of community-based programs [7].

While these requirements reinforce the importance of adopting a stance of public advocacy as a psychiatrist and mandate this as an aspect of residency training, they provide minimal guidance on how to accomplish this objective in training or in practice. It is our aim to provide some helpful guidelines and suggestions for the integration of advocacy into psychiatry residency training.

Curricular Components

In preparing a curriculum to address these competencies and milestones, advocacy training can be seen as containing two necessary, but distinct components: *Knowledge*, addressed from a didactic perspective, and *Practice*, addressed through experiential opportunities which develop skills in each area. It is also helpful to conceptualize how both the Knowledge and Practice of advocacy will be applied in different scenarios in clinical practice and the community.

Vance [4] describes six levels at which advocacy might occur, which range from advocacy

on behalf of an individual patient or small group of patients upward through advocacy efforts aimed at national and global issues. Some issues of concern to psychiatric practice may span several of these levels—for example, gender equity may affect patients at individual, national, and global levels, but will be approached differently in each of those levels, requiring different means to address the concern. Dr. James Curry, a graduate of our residency program, visualized this hierarchy in this way, as pictured in Fig. 16.1.

This conceptualization may be useful for the design of training programs or projects, allowing one to organize their approach according to the level at which one wishes to exert influence and identifying the most important stakeholders at each level. This also illustrates how the actual activities of advocacy might vary according to the level of approach. Personal advocacy for a patient or family will require the mobilization of different skills and resources than those required for advocacy at a community level via activism or grassroots organizing, or at a policy level through legislation.

Knowledge Components

Social Determinants Taking action as an advocate first requires that one has adequate knowledge of the issues one hopes to influence, the community one wishes to affect, and the means through which to bring this influence.

The required knowledge base for advocacy begins with a general understanding of the social determinants of health, which are defined by the WHO as “the conditions in which people are born, grow, live, work, and age” and which are shaped by the distribution of money, power, and resources across multiple levels of society.

Residents should at a minimum be able to define the concept of a social determinant of health, to list several, and describe how they might particularly affect mental health conditions individually or in combination. For example, housing instability, is a social determinant, in turn often related to several others, such as poverty and economic inequality, and frequently adversely affects medication adherence. Almost all residents can cite a personal example of a recent patient reporting an incident with lost,

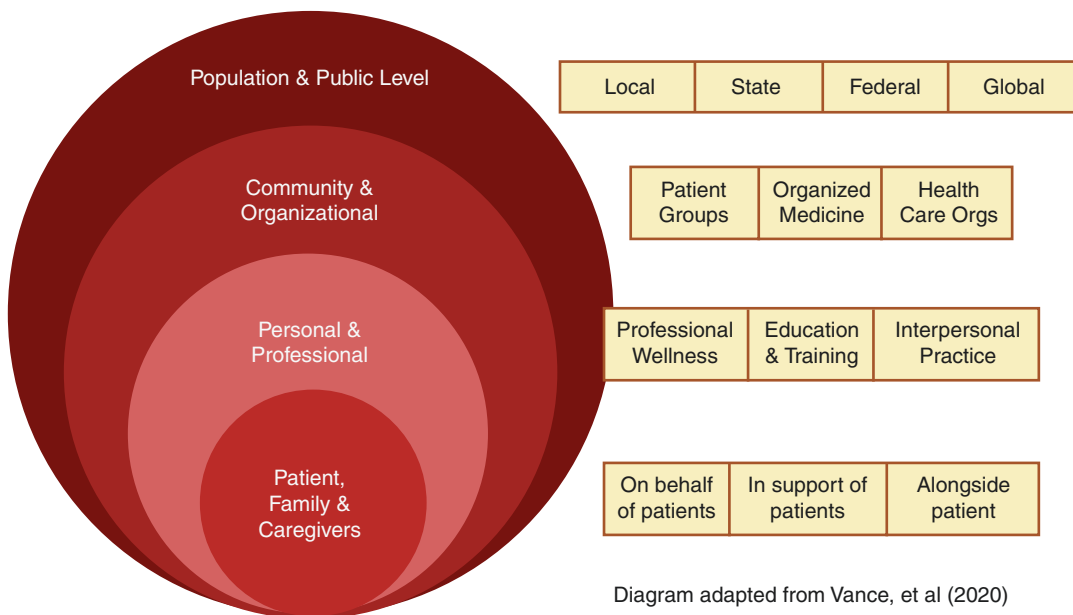


Diagram adapted from Vance, et al (2020)

Fig. 16.1 Hierarchical reconceptualization of levels of advocacy. J. Curry, based on Vance, et al. (2020), personal communication. (Reprinted with permission from A

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stolen, or forgotten medications due to unstable or unsafe housing, with subsequent negative effects on mental and physical health outcomes. We have found Dr. Ruth Shim's conceptualization useful in illustrating how health disparities result from these disparities in economic and educational opportunities, which are in turn driven by public policies and social norms [5]. Efforts to affect these "causes of the causes" must therefore focus at the policy-making and legislative level to make a long-term impact.

From a didactic standpoint, Compton and Shim's compilation "*Social Determinants of Mental Health*" [8] is a useful resource for both introducing the general concept and discussing several specific determinants which have relevance to psychiatry. In our program, we typically present this material during the outpatient training year, having residents take turns presenting content to their cohort, and discussing cases from their current clinical services in which given social determinants are particularly relevant to presentation or treatment planning.

In addition to this more in-depth discussion, we introduce the basic vocabulary of social determinants of health early, during the intern or first post-graduate year, and practice identifying social determinants in initial assessments and biopsychosocial formulations at all levels of training.

Current Community Issues When manifested as disparities in resource allocation, social determinants of health are seen in virtually all aspects of life. A key aspect of the knowledge base for advocacy involves knowing one's own community in a way that identifies the current issues that are most salient to mental health. Achievement gaps in education, unemployment, segregation in housing, lack of affordable housing, personal safety, crime, and gun violence are all immediate concerns which may be manifested in a higher prevalence of mental distress in certain segments of the community. Disparities in healthcare access that are sequelae of racial discrimination can be noted as they arise. Programs in rural areas might face other issues, such as isolation, hidden pockets of poverty, or limited access to

hospitals, providers, specialty care providers, and clinical services—different yet equally profound in their effects.

Residents are encouraged to identify and further explore each of these specific domains, all of which present with a range of options for active intervention at different levels, whether one advocates for an individual patient, educates peers or community members, or works to influence policy and legislation at higher levels. Specific major domains which we have begun to address are listed below, with some suggestions for first steps toward approaching the issues.

Racial Disparities Although racial diversity and inclusion in training programs are addressed elsewhere in this volume, this has been a particularly important issue in our community, and our program's primary emphasis for advocacy in the past year. As Dr. Ruth Shim has boldly challenged us to consider, the true cause of the vast majority of the mental health inequity faced in the United States today is social injustice and enduring structural racism [9]. Our current disparities in access to care, parity in treatment, stigma, and lack of representation in our workforce are the results of processes that were set into motion well over 100 years ago in the development of our current healthcare system [10]. For this reason, the recognition of where bias and discrimination underlie disparity and influence care then becomes our primary focus for advocacy at both personal and institutional levels.

In didactics at all levels, knowledge gaps about racism and discrimination and the resultant health outcome disparities and access to service issues can begin to be explored through numerous forms of media available online. Specific measures of disparities can be obtained through state departments of health or federal sources such as the Substance Abuse and Mental Health Service Administration (SAMHSA) and other federal agencies [11]. Assigning trainees an online "scavenger hunt" to search out information on these issues, then having them report their findings to peer groups can be a useful exercise in active learning. For example, seeking informa-

tion from SAMSHA regarding whether opioid overdose death rates in the Black community are elevated relative to others would reveal that though the rates were similar and increasing for all ethnic groups, Black patients are less likely to have received treatment, and more likely to face disparities in access to treatment [12]. A resident wishing to delve deeper into advocacy on this issue would find a wealth of further citations to guide their research and actions.

It will also be important to assess your trainees' preexisting knowledge of the history of colonization, racial discrimination, and the struggle for civil rights in the United States. A medical student or resident who received only minimal secondary instruction in American History, or who was taught in a setting in which the history of racial discrimination was minimized, might be more prone to see these disparities as purely individual problems, rather than as policy concerns which might be addressed through advocacy. We sometimes found that many residents who had come to our program as International Medical Graduates had no framework of American History at all with which to understand the current persistence of racial discrimination in the United States. Taking opportunities to revisit these topics in didactics, or through seminars or museum field trips, particularly as they relate to the local community, will enrich residents' relationship with the populations they serve.

It is worth noting that the ACGME Medical Knowledge competencies specify teaching "aspects of American culture and subcultures, including immigrant populations, particularly those found in the patient community associated with the educational program, with specific focus on the cultural elements of the relationship between the resident and the patient, including the dynamics of differences in cultural identity, values and preferences, and power requirements" [6, p. 23]. We often take groups of residents on field trips to point out the geographic distributions of various ethnic groups in our area, including discussions of how racially-determined housing discrimination, known as "red-lining," was practiced in the past, and noting how its legacy persists today in housing disparities. For

example, here in St. Paul, as in many urban areas nationally, a thriving Black residential and business district, "Rondo," was razed in the 1950s and 60s to make way for freeway construction, largely to benefit suburban commuters. An awareness of this history can help residents to appreciate the intersection of social determinants of health with race in their patient population.

However you choose to address it, the history of racial discrimination that characterizes this nation should not be minimized, nor its present effects in pervasive social disparities ignored. A number of basic resources have been compiled as a starting point for didactic efforts, of which the APA Resource Document, "How Psychiatrists Can Talk with Patients and Their Families About Race and Racism" is an excellent example [13].

One (resident-led) effort directly addressed residents' personal experiences with racism and attitudes toward race through a series of "intergroup dialogues." This approach, based on a specific academic model developed in teacher education, had learners from different social identities engage in an open, nonjudgmental conversation about race and social inequalities. This helped residents to appreciate the different starting points that they each had in identifying and responding to racial bias, and helped them to gain vital practice in listening to the viewpoints of others whose life histories were very different than their own [14].

As a start for taking action against racial disparities, we have been fortunate that our sponsoring institutions, Hennepin Healthcare and HealthPartners, have adopted strong statements in support of health equity, including benchmarks in their annual institutional goals, and sponsoring numerous efforts and initiatives aimed at reducing these disparities. Residents in our program are frequently made aware of these commitments, are included as representatives to Diversity and Inclusion Committees, and encouraged to participate in events, such as listening sessions and community educational outreach as they arise [15–17].

In focusing on the racial discrimination which is rooted in America's shameful 400-year history of African slavery, we must also not neglect that

others in our community experience disparities in treatment due to the social construct of race. Our community is home to the indigenous Dakota and Ojibwe peoples, whose healthcare challenges are magnified by centuries of neglect, poverty, and substance use. It is also home to large concentrations of immigrant groups from southeast Asia and Somalia. These community members often face discrimination because of racial, religious, and immigration characteristics. Other subgroups face controversy as refugees from the war on terror in the Middle East, or their status as asylum-seekers or economic migrants from Central America, or may have been targeted for hate crimes out of a misplaced attribution of blame toward Asian-Americans for the COVID pandemic. All of these issues have exposed many to the inherent systemic racial bias present in American society. Learning to identify and address this discrimination in all of its forms is a vital aspect of advocating for our patients and communities.

To help residents address our knowledge gaps about these populations, our program has instituted a series of “Culture and Community” lectures which run as an ongoing thread throughout our didactic curriculum. We are fortunate to have as our teammates in this community psychiatrists, psychologists, and social workers who originate in our major ethnic and immigrant populations and who have trained with us, including Hmong, Somali, and Latinx physicians who are committed to educating us on the needs of these communities on a regular basis.

An important point to keep in mind when involving residents and junior faculty in these efforts, however, is to avoid placing an excess burden on those from underrepresented groups. This so-called “minority tax,” extra responsibilities placed on minority faculty ostensibly to advance diversity [18], can actually subtly interfere with their own career advancement, marginalizing their work while shifting the institutional responsibility to address these social problems away from the actual centers of power and decision-making. When our teaching about healthcare disparities emphasizes that inequity is a problem for *all* members of the community,

instead of “someone else’s problem,” then every resident and staff member can see that addressing disparities will ultimately benefit all as well.

Other Populations Beyond racial and ethnic discrimination, clearly there are many other groups of people who will experience discrimination because of characteristics other than race or ethnicity, and who experience unique disparities in healthcare, including mental healthcare.

LGBTQ+ patients may experience stigma and discrimination at multiple levels due to the intersectionality of their orientation or gender identity with their racial or ethnic identity. Many will have harrowing stories of having health concerns dismissed or minimized because of this. Residents need to be familiar with the increased risks of mental illness and suicide in these patients, exacerbated by factors such as increased societal stigma, cultural sanctions, discrimination, or denial of their civil and human rights. Patients may face barriers to accessing health services, or be discriminated against in those settings.

One particularly vulnerable segment of this community is the adolescent patient, particularly those who are transgender or nonbinary. LGBTQ+ teens in general are more likely to report being bullied by peers, and report proportionally less happiness and satisfaction with their lives than peer groups. Transgender teens in particular are noted to have a higher risk of suicide attempts and social isolation, and may be in the position of needing to navigate their adolescence without the support of parents and other adults [19–22].

One fairly low-effort, practical intervention to begin advocating for LGBTQ+ individuals is to educate residents to adopt the practice of introducing oneself by sharing the pronouns that they each use to refer to themselves, and asking the patient what their pronouns are. This often is an initial step to establishing trust and rapport, and also engages us in adopting a stance of active allyship, especially with patients who may have previously encountered a lack of support for gender diversity in interactions with the healthcare system.

Recent advocacy efforts by mental health advocates partnering with the local LGBTQ+ community have centered on supporting bans of reparative or “Conversion Therapy”—attempts to bring about change in an individual’s sexual orientation or gender identity through psychotherapy. Such therapies are often aimed at the young and vulnerable, or forced upon minors by parents and guardians. In addition to being ineffective at their purported goal, these practices perpetuate social stigmas against LGBTQ+ persons and can result in substantial harms of increased mental illness, substance use, and suicide. In Minnesota, this is an example where community groups, including physician professional societies, persistently advocated, at this point succeeding in winning an executive order restricting the practice [23].

Microaggressions In building our knowledge base regarding race, gender, and other forms of discrimination, a basic concept that is important to understand is that of microaggression; defined as the “brief, everyday exchanges that send denigrating messages to certain individuals because of their group membership” [24]. These expressions of bias, which may be intentional or unintentional, serve to repeatedly traumatize and marginalize people on the basis of their race, gender, religion, or sexual orientation. An example might be that of a Black male physician being scrutinized more closely by security when entering the hospital where he works, a Latina teacher being complimented on her command of the English language, or Muslim residents finding that time off requests for Ramadan are not treated with the same respect as other residents’ request for Christmas vacation.

Residents should learn how to identify and respond appropriately to these expressions of bias whether directed toward them, a patient, or a colleague. Learning to actively and non-defensively listen to recipients of microaggressions, while validating (and not minimizing) their feelings is an elementary activity that we can all do as a first step toward advocating against bias and discrimination, especially when it may involve the need to take responsibility for our own biases and missteps.

Finally, recognize the value of representation. The current paucity of Black men in medicine and elementary education, to name two professions [25, 26], essentially ensures that most Black boys will not have role models to illustrate that they can aspire to these occupations. Patients will frequently prefer to communicate with a physician who “looks like me,” and the positive effects of this concordance on patient-physician concordance have been noted in the literature [27]. In contrast to microaggression, consider how to commit “microaffirmations” by including and amplifying the voices of minorities and women and championing their career development as a practical form of advocacy to benefit our professions and patients by making our workforce more similar to our patient population.

Stigma is a major contributor to disparities in mental health across the entire spectrum of psychiatric illness, but particularly affects two large groups: those with chronic, severe, and persistent mental illness (SPMI) and those with substance use disorders. Knowledge about these conditions, and the associated experiences of stigma, is vital in advocating for these patients within our health-care systems.

In our program, we have found that advocacy against stigma is an area where most residents are well equipped to get involved through raising the knowledge and awareness of these issues within hospitals and clinics and by educating their peers in other specialties through formal and informal didactics and Grand Rounds presentations. Residents may find themselves pleasantly surprised to be seen as the “experts” in our specialty by their fellow learners elsewhere. In addition, the voices of residents are often more readily heard by their peer residents than the voices of faculty when it comes to advocacy issues.

Many hospital and healthcare systems have adopted more widespread institutional efforts aimed at reduction of stigma across clinical and community settings. These programs are also seeking input from trained professionals, including residents, who can find these to be fruitful places to initiate quality improvement projects.

Groups which are particularly stigmatized, even within mental health settings, are those with

substance use disorders, especially those involved with the criminal justice system, and the SPMI patient population. Many times, patients will carry all three of these labels, as prisons and jails in many jurisdictions have tended to become holding institutions for mentally ill offenders. These are settings in which the intersectionality of race, poverty, trauma, mental illness, and substance use can be seen at its worst.

Many cities have been successfully piloting diversion programs such as separate mental health and drug courts which identify vulnerable patients, keep them out of the general criminal justice process, and provide treatment and case management services in the community rather than incarceration. Presenting these programs to our residents and colleagues helps us advocate for these patient populations while developing our knowledge base about these community resources.

Systems Knowledge As indicated above in the ACGME Competencies and Milestones, advocacy has numerous connection points with residents' training in Systems-Based Practice. This involves being aware of and conversant with the important regulation and business aspects of psychiatry. We ensure that our residents receive regular didactic updates in public sector psychiatry, especially as patient care interfaces with the legal system in commitments and forensic evaluations. A major aspect of our outpatient training includes a yearlong assignment to an Assertive Community Treatment (ACT) team, on which residents gain hands-on experience with the system through helping patients navigate healthcare and social services agencies. We also encourage administrative psychiatry electives in which residents can shadow senior administrative leaders through hospital and departmental meetings, quality improvement projects, and regulatory visits.

Government and Regulation A final aspect of the Knowledge Component of advocacy which might be forgotten is that of governmental and regulatory systems. If the goal of advocacy is to advance patient or population health through public policy by promoting systemic social

change, it is essential that residents have a basic grasp of how those policies are made and enforced, and how as private citizens they might exercise an informed influence upon social change.

The process of passing legislation that affects healthcare can be frustratingly slow, bewilderingly complicated, and laborious, and may discourage all but the most committed politically-minded trainees from engaging. Fortunately, many hospital systems now employ full-time lobbyists to advise administrators on the issues currently in front of state legislators and request specific input. Including in your residency didactic programs a regular update about current bills being followed through Congress or your state legislature can help to better inform advocacy efforts. Organizations such as the American Psychiatric Association [28], Mental Health America [29], National Alliance on Mental Illness (NAMI) [30], and other similar organizations will be rich sources of currently updated information about advocacy initiatives that are currently being brought in front of legislative bodies.

Many state psychiatric and medical societies will also sponsor a "Day on the Hill" activity that formally allows clinicians to meet with government leaders and share areas of concern. We encourage participation in these, if for no other reason than to enhance one's personal knowledge of the process and to meet one's own elected representatives. Residents are often pleasantly surprised to learn that their state Representatives and Senators are genuine, approachable human beings who share many of their concerns. Most elected officials have only a minimal understanding (and that possibly gained from watching television shows) of what is involved in the medical education process, and are often eager to learn.

Another neglected advocacy activity that can be easily implemented is to encourage voter registration in clinical settings. Laws and procedures will vary from state to state, but this can take the form of simply having teams greet patients to ask about registration status, and provide literature or forms, to facilitating the actual registration

Table 16.1 Key knowledge base topics for advocacy

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| Social determinants of health |
| Racial disparities in health |
| History and culture of major ethnic minorities in your community |
| Identification and response to microaggressions |
| LGBTQ+ issues |
| Stigma |
| Disparities in criminal justice system |
| Local and state government and administrative structures |

process. This should be clearly framed as a non-partisan activity, but one which is vital to enhancing citizen activity across the spectrum Table 16.1.

Practice Components

Emphasizing advocacy among trainees will ultimately provide numerous benefits to a program that wishes to develop healthcare system leadership for the future. For most programs, working to increase trainees' (and faculty members') knowledge based on a few of the issues named above in Table 16.1 may be ambitious enough as an initial consideration—but as with our clinical knowledge, it needs to be transformed into meaningful action to truly qualify as advocacy which advances the cause of public health. Moving beyond mere academic knowledge of issues will multiply our learning and encourage us to do more. All the programs will be different in their specific situation or community need, but we urge you to start something, and offer a few practical guidelines to consider as you proceed.

Choose Your Battles Considering the magnitude of the societal needs discussed above, there is an ever-present temptation to take on too much, and to spread oneself and one's trainees too thinly to make a significant difference. A key consideration for success will be to more narrowly choose one's focus to fit the community and resources at hand. As with choosing a QI project, it is useful to consider the Effort vs. Impact matrix for a given issue to optimize the feasibility and impact of an initiative. An idealist among your group may be attracted to a major societal concern, for

example, homelessness, without having an appreciation for the limits of their team's (or their own) resources and energy to address it. The most rewarding results will come from relatively low-effort interventions that have moderately high impacts in a high-priority area of concern—for example, working to improve access to mental health services for unhoused individuals, rather than attempting to provide long-term housing to a population. Likewise, very low-effort projects, such as supplying a physical need like food or clothing to the unhoused, may ultimately have negligible long-term impacts on the issue.

Choose Champions Given the time-limited nature of training, for one's advocacy to make a lasting impact beyond a given resident's tenure in the program, it should be our aim to develop a sense of continuity that bridges across residency cohorts. This may be achievable by recruiting a faculty or administrative champion who can work to direct succeeding generations of residents over a number of years, passing on the institutional memory of what has been done and tried in the past. As many of our issues of interest cannot be satisfactorily resolved in 1 year, or one resident's four-year tenure, having a faculty champion can keep an issue in play across a number of residency classes, and help ensure that it is not forgotten from one legislative session to the next. This can also effectively model that the work of advocacy is not the job of a single person—resident or faculty—but a continuous, ongoing process.

Find Allies Along that line, a successful advocacy effort will be focused on building relationships with allies in your cause. Many times a natural alliance can be developed with colleagues in organized specialty or sub-specialty groups, such as the American Psychiatric Association, American Society for Addiction Medicine, or any number of other affiliated groups with whom you share a common cause. These organized professional groups may also already have efforts underway in your area of interest, and even dedicated lobbying or educational resources available to their members.

Patient-centered advocacy organizations are also useful sources of information and community networks for advocacy. The National Alliance on Mental Illness (NAMI) serves to connect patients, families, providers, and policy makers across several general domains of mental illness with the goal of advocating for better understanding and outcomes [30]. Specific disorders of interest, for example, autism or dementia, often have associated voluntary societies dedicated to supporting patients, families, and/or research into these disorders. One of our trainees, interested in geriatric psychiatry, made connections with a local chapter of the Alzheimer's Association, for example, and was able to develop an educational program for caregivers to help alleviate burnout.

Association with organizations and societies which share your goals in advocacy can also save you from “reinventing the wheel” when copious resources are already in existence. For example, Mental Health America, a policy advocacy organization, has developed numerous position papers which can serve as starting points for residents or faculty wishing to begin understanding specific issues within mental health treatment, prevention, and public policy [29]. “Prepackaged” resources such as these can also be a valuable tool if one is planning to meet with policymakers in legislative or administrative settings by helping one solidify one's personal understanding of relevant concerns and talking points.

Although a wealth of resources will be found through national associations, do not neglect to seek out local partners with common interests, who can help guide you to targeted efforts with higher immediate yields in your community, as well as being able to assist with the needed awareness of current legislative initiatives that may be underway. One local volunteer coalition, Minnesota Doctors for Health Equity, has produced a set of easily accessible infographic materials for education on their main topics of interest, as well as a useful Legislative Advocacy Toolkit for beginning the process of engaging with lawmakers [31].

Additional allies can be found among our colleagues in other specialties and disciplines. Primary care specialties may be seeking help in

addressing maternal-child concerns, substance use disorders, food insecurity, and many other social and behavioral issues which cross specialties. Seeking out opportunities to collaborate with these colleagues will strengthen our health-care systems and broaden the reach of our efforts to serve our communities.

Equip Your Troops View advocacy as a transferable skill and mindset that, like clinical skills, develops through practice over time. As leaders, we can provide knowledge, opportunities, and context as we work together to address the pressing social needs of our patients. It can also be an excellent venue to develop and evaluate teamwork and leadership skills in our residents.

Develop Your Own Agenda for Advocacy As a leader, model knowledge of your community and be engaged in its activity beyond the healthcare system. Be conversant in your community's history and culture, and be involved in ways that suit you and your lifestyle—whether it is connecting with a local school board, volunteering with a religious organization, engaging in the political process, or supporting cultural efforts. Advocacy, like other aspects of the hidden curriculum, is often “Caught, not Taught.” Have a passion for your community, and share it with your trainees.

Finally, *start small—but start!* Here are some Low-effort ideas:

Teach your outpatient residents the skill of *social prescribing*. Encourage them to have contact information on hand for libraries, patient support organizations, children's programs, food banks, and the like. Reinforcing this will train residents to recognize how specific social determinants of health are impacting the individual lives of their patients, and familiarize them with local resources.

Know Your Community Practical exposures to many local resources can be accomplished through resident retreats and field trips. We have organized team scavenger hunts that sent residents out in small groups (spanning multiple training levels where possible) to collect photos

of places such as ethnic and cultural centers, government institutions, service agencies, and to talk to interesting people. A side benefit to these is the opportunity to increase resident cohesiveness and develop a shared sense of mission to the community, hopefully while also having a modest amount of fun.

Seek to Serve Having ties with our local Somali and Hmong communities via our own trainees from these communities, trainees were also able to assist in vaccination education efforts in those communities. Other service projects have targeted improving maternal health through nutritional education in the Somali community, speaking about health careers to Somali high school students, and a group fundraising effort toward a Hmong youth education program.

Residents Teaching Residents We have found that the greatest successes arise from projects and topics which are personally owned by the residents themselves. A place to start with this is by having residents teach one another about topics of interest. As stated above, we make this a feature of our own didactics about social determinants, but it can be extended to presenting various policy position papers, such as the ones produced by Mental Health America above or examining “white papers” produced by professional societies. As members of the community themselves, residents should view themselves as equivalently “expert” regarding these topics as a faculty member would be, and by taking an active role in teaching themselves and their peers they can begin to visualize future actions to address issues. Monthly or quarterly book clubs which examine an issue can provide both engaging discussion and enjoyable social interactions, in which faculty can take part as well. These will even translate well to virtual platforms, such as Zoom, to keep social connections alive in times of pandemic isolation.

“Flip the Hierarchy” Watch where your trainees are engaging in social issues and follow them there. Our residency program’s most successful advocacy for antiracism and addressing dispari-

Table 16.2 Starting points of advocacy activity

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| Choose a focus |
| Identify partner organizations |
| Professional organizations |
| Patient-centered organizations |
| Community networks |
| Learn about your community |
| “Prescribe” community resources |
| Capitalize on opportunities to teach |
| Assemble a team for sustained effort |
| Recruit resident advocates to your program |

ties in healthcare among immigrant groups stemmed from the resident-initiated projects and activities to open dialogues about race and related disparities. Know your residents and find the initiatives that they are already motivated for. An outline to follow through your initial explorations can be found in Table 16.2.

Practical Challenges

It does need to be acknowledged that once one begins to take leadership in advocacy, one can face resistance from the institutional hierarchies inherent to medical education and large institutions. Advocacy on a public policy level may force one to take countercultural stands, and depending on the local institutional politics, the issues one chooses to advocate for have the potential to affect one’s career advancement for good or ill.

Many employers and healthcare systems, particularly government-affiliated ones run by state departments of health or the Department of Veterans Affairs (VA), may have strict policies against partisan political activities, even with termination as a possible consequence for infractions. Teaching and supervision of residents in these settings need to carefully address whether the viewpoints one espouses are political activity, aimed at promoting a particular viewpoint or candidate, or advocacy as defined above—an activity performed on behalf of causes, policies, or opinions to advance patient or population health. The difference between the two may be microscopically slight, so one needs to be mindful of how opinions are communicated. One should also

develop the practice of seeking advice and counsel from others “higher up” the authority structure, which will not only help to prevent future uncomfortable confrontations, but also help one to build alliances with persons of influence.

A large part of advocacy is the vital process of learning how to defend one’s viewpoints with logic and evidence. Working to teach and develop such persuasive communication skills can ultimately help to overcome institutional hesitancy, especially when advocacy is framed as necessary training in systems-based practice. The perspective of one motivated to preserve the status quo can be influenced by embracing the language of continuous change and quality improvement, as exemplified by the patient safety movement. Savvy advocates will work to build their case for how an institution will benefit from change, whether through gains in positive public reputation, improved patient satisfaction, or other quality measures. One may even be able to adopt measures that result in monetary benefits to the system and community through reduced health-care expenditures or increased productivity.

In addition, trainees, having less institutional power, often will have concerns about being perceived as moving counter to the hierarchical and political structure of academic medical education. In many programs where this traditional culture is deeply entrenched, residents may feel inhibited about speaking their minds about concerns or practices that perpetuate disparities. Engagement in social controversy is by definition countercultural, and those in authority may label it “unprofessional.” Trainees may be uneasy about receiving a negative evaluation, or even a citation, for taking a public stance.

As advocates, we believe that residents should be encouraged to advocate for the causes they deem important, publish opinions, and engage in peaceful service activities—even protests at times. It is worth noting that as a significant amount of this type of personal advocacy may take place over social media, it is important to be clear about program expectations for behavior in these public domains repeatedly, beginning at the start of residency. Ongoing group and individual supervisory discussions can provide feedback

about residents’ personal social media “footprints” for useful professional formation. As leaders, engaging residents in crafting and disseminating their messages about these issues and thinking through the potential outcomes and responses in the community will be an important part of their professional development. We will also set the tone for them in our use of personal and professional social media.

Additional challenges that may arise in advocacy work are connected to the slow pace of societal change. Policy changes may require years of legislative work and span a number of election cycles. In contrast, a resident is usually only with us for 4 years and will have numerous other concerns as a learner which rightly will prevent them from devoting full time and energy to advocacy. Even if protected time is available in terms of a dedicated month, or a half-day set aside in a longitudinal schedule, it may be impossible to develop real momentum toward a project or involvement in an issue in the time allotted. A further challenge can present in the vagaries of legislative schedules. It is not uncommon for a hearing to be scheduled, or rescheduled, at short notice. Lobbyists or legislative aides may call the day of a hearing to request testimony to a committee, or urgent constituent calls be requested to a key legislator in advance of a vote. Straightforward policies may end up as amendments to unrelated bills, or bundled with other issues, making the tracking of relevant proceedings a challenge. This is where having an awareness of lobbying efforts supported by your institution, or patient advocacy groups, can help immensely as professional lobbyists monitor these issues and proceedings as their full-time job, and can alert you to immediate actions which may assist your cause.

Ultimately, we should recall that the aim of advocacy is to advance public health whether for individual patients or a population. If the work is becoming excessively politicized, or especially if one finds oneself in an ethical dilemma, it is vital to continue asking the question, “Am I doing this for my patient—or myself?” The thirst for reputation or influence should never lead us to exploit a patient situation in order to gain sympathy for a

cause, or to allow us to engage in hollow virtue signaling. Our public efforts and statements, even when carefully de-identified of personal information, can still result in a patient being unwittingly “outed” as a trauma victim or forced to divulge other struggles that they are not prepared to make public, even to close contacts. A patient hearing you speak publicly about a situation like their own might wonder if their own treatment story is being shared, and whether they can fully entrust the details of their concerns to you in the future. These risks make it vital that we work within structures of accountability and partnership with one another as we take on the work of advocacy.

In many of these respects, being an advocate at the societal level is no different than in any of our other roles as a clinician, educator, or employee. Each role may present an ethical dilemma which conflicts with the legitimate interests of one of the other roles—time required to advocate for a patient might reduce our availability to a resident on a given day, for example. Just as when we declare our potential conflicts of interest when giving an educational presentation, we should be prepared to be transparent about when we are speaking out as an individual concerned citizen, as opposed to speaking with the authority of our institution or profession. We also should recognize that with the social authority that we hold as physicians and program directors, this distinction may be difficult for our listeners to discern unless we are making it clear. Use of “as a psychiatrist...” or “as a physician...” statements couched in the authority of our role, when they come only from our personal opinion or preference should be avoided.

Building a Culture of Advocacy

Beyond specific advocacy efforts, sustaining these initiatives over the extended period of time required to make a lasting impact at the policy level will require that a program work toward building a culture of advocacy which supports advocacy over the long term. Ideally, a program culture would have residents at all levels of training engaged in active advocacy and supported by a faculty which provides direction and the wis-

dom of institutional memory. As a leader, it is important to consider how you will be personally involved as a change agent and advocate in your own system. In our experience, successful culture change is “caught, not taught,” that is, learned through demonstrated actions and attitudes as opposed to specific didactics. Although it should never be the task of a single person to carry the effort, leaders are needed to set an overall vision and to guide individuals to their place in the team.

Additionally, programs which wish to prioritize advocacy should be ready to recruit their successive generations of trainees based on demonstrated talents and passion for advocacy. A curriculum vitae (CV) filled with service and advocacy activities should be as highly prized as one with research publications, and Gold Humanism awardees should be sought after as highly as Alpha Omega Alpha (AOA) honorees. Attention also must be given to recruiting for representation. As mentioned above, it is our goal that a student looking at our program would see among our diverse residents one who “looks like me.” It is also important that our mentorship is aimed at fully valuing the perspectives of all our residents and is seeking to advance their careers in ways that amplify the voices of underrepresented groups. To do less than that is meaningless tokenism.

Finally, we need to acknowledge that advocacy is hard work, and often without immediate results or reward. This can easily lead to feelings of powerlessness and burnout. Coaching, supervision, and mentoring are absolutely vital in advocacy, just as it is in other aspects of training. We must not neglect that an important effect of training residents as advocates is to empower residents to advocate for themselves, their training, and their profession.

The present generation of trainees, more than ever, is highly sensitive to unhealthy and abusive elements of the healthcare system, and in our experience, much more willing to speak up about elements of the system which need changing. Topics such as physician burnout and suicide will not be addressed by mere lip service or resilience seminars, but require a willingness to change our systems and policies. Particularly in this age of COVID (at the time of this writing), physicians

need to be able to safely stand up and say “Enough,” and to build cultures of training and practice which are more hospitable to flourishing as human beings. Self-advocacy will be expressed by residents being able to verbalize their own goals and values, and work within their programs for policies that maximize wellness and self-care. We must encourage this, and demonstrate it ourselves through prioritizing our own concern for their wellbeing. If we wish to train advocates, we must advocate for those we train!

The communities we serve are ever changing. Each generation of trainees differs from their predecessors, and each generation of physicians meets different challenges in our culture and community. Part of our calling as professionals is to be aware of the vital signs that reflect this change, and to utilize the tools of our advocacy armamentarium to respond to that change to effect positive changes in the lives of our patients. Investing our time and effort in equipping our trainees for this mission will be among the most rewarding ways that we influence the future of our profession. It is to be desired that our residents will emerge from training as leaders against discrimination, stigma, and disparities, in future healthcare systems which are truly building a healthier, more equitable society.

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References

1. Protests spread over police shootings. Police promised reforms. Every year, they still shoot and kill nearly 1,000 people. Washington Post, June 8, 2020.
2. Every police-involved death in Minnesota since 2000. StarTribune, Minneapolis, MN. 2021. <https://www.startribune.com/every-police-involved-death-in-minnesota-since-2000/502088871/>. Updated Oct 5 2021. Accessed 30 Nov 2021.
3. Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/advocacy>. Accessed 30 Aug 2021. Merriam-Webster.
4. Vance MC, Kennedy KG, Wiechers JR, Levin SM. A psychiatrist's guide to advocacy. Washington, D.C.: American Psychiatric Association Publishing; 2020.
5. Compton MT, Shim RS. The social determinants of mental health. Focus. 2015;13:419–25. <https://doi.org/10.1176/appi.focus.20150017>.
6. ACGME Program Requirements for Graduate Medical Education in Psychiatry. The Accreditation Council for Graduate Medical Education. 2021. https://www.acgme.org/globalassets/pfassets/programrequirements/400_psychiatry_2021.pdf. (IV.B.1.f).(1).(j-k), p. 26). Accessed 23 Nov 2021.
7. Psychiatry Milestones. The Accreditation Council for Graduate Medical Education. 2020. <https://www.acgme.org/globalassets/PDFs/Milestones/PsychiatryMilestones2.0.pdf>, p. 3, 13. Accessed 23 Nov 2020.
8. Compton MT, Shim RS. The social determinants of mental health. Washington, D.C.: American Psychiatric Association Publishing; 2015.
9. Shim RS. Dismantling structural racism in psychiatry: a path to mental health equity. Am J Psychiatr. 2021;178:592–8. <https://doi.org/10.1176/appi.ajp.2021.21060558>.
10. Ko M, Cruz AL, Cummings JR. Social injustice and the health care system. In: Shim RS, Vinson SY, editors. Social (in)justice and mental health. Washington, D.C.: American Psychiatric Association Publishing; 2021. p. 125–41.
11. Department of Health and Human Services Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/>. 2021. Accessed 24 Nov 2021.
12. Substance Abuse and Mental Health Services Administration. The opioid crisis and the Black/African American Population: an urgent issue. 2020. Publication No. PEP20-05-02-001. Office of Behavioral Health Equity. Substance Abuse and Mental Health Services Administration, 2020.
13. APA Council on children, adolescents, and their families. How psychiatrists can talk with patients and their families about race and racism. 2020. https://www.psychiatry.org/File%20Library/Psychiatrists/Directories/Library-and-Archive/resource_documents/Resource-Documents-2020-How-Psychiatrists-Can-Talk-About-Race-Racism.pdf. Accessed 20 Aug 2021.
14. Hammond BA, James C. Creating an intergroup dialogue curriculum on race for psychiatry residents. Acad Psych. 2020;44:498–9.
15. HealthPartners: Equity, Inclusion and Anti-racism. <https://www.healthpartners.com/about/equity-inclusion-anti-racism/>. 2021. Accessed 23 Nov 2021.
16. Hennepin Healthcare: Commitment to Diversity. <https://www.hennepinhealthcare.org/commitment-to-diversity/>. 2021. Accessed 23 Nov 2021.
17. Hennepin Healthcare Community Health Needs Assessment 2019 and 2020–2022 Community Health Needs Assessment Implementation Plan and Health

- Services Plan. 2021. <https://www.hennepinhealthcare.org/wp-content/uploads/2020/01/2019-Community-Health-Needs-Assessment-2020-2022-Community-Health-Needs-Assessment-Implementation-Plan-Health-Services-Plan.pdf>. Accessed 23 Nov 2021.
18. Rodríguez JE, Campbell KM, Pololi LH. Addressing disparities in academic medicine: what of the minority tax? *BMC Med Educ*. 2015;15:6. <https://doi.org/10.1186/s12909-015-0290-9>.
 19. Berlan ED, Corliss HL, Field AE, Goodman E, Austin SB. Sexual orientation and bullying among adolescents in the growing up today study. *J Adolesc Health*. 2010;46:366–71. <https://doi.org/10.1016/j.jadohealth.2009.10.015>.
 20. Ryan C. Helping families support their lesbian, gay, bisexual, and transgender (LGBT) children. 2009. National Center for Cultural Competence, Georgetown University Center for Child and Human Development. https://nccc.georgetown.edu/documents/LGBT_Brief.pdf.
 21. Ryan C, Huebner D, Diaz RM, Sanchez J. Family rejection as a predictor of negative health outcomes in white and Latino lesbian, gay and bisexual young adults. *Pediatrics*. 2009;123:346–52.
 22. Christensen J, Imhof R, Linder K, McKean A. Protective factors for transgender and gender nonbinary youth experiencing suicidality: a systematic review of the literature. *J Adolesc Health*. 2021;68:S35–36. <https://doi.org/10.1016/j.jadohealth.2020.12.074>.
 23. Substance Abuse and Mental Health Services Administration. Ending conversion therapy: supporting and affirming LGBTQ youth. 2015. HHS publication no. (SMA) 15–4928. Substance Abuse and Mental Health Services Administration; Rockville; 2015.
 24. Sue D, Spanierman L. *Microaggressions in everyday life*. 2nd ed. Nashville: Wiley; 2020.
 25. American Association of Medical Colleges, aamc.org. [cited 2021 Nov 26]. Available from: <https://www.aamc.org/data-reports/students-residents/interactive-data/2021-facts-enrollment-graduates-and-md-phd-data>.
 26. National Center for Education Statistics, nces.ed.gov. [cited 2021 Nov 26]. Available from: <https://nces.ed.gov/programs/coe/indicator/clr>.
 27. Shen MJ, Peterson EB, Costas-Muniz R, Hernandez M, Jewell ST, Matsoukas K, Bylund CL. The effects of race and racial concordance on patient-physician communication: a systematic review of the literature. *J Racial Ethnic Health Disparities*. 2018;5:117–40. <https://doi.org/10.1007/s40615-017-0350-4>.
 28. APA Advocacy: American Psychiatric Association. [cited 2021 Aug 30]. Available from: <https://www.psychiatry.org/psychiatrists/advocacy>.
 29. Mental Health America. [cited 2021 Nov 26]. Available from: <https://mhanational.org/>.
 30. National Alliance on Mental Illness. [cited 2021 Nov 24]. Available from <https://nami.org/Advocacy>.
 31. Legislative Advocacy Toolkit, Minnesota Doctors for Health Equity. [cited 2021 Aug 28]. Available from <https://mdheq.org/Primers-and-Toolkits>.



Building a System of Competency-Based Assessment

17

John Q. Young

Background

Emergence of Outcomes-Based Education

Over the past two plus decades, numerous national and international reports have documented critical deficiencies in medical education, including psychiatric graduate medical education (PsyGME). These deficiencies encompass the what (skills learned), the how (pedagogy used), and the why (meaning/purpose) of medical education. Critical gaps in competencies are highlighted by suboptimal patient outcomes, unacceptable variability in the abilities of trainees upon graduation, and poor alignment between what trainees learn and the skills required to provide safe and effective care in emerging care delivery systems [1–4]. Pedagogic shortfalls include the use of instructional techniques that are ineffective and inefficient [1–4]. Deficiencies in our learning environments and culture generate burnout and microaggressions that harm the formation of professional identity, characterized

by joy, meaning, and purpose in medicine [5–10]. These and other reports have called for fundamental and far reaching reforms [11, 12].

In an effort to better align the medical education continuum with population health needs, regulatory bodies adopted a new approach in the mid- to late-1990s [5]. Accreditation bodies shifted focus from structure and process measures (e.g., time-based rotations) to measurable educational outcomes [13–15]. For example, in 2001, the Accreditation Council for Graduate Medical Education (ACGME) mandated that graduation from residency become contingent on demonstrated competence in the now familiar six core domains: patient care, medical knowledge, interpersonal and communication skills, systems-based practice, practice-based learning and improvement, and professionalism [16]. Similar reforms have taken place in other countries such as with the implementation of the CanMEDS framework in Canada, and the Netherlands and the adoption of the Tomorrow's Doctors framework in the United Kingdom [17].

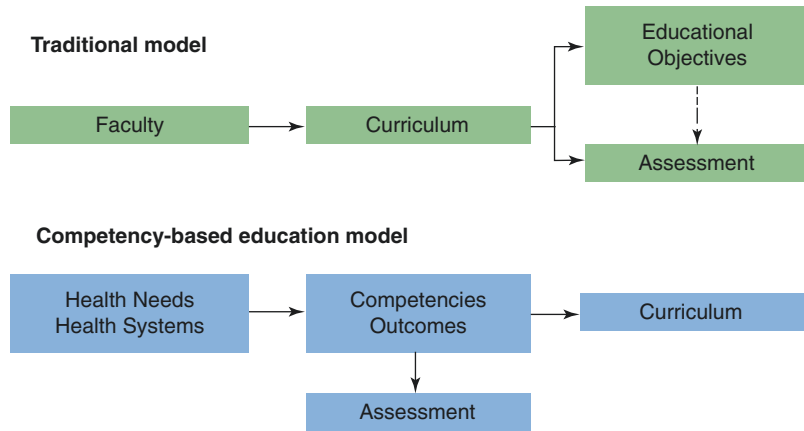
In this context, competency-based medical education (CBME) emerged as an outcomes-based approach to the design, implementation, assessment, and evaluation of medical education programs [15]. The fundamental premise of CBME is that trainees should acquire the abilities necessary to meet the health needs of our patients and communities. The competencies are therefore derived from an analysis of what a

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Fig. 17.1 Models for development of curriculum development in medical education



physician must be able to perform in emerging care delivery models. The curriculum and assessment program are then designed to achieve these competencies [18]. This approach to curriculum development, centered on the competencies necessary to meet the health needs of the community, differs from the traditional approach, which centered on what the faculty determined to be important (Fig. 17.1). CBME emphasizes instructional techniques that are learner-specific, flexible, and time-variable. More recently, with the recognition of burnout and the devastating effects it can have on skill acquisition, CBME has recognized the importance of learning cultures and processes that promote resilience and well-being [19].

Reforms to Align Psychiatric Education with Population Health

The emergence of outcomes-based education has stimulated efforts to realign our systems of medical education with patient and societal needs [1, 3]. We see reform in content. Our curricula are evolving to prepare graduates to practice in delivery systems that employ team-based, population-oriented, technology-enabled care for the longitudinal management of chronic disease rather than individual-based, episodic management of acute illness [1, 2]. In psychiatry, this has included developing courses and rotations dedicated to learning-integrated care, tele-psychiatry, clinical neuroscience, system approaches to qual-

ity improvement and patient safety, and evidence-based treatments [20–25]. Moreover, we see reform in pedagogy. Our instructional techniques are increasingly employing evidence-based strategies to more effectively integrate formal knowledge and clinical experience, develop life-long habits of inquiry and improvement, and support the formation of professional identities [3, 7, 21]. And, in the face of endemic burnout, we are returning to the “why” of medicine. We are beginning to address how to reform our learning environments and cultures in order to foster resilience and enduring engagement rather than burnout [9, 26, 27].

Key Enabler of Reform: Competency-Based Assessment

Innovations to align medical education with population health are promising. However, these efforts will ultimately not succeed unless we meet two fundamental challenges. First, in PsyGME, we must learn how to produce lifelong learners who can self-regulate their own learning by continually incorporating the exponentially increasing volume and complexity of new evidence into their practice of medicine. Otherwise, we will not close the quality chasm that exists between actual care and best care/practices, and our future physicians will not adapt to their new roles in emerging care delivery models. For example, roughly half the care provided in the United States across specialties is not consistent

with evidence-based practice [28]. In other words, the standard of care is not consistent with best practices. In addition, the time lag for physicians to adopt newly proven effective practices is nearly two decades, and may be even longer for physicians to “de-adopt” practices shown to be ineffective [29–31].

Second, PsyGME must learn how to gather and interpret robust performance data so that competency acquisition is accelerated and residents graduate only if and when they are ready for independent practice, that is, possess the competencies required to provide safe, person-centered, and effective care to our patients and communities within our health systems. Otherwise, we will not possess the data to drive continuous quality improvement of our curricula and learning environments, support time-variable training, and ensure alignment between our medical education and healthcare systems.

Challenges with Competency-Based Assessment

Meeting these two challenges requires the capacity to capture meaningful educational outcomes in a system of assessment that supports self-regulated learning and competence as well as trustworthy decisions about readiness for practice [32]. This has led to substantial and sustained efforts internationally to develop effective ways to assess these competencies. However, implementation of competency-based medical education has encountered significant challenges. Some have argued that the units of assessment (e.g., milestones and competencies) are too numerous and/or too abstract for educators to meaningfully evaluate [33, 34].

In addition, traditional methods of assessment, which focus on “knows” and “knows how,” have been insufficient to assess competence in the workplace, that is, “what doctors actually do in practice” [35–38]. This has led to the development of workplace-based assessment (WBA). While WBA strategies (e.g., direct observation tools, multisource feedback) have been developed, many have been plagued by validity concerns [39,

40]. For example, faculty members often do not use the same frame of reference when completing a WBA and their feedback often lacks meaningfulness for the learner, leading to trivialization [32]. Research findings indicate that narrative comments provide helpful guidance to learners and enhance summative decisions, especially when combined with quantitative ratings [41–43]. Yet, the narrative comments are also plagued by variable quality and the purposeful use of vague or coded language that can be difficult for both the learner and the Clinical Competency Committee (CCC) to interpret [44, 45].

Moreover, WBA efforts have not adequately engaged the learner as a co-producer [46], a critical feature if we are to generate physicians who are motivated [47] and able to regulate their own learning [48]. The provision of high quality external data is necessary, but not sufficient, for self-directed learning. Self-directed learning requires considerable external direction and scaffolding [49]. Coaching has been shown to increase residents’ abilities to recognize and reflect upon their learning gaps, and seek out learning opportunities that lead to improved performance [50]. The creation of a psychologically safe interpersonal space in which “imposter syndrome” and other doubts can be addressed helps trainees and their faculty and coaches move from a fixed to a growth mindset and become more resilient within environments that expose their inadequate skills [51].

Finally, even when assessment tools with evidence for validity have been implemented in a way that engages the learner, the assessment activity generally is not part of a system of assessment that is aligned with the curriculum and that combines multiple assessments and components into a process that supports high quality feedback and trustworthy summative decisions by CCCs [37, 39].

Competency-Based Assessment in PsyGME

To address these challenges effectively, competency-based assessment (CBA) for PsyGME must simultaneously optimize three

goals: (1) Maximize learning through formative assessment (assessment for learning); (2) Enable robust high stakes decision-making (e.g., promotion or selection) through summative assessment (assessment of learning); and (3) Support ongoing improvements in the curriculum [32]. In this chapter, we will focus primarily on the first two goals. As such, the CBA system must promote both self-regulated growth and clinical competence as judged by a trustworthy process. These purposes must be held together. The key to effectively doing so is situating these activities within a carefully designed system of assessment.

System of Assessment

One of the most important insights to emerge from the first-generation efforts to implement CBA is the understanding that the validity and, ultimately, the effectiveness of CBA is not primarily about the assessment tools but about how the various assessment activities interact with each other and relate to the overall goals. This has led to a shift in focus from the psychometric properties of individual assessment tools to the design of the assessment system [39, 52, 53]. In 2018, an international group of educational researchers and thought leaders published a consensus framework for a good system of assessment. The good system has the following features [39]:

1. *Coherent*. Individual assessments are coordinated and aligned around the same purposes within a common framework.
2. *Continuous*. Assessments are ongoing, frequent, and embedded throughout the curriculum.
3. *Comprehensive*. Each competency is assessed multiple times by several methods; the assessment activities, taken together, serve formative, summative, and programmatic assessment.
4. *Feasible*. The components of the system of assessment are practical, sensible, and “doable” for the given stakeholders, context, and purposes.
5. *Purpose-driven*. The CBA system supports the purposes for which it was created, including robust formative, summative, and programmatic assessment.
6. *Acceptable*. The CBA system is credible and acceptable to the stakeholders, including the learners, staff, patients, faculty, school or institution, and regulatory bodies.
7. *Transparent and equitable*. The ownership, access, and use of the assessment data is clear to all stakeholders; systematic steps are taken to detect and minimize bias and promote fair outcomes.

The good enough CBA system operationalizes these design principles and blends multiple assessments to achieve different purposes (e.g., formative and summative) for a variety of stakeholders (e.g., patients, residents, faculty, CCCs, regulators). This includes the use of assessment instruments with evidence for validity, but also protected spaces for the assessment activities (e.g., direct observation and structured feedback), engaged and activated faculty and learners who are oriented to a similar conception of the performance dimensions, and a culture that values growth.

To operationalize these principles, the good enough CBA system has several interacting components: workplace-based assessment, ongoing faculty development, learning analytics, longitudinal coaching, and trustworthy clinical competence decision-making processes (Fig. 17.2). We now review each of these components.

Workplace-Based Assessment

WBAs are at the center of a CBA system. WBAs focus on what trainees actually do with patients and team members. What the trainee “does” becomes the basis for identifying growth edges and determining readiness for advancement and ultimately independent practice. Implementing WBAs requires choices about the assessment framework, type and design of tool, platforms, rater variability, and the contexts in which assessment will occur.

Fig. 17.2 Key components – system of competency-based assessment

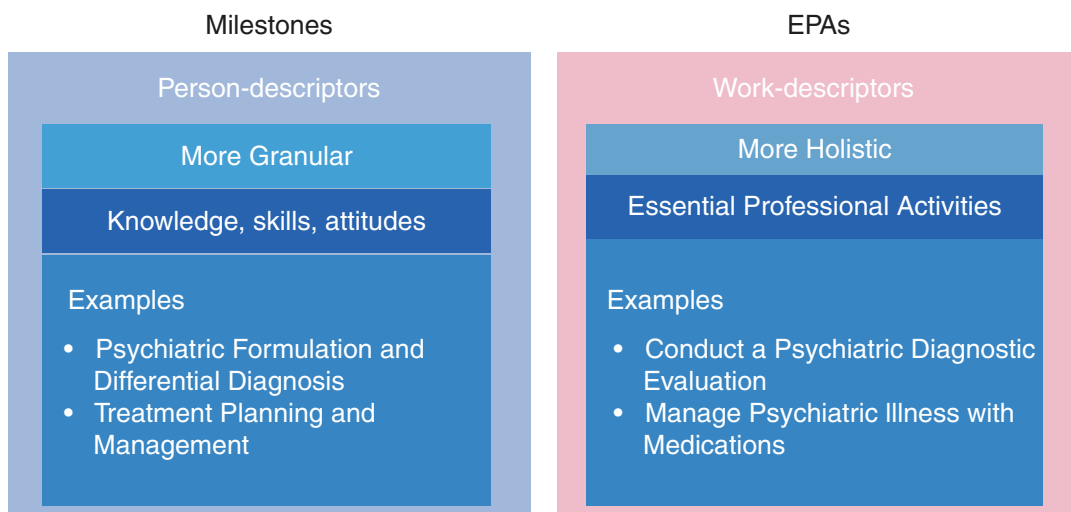
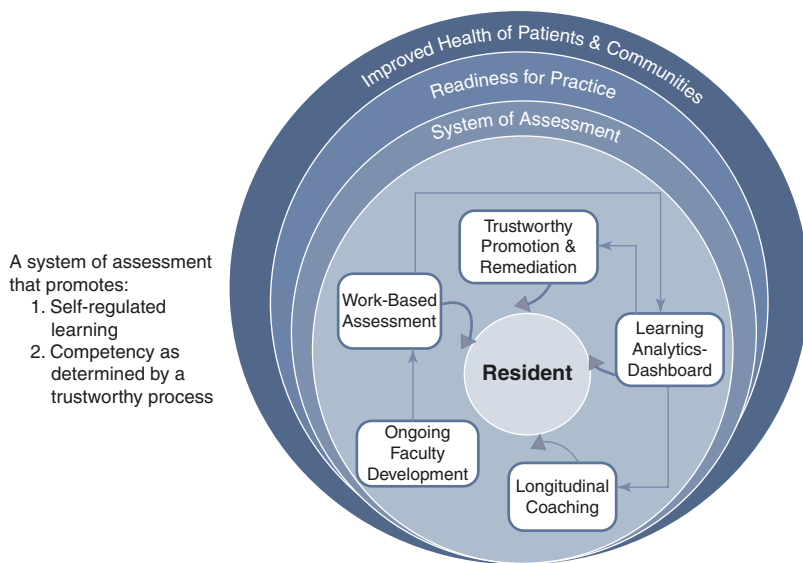


Fig. 17.3 Comparing two competency framework: milestones and EPAs

Framework In developing the WBAs, PsyGME programs must first choose the framework for assessment. The two most common developmental frameworks for operationalizing competency-based medical education are Milestones and Entrustable Professional Activities (EPAs) (Fig. 17.3). Milestones are more granular. Milestones are behavioral narratives that mark the developmental progression of a trainee’s abilities

(knowledge, skills, and attitudes) within a given subcompetency. One of the milestones for psychiatric evaluation reads “uses hypothesis-driven information gathering to obtain complete, accurate and relevant history.” Milestones give definition to the more abstract competencies and, when taken together, depict a model for a trainee’s abilities at each stage of development from novice to expert. In contrast, EPAs are more holistic. EPAs

are the list of tasks that define a given specialty (e.g., conducting a diagnostic psychiatric assessment) [54]. Each EPA requires the simultaneous integration of multiple individual milestones and subcompetencies. EPAs must be executable within a given time frame, observable, measurable, and suitable for focused entrustment decisions, that is, the task can be entrusted to the trainee for unsupervised execution once sufficient competence is reached [55]. For example, within the Milestones competency domain of patient care, there are five subcompetencies, including Psychiatric Evaluation, Psychiatric Formulation and Differential Diagnosis, and Treatment Planning and Management. In the EPA framework, these three subcompetencies are nested within professional activities such as a diagnostic interview or medication management visit.

EPAs and Milestones are complementary (Fig. 17.4). In other words, an individual requires abilities in order to perform an activity effectively. EPAs can be mapped to subcompetencies and individual milestones. Guides have been developed to help groups develop EPAs [55]. Both Canada and the Netherlands have combined the Milestones and EPAs in their national WBA programs [56].

The Accreditation Council for Graduate Medical Education (ACGME) implemented version 2.0 of the Psychiatry Milestones in July

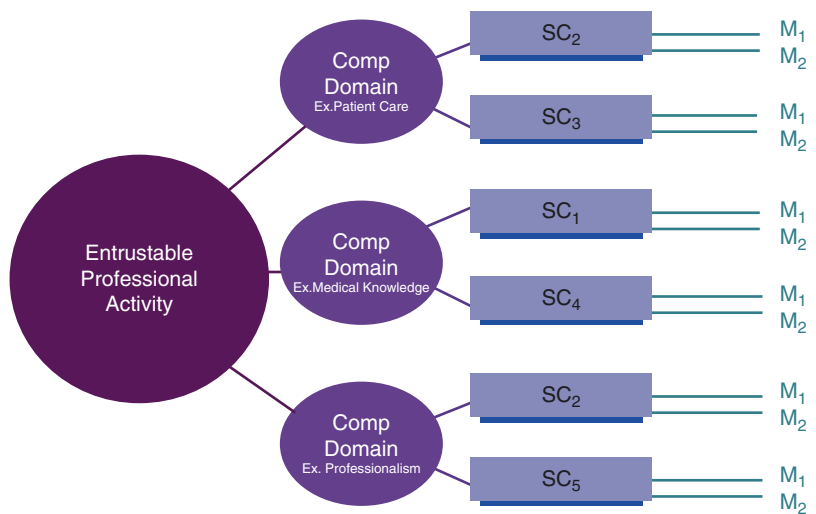
2021 [57]. Milestones 2.0 includes 21 subcompetencies. (Table 17.1).

Individual milestones within each subcompetency are organized around a five-level, developmental framework, with level 1 representing the skills and attributes expected of a beginning resident, levels 2 and 3 as intermediate stages, level 4 those of graduating residents, and level 5 aspirational achievements [58] (Table 17.2).

While the ACGME has not adopted EPAs, many specialties have. EPAs have been developed for most specialties, including anesthesiology, ambulatory practice family medicine, gastroenterology, geriatric medicine, hematology and oncology, internal medicine, pediatrics, obstetrics and gynecology, psychiatry, pulmonary and critical care, and rheumatology [55, 59–64]. Several different types of expert consensus methodologies have been used, including task forces, interview, and survey. In psychiatry, EPAs were first developed in New Zealand and Australia [65]. Later, a single US residency program implemented EPA-based end-rotation evaluations. In this program, the EPAs were constructed by the rotation leaders [63].

Recognizing the potential for end-of-training EPAs in the United States, the Executive Council of the American Association of Directors of Psychiatric Residency Training (AADPRT) created the EPAs for Psychiatry Task Force in 2014.

Fig. 17.4 Relationship between EPAs and Milestones



Comp Domain Competency Domain (e.g., Patient Care or Medical Knowledge), SC Sub-Competency (e.g., Patient Care – Psychiatric Evaluation), M milestone

Table 17.1 List of milestones 2.0 and EPAs

| Milestones 2.0 | EPAs |
|---|--|
| Patient care | Conduct a psychiatric diagnostic evaluation |
| Psychiatric evaluation | Manage psychiatric patients longitudinally |
| Psychiatric formulation and differential diagnosis | Manage a patient's psychiatric conditions with medications |
| Treatment planning and management | Manage transitions in care |
| Psychotherapy | Manage psychiatric emergencies |
| Somatic therapies | Provide psychiatric consultation to other clinicians or services |
| Clinical consultation | Provide supportive psychotherapy |
| Medical knowledge | Provide cognitive behavioral therapy |
| Development through the life cycle | Provide psychodynamic psychotherapy |
| Psychopathology | Manage involuntary commitment and treatment |
| Clinical neuroscience | Assess and manage decision-making capacity |
| Psychotherapy | Apply quality improvement methodologies to one's patient panel or clinical service |
| Systems-based practice | Lead an interprofessional healthcare team |
| Patient safety and quality improvement | |
| System navigation for patient-centered care | |
| Physician role in health care systems | |
| Practice-based learning and improvement | |
| Evidence-based and informed practice | |
| Reflective practice and commitment to personal growth | |
| Professionalism | |
| Professional behavior and ethical principles | |
| Accountability/conscientiousness | |
| Well-being | |
| Interpersonal and communication skills | |
| Patient- and family-centered communication | |
| Interprofessional and team communication | |
| Communication within healthcare systems | |

Table 17.2 Comparing typical scales for milestones and EPAs

| Anchor | Milestone scale | EPA scale (Example) |
|---------|---------------------------------|---|
| Level 1 | Novice | Co-treat/observe |
| Level 2 | Intermediate | Direct supervision |
| Level 3 | Intermediate | Indirect supervision |
| Level 4 | Ready for unsupervised practice | Oversight (ready for unsupervised practice) |
| Level 5 | Expert | Supervise others |

The Council charged the Task Force to develop proposed EPAs that every graduating resident should be able to perform without supervision. The Task Force employed a rigorous, multistage process that culminated in a national Delphi survey in order to develop EPAs that were essential, clear, and representative. This process, the most comprehensive to date for psychiatry, yielded 13 EPAs [66] (Table 17.1). For each EPA, residents are assessed according to the level of supervision with which they can be entrusted. A

typical entrustment scale would be: observe, direct supervision, indirect supervision, oversight, independent, supervise others (Table 17.2).

The AADPRT EPA study authors encouraged programs to experiment and adapt the EPAs in order to align with local context and mission. For example, programs may choose to lump or split EPAs in various ways:

- Disease (e.g., manage bipolar illness).
- Setting (e.g., diagnostic psychiatric interview in the Emergency Department).
- Treatment modality (e.g., initiate treatment with clozapine or cognitive behavioral therapy versus psychodynamic psychotherapy).
- Patient acuity/complexity (e.g., patients with one defined problem versus patients with multiple problems).

The AADPRT EPA Task Force also recommended differentiating between EPAs that should

be required nationally versus those that might be required only by a specific institution and between EPAs that are required, elective, and/or aspirational. Some psychiatry programs have implemented EPAs [63, 67] and the AADPRT Assessment Committee has published an implementation toolkit for program directors, including assessment tools, faculty development guidelines, and a mapping of EPAs to the Milestones 2.0 [68].

Fit-for-Purpose Because assessment drives learning, it is critical that PsyGME programs align their WBA tools with their curriculum [69]. This has several implications. Programs must design their WBAs so that each primary EPA or competency is assessed multiple times by several methods. In addition, programs should emphasize a given WBA tool in proportion to the importance of the competencies or EPA that it assesses. The WBAs should indicate to the learner what the program values. Too often, programs assess what is easy to assess rather than what is important to assess. This can lead stakeholders to experience WBAs as trivial and intrusive and worse yet, lead them to focus their learning efforts on relatively less important competencies.

Each WBA tool should possess the key elements of fit-for-purpose individual assessments, with priority to validity, feasibility, educational and catalytic effects, and acceptability [39, 70–72] (Table 17.3). The distinction between educational and catalytic effects is important. Educational effects refer to the effects on behavior that occur prior to the WBA, that is, to what extent anticipation of the WBA prompts the learner to engage in preparatory activities that are valuable and worth the time. Catalytic effects refer to the effects of the WBA after the assessment, that is, to what extent does the WBA generate information and feedback that prompts both growth- and future-motivated effort. WBAs should motivate high yield activities both before and after the assessment.

PsyGME programs should use multiple types of WBAs, each administered multiple times with multiple assessors [32]. The use of “multiples” helps overcome bias. Multiple methods help to

Table 17.3 Fit-for-purpose assessments: key elements^a

| Element | Description |
|--------------------|--|
| Validity | A body of evidence that supports the use of the results of the WBA for the intended purpose. This usually includes evidence-related content, internal structure, response process, association with other variables, and consequences. |
| Feasibility | Implementation of the WBA is doable given the circumstances and context. |
| Educational effect | Anticipation of the WBA prompts the learners to engage in preparatory activities that have educational benefit. |
| Catalytic effect | Feedback from the WBA promotes growth and motivates effort and engagement. |
| Acceptability | The stakeholders, including learners, faculty, clinical competency committees, institutions, and external regulators view the information derived from the WBAs as credible. |

^aAdapted from: Norcini et al. [72]

compensate for the limitations of any one technique or assessment instrument. Multiple assessments of a given competency or EPA help overcome “one-offs” (e.g., resident performing atypically) and to develop a more stable and complete view of a trainee’s skill. Multiple (and diverse) assessors helps protect against the biases (e.g., halo effects, leniency, variable conceptions of competence, race, gender, sexual orientation) that influence any given faculty member’s judgment.

Types of Tools The most common WBA tools include multisource feedback (patients, staff, peers), chart stimulated recall, direct observation, end-rotation global feedback, portfolios, and practice-based audit (Table 17.4). Multisource feedback tools typically focus on the competency domains of interpersonal and communication skills and professionalism from the perspective of faculty, allied health staff, patients, peers, administrative staff, and the self. Several studies have shown that psychiatry residents value this feedback [73–75]. Chart stimulated recall has not been studied in psychiatry, but represents an

Table 17.4 Common examples of workplace-based assessment approaches

| Approach | Description | Example |
|--|---|---|
| Multisource feedback | Assessments from patients, staff, and peers, typically focused on interpersonal and communication skills and professionalism | Patient experience surveys in which the results can be tied to a specific trainee |
| Direct observation and structured feedback | Assessments from supervisors based on the direct observation of the trainee performing a clinical task | Psychopharmacotherapy – Structured clinical observation tool |
| Chart stimulated recall | Assessment based on a trainee’s responses to a series of “what if” questions based on an actual patient (i.e., chart) | To assess competence with managing depression in peripartum patients, each resident answers questions such as how would their approach to the management of depression change if they learned that the patient has a history of a manic episode |
| Practice-based audit | Assessment based on measures for meaningful outcomes that derive from the clinical care the trainee delivered to patients | A quarterly dashboard that shows for each trainee what proportion of their patients on antipsychotic medications have received appropriate metabolic screening |
| Portfolio | Assessment based on a systematic collection and organization of artifacts that represent the ability to perform a task. Portfolios often include a reflective component | Trainees post on a digital platform copies of several biopsychosocial formulations they wrote or videos of teaching a patient how to do an exposure exercise with reflections |

Adapted from: Young et al. [155].

excellent way to assess clinical reasoning and decision-making. For example, an attending may view the chart of a patient recently seen by the resident and then ask for the rationale behind the clinical decisions and probe further by asking a series of hypothetical “what ifs” (e.g., what if the patient was pregnant, would your choice of medication change? How would you explain the risk of medication Y to such a patient?) [76]

Direct observation with structured feedback is a central and primary strategy for WBA. The Psychopharmacotherapy-Structured Clinical Observation (P-SCO) is the direct observation and feedback tool in psychiatry with the most evidence for validity. The P-SCO was developed to assess the EPA of a follow-up (medication management) visit [77]. The P-SCO includes a checklist of the essential tasks of a medication visit plus space for narrative comments. The feasibility and utility of implementing the P-SCO has been demonstrated in several studies [77, 78]. Additional research has reported evidence for validity of the P-SCO with respect to its content, internal structure, and association with other variables [79, 80]. Moreover, the P-SCO has been

found to generate high quality narrative comments that are behaviorally specific and balanced between corrective and reinforcing and either add unique content or elaborate on the “why” behind a low or high quantitative score [77, 81]. This latter finding is particularly encouraging given that research on end-rotation evaluations have found narrative comments to be vague and non-specific and, therefore, ineffective [44, 77]. Evidence for validity has also been developed for the data generated by a tool that assesses the EPA of a psychiatric diagnostic interview [82]. Finally, a mobile app that assesses EPAs in psychiatry showed evidence of feasibility and validity [83]. Completion of a single assessment with the EPA app took on average 72 seconds and generated one high quality, specific corrective comment. The entrustment scores assigned by faculty using the EPA app correlated highly with the experience level of the trainee.

While the use of portfolios as a WBA tool has been demonstrated in psychiatry, relatively little has been written [84, 85]. Finally, perhaps the most underutilized WBA method in psychiatry is practice-based audit or the provision of meaning-

ful outcomes (e.g., proportion of patients on an antipsychotic medication who have been screened for metabolic syndrome according to guidelines) derived from the clinical care delivered by the learner to their patients. Groundbreaking work in pediatrics has identified resident-sensitive quality measures, that is, measures influenced by the care delivered by residents and obtainable from electronic records [86–88]. Similar efforts are urgently needed in PsyGME.

Future research in PsyGME should focus on the development of WBAs that focus on EPAs and competencies other than the relatively well studied follow up visit and diagnostic interview. Priority areas include WBAs for psychotherapies, quality improvement and patient safety, clinical reasoning, handoffs, and critical appraisal/evidence-based medicine (EBM). To meet this need, PsyGME educators and researchers can either develop new tools or adapt those with evidence for validity in other specialties [89–91]. It is also important to note that CBA will include non-WBAs, including knowledge assessments such as the Psychiatry Resident In-Training Examination. The emphasis, however, is on how the resident performs in the workplace.

Design WBAs should include both quantitative and, importantly, narrative data [41–43, 92]. A recent study of the P-SCO found that the checklist and the narrative comments complemented each other. The narrative comments expanded upon the low or high checklist scores, providing important guidance to the resident and the CCC about what was done well or not so well. At the same time, half of the comments addressed aspects of the performance not captured by the checklist, contributing highly valuable content that otherwise would not be captured [81]. Some programs are using WBAs with only comments. The rationale is that completing the checklist or quantitative items comes at a cost, in terms of time, rater cognitive load, and promoting “achievement” or grades rather than growth [93]. In addition, some studies suggest that learners find comments more helpful than quantitative scores, and recent studies suggested that narra-

tive comments can support summative judgments [41, 43, 94]. On the other hand, the checklist may improve clinical care and feedback by orienting both the supervisor and learner to a shared mental model of what competence looks like for that activity in that particular setting. The checklist may also help faculty identify areas for and provide behaviorally specific feedback. A recent implementation study of the P-SCO supported these benefits [78]. In addition, the completion of the checklist may lead to improvements in the rater’s (faculty member’s) own practice [32]. If the frame of reference provided by the checklist does result in higher quality comments, then several important questions must be answered. Is provision of the checklist (rather than completion) adequate or is completion essential? If completion is essential, is there a threshold number of completed observations after which the checklist is sufficiently internalized by the faculty member and resident and no longer necessary? And does the checklist help the learner progress more rapidly? As we look to sustainability of our direct observation assessment programs, these questions will be important to answer through future research on the P-SCO and other direct observation tools.

Platforms The CBA system must also choose carefully the platforms for its WBAs. The principal choices are paper-based versus mobile apps. Research in PsyGME has identified trade-offs. A series of studies using implementation science to identify the barriers and facilitators of engagement with both an EPA app and a paper-based WBA yielded several insights [78, 95]. First, it is critical that mobile apps be developed utilizing an iterative, user-centered design process in order to minimize cognitive load and ensure ease of use (feasibility) and high quality data [93, 96–98]. The user-centered process leverages focus groups, think-alouds, and human-factors design principles to construct, test, and redesign the tool. This is relevant to paper-based forms as well. Well-designed, easy to use tools are much more likely to be used in the manner intended. Second, careful attention should be given to how WBAs, whether electronic or paper, are embedded within

clinical workflows to ensure feasibility [39]. Alpha and beta testing can help identify features of the WBA and/or workflow that either facilitate or impede engagement such as how many, when, and for how long patients are scheduled. Third, these studies found that faculty and residents value the quickness of the mobile app and how the app forced the faculty member to distill feedback into a succinct point. On the other hand, both faculty and residents appreciated how the paper-based form with a checklist generated more thorough, systematic feedback. Faculty however stated that they would resent completing the checklist on a smartphone. These studies suggest that there may be a role for both types of platforms (and tools) in a WBA program.

Direct Observation and Structured Feedback

All WBA programs should include direct observation and structured feedback programs. Such programs facilitate the capture of data at the point of care that can be aggregated into powerful performance dashboards as well as opportunities for coaching in the moment and afterward. Implementation of direct observation and structured feedback programs have encountered significant challenges. Supervisors and trainees often are inadequately trained, do not understand the purpose, and interact in settings with insufficient time for direct observation and/or feedback [99, 100]. Studies have identified additional barriers. Clinical curricula are structured in such a way that many of the supervisory relationships are brief and frequently changing, which impedes the development of strong educational alliances. In addition, faculty often provide low quality, unidirectional feedback that is not credible to the trainee [101–108]. Moreover, trainees often perceive assessment as summative even when intended as formative [109–111]. Trainees may alter their behavior (e.g., adopt a checklist approach) to conform to what they perceive to be desired [112, 113]. The direct observation then morphs into a performance that feels inauthentic, which, in turn, undermines subsequent receptiv-

ity to feedback (e.g., “that is not what I normally do anyways”) [113]. As a result, some studies indicate that faculty and residents have a negative view of direct observation and structured feedback programs. They describe their experience as “tick-box” or “jump through the hoops” exercises that add stress to already compressed schedules and intrude upon the residents’ autonomy [99, 113]. Taken together, these factors can lead to the trivialization of WBA.

To address these challenges, researchers have proposed a number of strategies [99, 100, 102, 114, 115] (Table 17.5). Clinic and attending schedules must be modified to create the protected space for observation and structured feedback [99, 100]. This can lead to reduced clinical productivity. However, some programs have offset many of these costs by billing for observation time as professional services. Deliberate practice with coaching can accelerate skill acquisition and then permit learners to be entrusted with more patient care responsibilities earlier in training, leading to additional cost mitigation. Other critical strategies for direct observation and struc-

Table 17.5 Key features of successful direct observation and structured feedback programs

| |
|---|
| 1. Provide regular, ongoing training in three areas: |
| (a) Direct observation, including how to support resident autonomy while observing. |
| (b) Use of the chosen WBAs, with attention to performance dimensions, frame of reference, and narrative comments. |
| (c) Feedback as a bidirectional, co-constructed conversation with an emphasis on open ended higher order questions and facilitated listening, encouragement, and agreeing on an action plan |
| 2. Design clinical rotations to create longitudinal supervisor-trainee relationships |
| 3. Repeated, frequent observations that become part of the culture. Ideally, direct observation is more frequent earlier in training and then tapers off (but does not stop) as a resident approaches readiness for independent practice. |
| 4. Protected time for faculty to observe and for faculty and trainee to engage in feedback |
| 5. Utilize whenever possible structured observation tools with evidence for validity |
| 6. Monitor adherence or engagement by faculty and residents (e.g., number of direct observation assessments completed by each faculty or trainee per rotation or clinic per month). |

tured feedback programs include ongoing faculty and resident training, longitudinal supervisory relationships, use of feedback models that emphasize bidirectional, co-constructed conversations, structured WBA tools with evidence for validity as described above, and monitoring of engagement.

A recent qualitative study of a direct observation program in psychiatry found that when these strategies are bundled together, many of the above challenges can be overcome [116]. Faculty and residents were aligned around the goals. They both perceived the program as focused on growth rather than judgment even though residents understood that the feedback had both formative and summative purposes. The program facilitated educational alliances characterized by trust and respect. With repeated practice within a longitudinal relationship, trainees dropped the performance orientation and described their interactions with patients as authentic. Residents generally perceived the feedback as credible, described feedback quality as high, and valued the two-way conversation.

Bundling the strategies in Table 17.5 together appeared to bring about important culture change in which the emphasis was on growth. This is very encouraging. However, there was an important note of caution in this study. When receiving feedback with which they did not agree, residents demurred or, at most, would ask a clarifying question, but then internally discounted the feedback. This finding is not new, but is concerning nonetheless. On the one hand, this may reflect positive attributes of the learner first critically appraising feedback before adopting. And some feedback is likely more a matter of style or even, at times, incorrect. The fact that learners are discounting some feedback may actually be good and certainly does not mean they are also not changing due to feedback they accept. On the other hand, this finding is concerning and represents an important threat to WBA and limit to the growth that can ensue. Some of the feedback discounted likely was correct or, even if a matter of style, still worth exploration. Further research is needed to understand what kinds of feedback are

being discounted and how that discounting process impacts growth. This raises the importance of longitudinal coaches that help the trainee learn how to self-assess, interpret performance data, and execute change plans.

Ongoing Faculty Development

While the WBA tools themselves should be developed and adapted according to validity principles, we know that validity resides “more in the users of the instrument than in the instruments that are used.” [32] Faculty possess idiosyncratic frames of reference – some are assessing their residents compared to themselves or their classmates, while others are assessing against specific competency criteria. And even if faculty are using the same frame of reference, they often utilize highly variable conceptions of the performance dimensions, that is, what constitutes competence. In addition, the narrative feedback provided by faculty can be vague [44]. This undermines the validity of the information for summative decisions and the utility of the information for growth. Faculty and resident training is essential and must address multiple skill sets:

1. Direct observation of a trainee while supporting their autonomy.
2. A shared mental model of the performance dimensions (i.e., for a given EPA or competency, what are the key components, in behavioral terms, that must occur in order to meet the standard for independent practice).
3. A shared mental model of the frame of reference (i.e., are you rating the resident compared to peers or an external standard).
4. Crafting quality narrative feedback [117, 118].
5. Feedback as a bidirectional dialogue, sometimes called “coaching in the moment,” that collaboratively constructs a shared assessment and then generates a specific plan of action with follow-up [119]. This model is a significant departure from the traditional unidirectional flow of feedback from the expert to the trainee.

To be effective, training must be frequent, multimodal, multitouch, and longitudinal and incorporate a broad range of educational strategies, including larger-scale workshops, more frequent service-specific trainings, online video modules, near peer support, and simulation with standardized learners. Residents and faculty need to be trained in how to co-produce learning and clinical care, that is, how to seek and engage with feedback in clinical contexts – a set of skills often neglected [37]. The ACGME’s Regional Faculty Development Workshops for competency-based assessment are an excellent model [120, 121]. Intensive faculty development will ensure that each data point is maximally informative to the learner – information rich, expressed in verbal and written formats, and engaged within a supervisory relationship focused on growth. Finally, residency programs should look to create longitudinal supervisory relationships in which a strong educational alliance can develop and support honest and productive growth conversations.

Learning Analytics and Data Visualization

The thoughtful implementation of WBA tools into direct observation and structured feedback programs, supported by ongoing faculty and resident training, will help to ensure that each assessment given to a trainee is maximally rich. Variance will exist. Two faculty members may rate the same resident encounter with a patient differently (inter-rater reliability). These differences can arise for multiple reasons. Each faculty member may value two different, equally important components of the task. One attending may focus on the screening for adverse effects, substance use, and suicide risk and overlook other important competencies, while the other may focus on how the trainee establishes an alliance and elicits the narrative. The variance in this case enhances the quality of the feedback. On the other hand, one faculty member may see the provision of supportive techniques during a medica-

tion visit as inappropriate while the other does not. This kind of variance may reflect contradictory notions of the task.

Thus, while some of the variance will be meaningful and important to embrace, some will also arise from bias (e.g., selective abstraction, gender, race, premature judgment, idiosyncratic beliefs). Any single assessment is limited by content specificity, that is, the fact that individual performance is context dependent (e.g., specific day, time, patient, attending, diagnosis, emotional state) [122, 123]. There are several key strategies to manage this challenge in addition to a robust program of ongoing faculty development. First, to capture a stable and trustworthy picture of a trainee’s performance, multiple data points need to be aggregated across multiple assessors and contexts [124]. The number of data points should increase with the stakes of the assessment decision [32]. Second, PsyGME needs to incorporate advanced learner analytics when aggregating data. These tools can be used to identify patterns of skew in the assessment system that may reflect unwanted bias (e.g., gender, race, rotation sequence, and assessor). The detected bias can inform faculty development and coaching efforts. In addition, the analytics can manage the bias by generating risk-adjusted performance propensity curves for each learner that account for factors such as rotation order, specific attendings assigned, year of training, race, gender [125]. Third, natural language processors (e.g., automated sentiment analysis) will soon be available to help capture themes from the large amounts of narrative data that a good enough CBA system should generate. This will be enormously helpful to coaches and CCCs alike.

Finally, the quantitative and narrative data need to be visualized in dashboards. A dashboard offers a platform for high-level data display, combined with drill-down options for more detail on quantitative and qualitative measures of learner performance. This information, combined with display of metrics indicating expected levels of performance, supports summative judgment and also enables evidence-informed feedback

discussions between residents and their faculty advisors or coaches to inform robust learning plans. With advanced learning analytics, dashboards can support both self-regulated learning and summative decisions with, for example, control charts that depict the competency acquisition trajectories for each individual trainee, including when change is meaningful versus “noise.” [96, 126] Data visualization in the form of dashboards combined with learning analytics is critical to avoid cognitive overload and support proper interpretation. Dashboard design needs to be carefully aligned with the needs of the end user. The design may be different for coaching versus CCC uses. Moreover, the needs of the end user will change and evolve; it is important to have the built-in capability to customize dashboards [125].

The most powerful use of learning analytics centers around the aggregation and analysis of large amounts of data in order to depict, perhaps via risk-adjusted performance propensity curves, where a trainee’s skill level is relative to stage of training and readiness for independent practice. These sorts of tools will empower trainees, coaches, and CCCs for both self-regulated growth and also for trustworthy promotion decisions.

Learning analytics also has tremendous possibilities for trainees who are having difficulties. For example, advanced learning analytics within a CBA system enables earlier identification and, just as importantly, provision of support to underperforming trainees [127]. In recently published data, researchers examined a longitudinal cohort of emergency medicine, family medicine, and internal medicine residents over their entire residency program [128]. The analysis showed that a Milestone rating of lower than level 2.5 at the end of the second year (of the 3-year programs) had a predictive probability of not attaining level 4 for that subcompetency ranging from 15% to 67%, depending on the program and the subcompetency. Similarly, a large internal medicine program has been able to use advanced analytics of direct observation data to identify within 6 months of beginning residency which trainees are at risk for not meeting program expectations [129]. These analytic techniques, as further developed and adopted, can improve our recogni-

tion and management of learning challenges and ultimately reduce the probability of graduates possessing key skill deficiencies.

Suffice it to say, advanced learning analytics has much to offer. This kind of sophistication, with the capability to manage skew and potential bias, aggregate and analyze large amounts of data, and deliver in formats that support summative decision-making, will be critical if we are to actualize time-variable training. If done correctly, the tools give CCCs much more confidence in making judgments about readiness for independent practice. However, even with these techniques, the quality of the output is dependent on the quality of the input. In other words, the adage “garbage, in, garbage out” still holds. To add value, analytics must be incorporated into a system of assessment that captures high quality data. Hence, the importance of the underlying program of WBA, including the tools, faculty development, and learning culture.

Longitudinal Coaching

Providing feedback, even if purely formative, is not enough to stimulate growth. Learners must review, reflect, discuss, and apply the feedback [46, 130–132]. Yet, medical students and residents typically do not engage in self-regulated learning, that is, engage in reflection and self-improvement on their own accord, a finding seen in both formative and summative assessment [112, 133]. Studies in PsyGME have had similar findings. For example, while residents in one psychiatry program uniformly appreciated the specific feedback provided to them via WBA tools, they rarely returned to the feedback after initial receipt [78, 134]. This finding is concerning and represents a significant threat to the impact on learning and, ultimately, the validity of a competency-based assessment program, if one of the primary purposes is to graduate life-long learners. It has become increasingly clear that trainees, in addition to high quality external data, need assistance with self-assessment and growth. One possible solution is to provide trainees with a coach who stands apart from the two assess-

ment processes described so far, feedback in the moment and higher stakes advancement decisions. If coaching relationships are longitudinal, there may be a better opportunity to develop the psychological safety and interpersonal comfort necessary for conversations that touch upon information that is potentially identity-threatening or inconsistent with self-assessment [46, 130].

Programs in PsyGME will need to develop and implement evidence-based coaching programs. Longitudinal coaches will be needed to be selected and trained to create a safe place in which the trainee can learn how to identify growth edges and set action plans. Such programs should be grounded in positive psychology, foster self-regulated learning [135], utilize a bidirectional, constructivist feedback model [136], and promote a growth mindset and work toward “personal best.” [137] Residents and coaches should embrace a co-production model

[46] to develop residents as learners with agency. This kind of coaching program will entail a predictable cycle of reflection and action (deliberate practice [138]).

The longitudinal coaching relationship can start after the Match or admission to the program, even prior to matriculation. The initial work should focus on benchmarking the initial skill set with respect to both clinical and self-regulated growth abilities. Benchmarking can be supported with the use of standardized patient simulations during orientation. Coaches need to continuously reorient residents and themselves to the purpose of this work, namely, to encourage and support resident well-being while they engage in iterative, vigorous clinical performance improvement. In addition, to help develop the resident’s intrinsic motivation, the coach will want to support the resident’s autonomy, competence, and self-efficacy [139, 140] (Fig. 17.5).

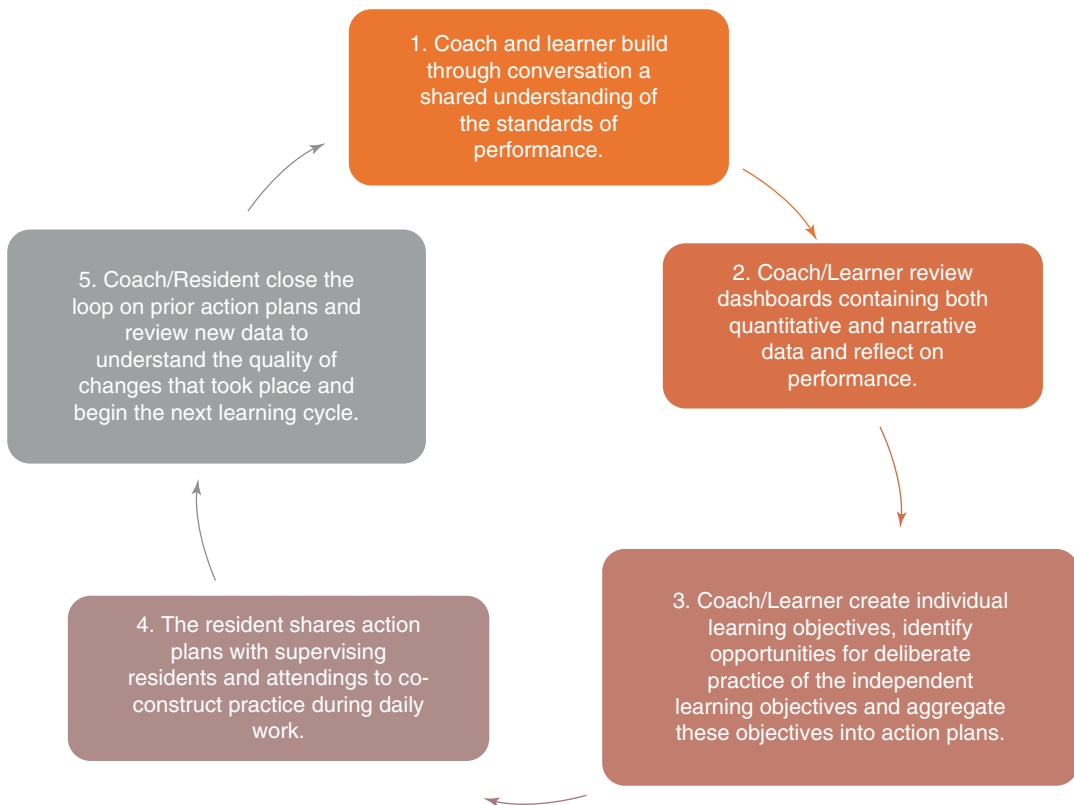


Fig. 17.5 Longitudinal coaching – key steps

Future work in PsyGME should prioritize developing model coaching programs with training materials. The potential benefits of this kind of coaching program are significant, especially if such programs are able to generate residents skilled in self-regulated learning who are, therefore, more engaged in their work and less vulnerable to burnout. Resident receptivity will be facilitated through reflection on feedback that is perceived as credible, that is, meaningful, and in the context of a longitudinal relationship so that the feedback is perceived as intended to support [108, 141]. Again, while the provision of high quality feedback data with advanced analytics is not sufficient for a CBA system, a coaching program without high quality and rigorous data will be severely limited.

Clinical Competency Committee

The Clinical Competency Committee (CCC) should have the same two purposes as the overall

CBA system: trustworthy judgments about readiness for independent practice (public accountability) and ongoing guidance to learners to support their growth (including remediation). The CCC serves these purposes through the synthesis of multiple quantitative and qualitative assessments. Figure 17.6 highlights the several aspects of a high performing CCC, including a combination of multiple assessment methods and assessors, learners as active agents and co-constructors of assessment, and the program’s accountability to the public [142].

Most CCCs fall far short of Fig. 17.6. A 2015 study of 34 program directors at five institutions discovered that most CCCs relied on global, end-of-rotation evaluations rather than using programmatic assessment with multiple tools and data points, focused on problem residents more than they spent time discussing typical residents, and lacked faculty development or training of CCC members [143].

Despite these challenges, the evidence base for CCCs is rapidly developing and provides

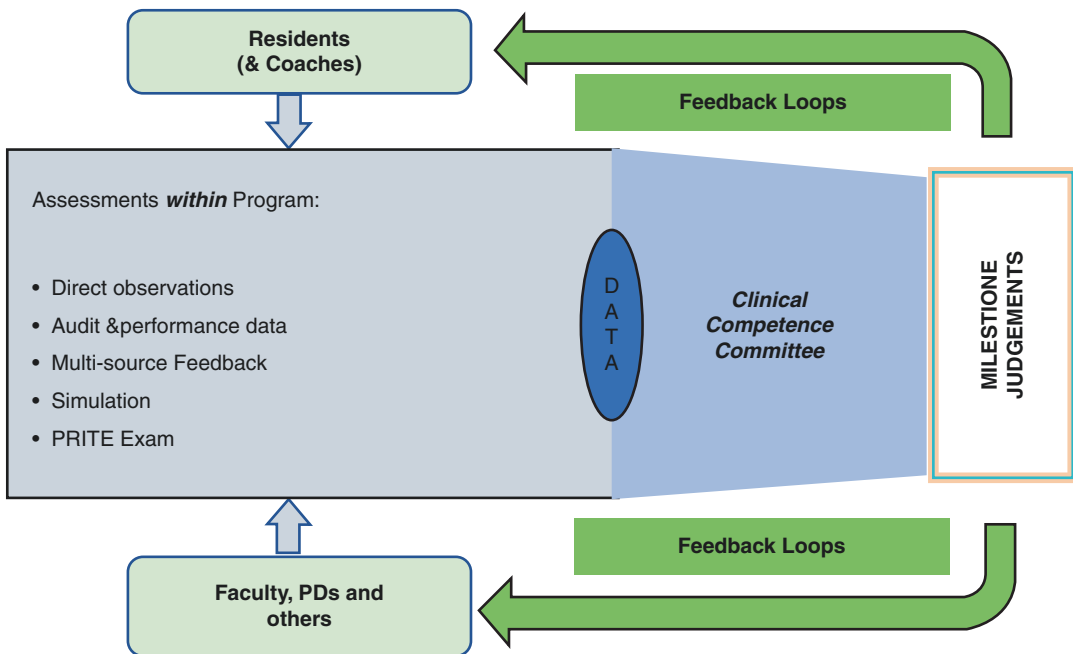


Fig. 17.6 Clinical competency committee. (Adapted from the ACGME Clinical Competency Committee Guidebook. Andolesk K, Padmore J, Hauer KE, Ekpenyong A, Edgar L, Holmboe EH. Clinical

Competency Committees: A Guidebook for Programs. Accreditation Council for Graduate Medical Education. Published 2020. Accessed 5/21/2021)

important guidance on how CCCs can better meet their mandate [142]. Figure 17.7 highlights key recommendations from this literature. One set of recommendations centers around CCC members. To improve the quality and defensibility of CCCs' judgments, CCC members should possess a growth mindset. This is critical if we are to re-balance toward formative assessment and shift the focus from "problem identification" toward a developmental approach that benefits all learners. CCC members must also possess a shared mental model of progression and what constitutes competence for each EPA or milestone. And CCC members should be diverse and trained in health equity, inclusion, and bias. Emerging data suggest that bias affects both numerical and qualitative data. Performance ratings have been shown to be systematically lower for women and underrepresented minorities [144, 145]. Narrative data have been shown to reinforce stereotypes [146]. Addressing inequities in our assessment processes is crucial.

Another set of recommendations focuses on the decision-making processes. CCC members should be trained to review the assessment data ahead of the meeting and to not come to the CCC meeting with a decision already determined. There should be a consistent and struc-

tured process. The process itself can look different depending on the program. Some CCCs assign learners to specific members and ask the latter to present a summary. Alternatively, some programs have each resident presented in a debate-like format. Mentors present the residents' accomplishments, while a second reviewer presents challenges [147]. Visual aids and dashboards can help focus the discussion and facilitate recognition of when a trainee is off-trajectory. Hierarchy can suppress dissent. CCCs should always start with the person most at risk in the hierarchical chain. Effective group process leads to better decisions than those made by individuals and to identification of problems otherwise overlooked [148]. The group process should employ other methods demonstrated to improve trustworthiness such as triangulation across multiple data points from multiple sources, management of bias, and deliberation proportional to the clarity of information. Current research is focused on best practices for CCC decision-making when lacking adequate data [149].

CCCs that utilize high quality data and deliberative processes will generate highly personalized growth plans and trustworthy summative decisions, creating the future basis for time-variable training [53, 143, 150, 151].

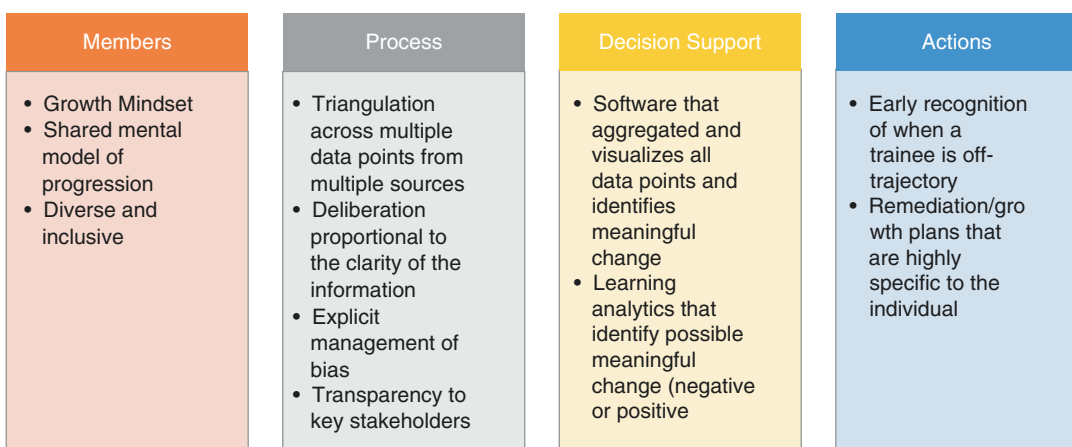


Fig. 17.7 Key features of fit-for-purpose clinical competency committees

Evaluating the CBA System

An important future question centers around how we evaluate the effectiveness of CBA systems in PsyGME, that is, how do we assess our assessment system? Such an evaluation must account for the fact that the components interact both with each other as well as with varied and unpredictable clinical and educational contexts. For interventions that occur in a complex adaptive system, implementation science frameworks that account for this complexity may be the most suitable evaluation design [152]. This kind of approach leads to evaluation at three levels: [1] individual components; [2] component interactions – how components relate to each other and the whole; and [3] overall system performance – clinical performance of the trainees and their dispositions toward growth [153]. For individual components, evaluation can focus on factors such as fidelity to the particular model of WBA, faculty development, and longitudinal coaching. Surveys, focus groups, and direct observation of processes (e.g., video/audio tape of feedback, coaching sessions, or CCCs) can assess quality against these indicators and probe barriers.

To understand how individual components interact and function together, two strategies seem relevant. First, the evaluation can focus on the experience of the end-users, that is, the trainees and the CCCs. For trainees, this might include data such as the number and quality of direct observations, completed WBAs, coaching sessions, and action plans. For CCCs, this might include data that characterize the quality and amount of information provided for their decisions. Second, implementation science frameworks such as the Consolidated Framework for Implementation Research can identify factors that influence residents' and CCCs' perceptions of credibility and utility [152].

To evaluate overall performance of the CBA system, measures should focus on the overall intended outcomes, that is, self-regulated learning and clinical competence. Toward that end, residents could complete surveys that assess dispositions toward learning and growth, including

self-regulated learning, motivation, curiosity, resilience, burnout, and aspiration for excellence. Clinical performance measures could include time to attainment of Milestone and EPA competencies; patient experience ratings; other multi-source feedback data; resident-sensitive quality measures; and post-graduation performance (fellowship Milestone data and survey data from employers).

Summary

Medical education, including PsyGME, has come under scrutiny for key deficiencies, including suboptimal patient outcomes in healthcare systems, unacceptable variability in the abilities of graduates after medical training, poor alignment between what trainees learn and the competencies required to provide safe and effective care in twenty-first century practice, and a significant gap between evidence-based instructional technique and actual practice in medical education. Recent recognition of endemic burnout as an adverse effect of our medical education programs and culture have added additional pressure for reform. At the same time, competency-based medical education, in general, and CBA, in particular, has emerged. Our medical education programs have responded with promising innovations in content, pedagogy, and culture. These changes offer hope. Yet, our ability to deliver on the promise of these innovations lies in developing CBA for PsyGME that simultaneously optimizes three goals: (1) Maximize learning through formative assessment and coaching (assessment for learning); (2) Enable robust and trustworthy high stakes decision-making (e.g., promotion or selection) through summative assessment (assessment of learning); and (3) Support ongoing improvements in the curriculum. The key to effectively doing so is designing a system of CBA with several critical components: workplace-based assessment, ongoing faculty development, learning analytics, longitudinal coaching, and fit-for-purpose clinical competency committees. Implementation will encounter significant chal-

enges; yet, the evidence base is rapidly expanding, as are practical guidebooks [154]. Successful implementation holds great promise. PsyGME will be much better positioned to promote both self-regulated growth and clinical competence and, with trustworthy and rigorous educational outcomes, to argue for increased flexibility in curricular innovation.

References

1. Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet* (London, England). 2010;376(9756):1923–58.
2. Lucey CR. Medical education: part of the problem and part of the solution. *JAMA Intern Med*. 2013;173(17):1639–43.
3. Cooke M, Irby DM, O'Brien BC. Carnegie foundation for the advancement of teaching. In: *Educating physicians : a call for reform of medical school and residency*. 1st ed. San Francisco: Jossey-Bass; 2010.
4. Eden J, Berwick DM, Wilensky GR, Institute of Medicine (U.S.). Committee on the Governance and Financing of Graduate Medical Education. *Graduate medical education that meets the nation's health needs*. Washington, D.C.: The National Academies Press; 2014.
5. Dyrbye L, Shanafelt T. A narrative review on burnout experienced by medical students and residents. *Med Educ*. 2016;50(1):132–49.
6. Dyrbye LN, West CP, Satele D, et al. Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. *Acad Med*. 2014;89(3):443–51.
7. Young JQ, Sugarman R, Schwartz J, Thakker K, O'Sullivan PS. Exploring residents' experience of career development scholarship tracks: a qualitative case study using social cognitive career theory. *Teach Learn Med*. 2020. <https://doi.org/10.1080/10401334.10402020.11751637>. Online ahead of print .
8. Corgan S, Ford Winkel A, Sugarman R, Young JQ. From burnout to wholehearted engagement: a qualitative exploration of psychiatry residents' experience of stress. *Acad Med*. 2021;96(5):709–17.
9. Young JQ, Schwartz J, Thakker K, O'Sullivan PS, Sugarman R. Where passion meets need: a longitudinal, self-directed program to help residents discover meaning and develop as scholars. *Acad Psychiatry*. 2020;44(4):455–60.
10. Osseo-Asare A, Balasuriya L, Huot SJ, et al. Minority resident physicians' views on the role of race/ethnicity in their training experiences in the workplace. *JAMA Netw Open*. 2018;1(5):e182723.
11. Thibault GE. Reforming health professions education will require culture change and closer ties between classroom and practice. *Health Affairs (Project Hope)*. 2013;32(11):1928–32.
12. Skochelak SE. A decade of reports calling for change in medical education: what do they say? *Acad Med*. 2010;85(9 Suppl):S26–33.
13. Carraccio C, Wolfsthal SD, Englander R, Ferentz K, Martin C. Shifting paradigms: from Flexner to competencies. *Acad Med*. 2002;77(5):361–7.
14. Leach DC. A model for GME: shifting from process to outcomes. A progress report from the accreditation council for graduate medical education. *Med Educ*. 2004;38(1):12–4.
15. Frank JR, Snell LS, Cate OT, et al. Competency-based medical education: theory to practice. *Med Teach*. 2010;32(8):638–45.
16. Nasca TJ, Philibert I, Brigham T, Flynn TC. The next GME accreditation system—rationale and benefits. *N Engl J Med*. 2012;366(11):1051–6.
17. Frank JR, Danoff D. The CanMEDS initiative: implementing an outcomes-based framework of physician competencies. *Med Teach*. 2007;29(7):642–7.
18. Frank JR, Mungroo R, Ahmad Y, Wang M, De Rossi S, Horsley T. Toward a definition of competency-based education in medicine: a systematic review of published definitions. *Med Teach*. 2010;32(8):631–7.
19. Dauphinee WD. Building a core competency assessment program for all stakeholders: the design and building of sailing ships can inform core competency frameworks. *Adv Health Sci Educ Theory Pract*. 2020;25(1):189–93.
20. Arbuckle MR, Weinberg M, Cabaniss DL, et al. Training psychiatry residents in quality improvement: an integrated, year-long curriculum. *Acad Psychiatry*. 2013;37(1):42–5.
21. Arbuckle MR, Travis MJ, Eisen J, et al. Transforming psychiatry from the classroom to the clinic: lessons from the National Neuroscience Curriculum Initiative. *Acad Psychiatry*. 2020;44(1):29–36.
22. Patel E, Muthusamy V, Young JQ. Delivering on the promise of CLER: a patient safety rotation that aligns resident education with hospital processes. *Acad Med*. 2018;93(6):898–903.
23. Sunderji N, Ion A, Huynh D, Benassi P, Ghavam-Rassoul A, Carvalhal A. Advancing integrated care through psychiatric workforce development: a systematic review of educational interventions to train psychiatrists in integrated care. *Can J Psychiatr*. 2018;63(8):513–25.
24. Crawford A, Sunderji N, Lopez J, Soklaridis S. Defining competencies for the practice of telepsychiatry through an assessment of resident learning needs. *BMC Med Educ*. 2016;16:28.
25. Hilty D, Chan S, Torous J, Luo J, Boland R. A framework for competencies for the use of mobile technologies in psychiatry and medicine: scoping review. *JMIR Mhealth Uhealth*. 2020;8(2):e12229.

26. Shanafelt TD, Dyrbye LN, West CP. Addressing physician burnout: the way forward. *JAMA*. 2017;317(9):901–2.
27. Goldman ML, Bernstein CA, Konopasek L, Arbuckle M, Mayer LES. An intervention framework for institutions to meet new ACGME common program requirements for physician well-being. *Acad Psychiatry*. 2018;42(4):542–7.
28. McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. *N Engl J Med*. 2003;348(26):2635–45.
29. Morris ZS, Wooding S, Grant J. The answer is 17 years, what is the question: understanding time lags in translational research. *J R Soc Med*. 2011;104(12):510–20.
30. Institute of Medicine. Crossing the quality chasm : a new health system for the 21st century. Washington, D.C.: National Academy Press; 2001.
31. Niven DJ, Rubenfeld GD, Kramer AA, Stelfox HT. Effect of published scientific evidence on glycaemic control in adult intensive care units. *JAMA Intern Med*. 2015;175(5):801–9.
32. van der Vleuten CP, Schuwirth LW, Driessen EW, et al. A model for programmatic assessment fit for purpose. *Med Teach*. 2012;34(3):205–14.
33. ten Cate O, Scheele F. Competency-based postgraduate training: can we bridge the gap between theory and clinical practice? *Acad Med*. 2007;82(6):542–7.
34. Malone K, Supri S. A critical time for medical education: the perils of competence-based reform of the curriculum. *Adv Health Sci Educ Theory Pract*. 2012;17(2):241–6.
35. Halman S, Dudek N, Wood T, et al. Direct observation of clinical skills feedback scale: development and validity evidence. *Teach Learn Med*. 2016;28(4):385–94.
36. Miller A, Archer J. Impact of workplace based assessment on doctors' education and performance: a systematic review. *BMJ*. 2010;341:c5064.
37. Schuwirth LW, Van der Vleuten CP. Programmatic assessment: from assessment of learning to assessment for learning. *Med Teach*. 2011;33(6):478–85.
38. Al-Eraky M, Marei H. A fresh look at Miller's pyramid: assessment at the 'Is' and 'Do' levels. *Med Educ*. 2016;50(12):1253–7.
39. Norcini J, Anderson MB, Bollela V, et al. Consensus framework for good assessment. *Med Teach*. 2018;2018:1–8.
40. Crossley J, Johnson G, Booth J, Wade W. Good questions, good answers: construct alignment improves the performance of workplace-based assessment scales. *Med Educ*. 2011;45(6):560–9.
41. Ginsburg S, van der Vleuten CPM, Eva KW. The hidden value of narrative comments for assessment: a quantitative reliability analysis of qualitative data. *Acad Med*. 2017;92(11):1617–21.
42. Ginsburg S, Regehr G, Lingard L, Eva KW. Reading between the lines: faculty interpretations of narrative evaluation comments. *Med Educ*. 2015;49(3):296–306.
43. Ginsburg S, Eva K, Regehr G. Do in-training evaluation reports deserve their bad reputations? A study of the reliability and predictive ability of ITER scores and narrative comments. *Acad Med*. 2013;88(10):1539–44.
44. Ginsburg S, van der Vleuten CP, Eva KW, Lingard L. Cracking the code: residents' interpretations of written assessment comments. *Med Educ*. 2017;51(4):401–10.
45. Dudek NL, Marks MB, Wood TJ, Lee AC. Assessing the quality of supervisors' completed clinical evaluation reports. *Med Educ*. 2008;42(8):816–22.
46. Holmboe ES. Work-based assessment and co-production in postgraduate medical training. *GMS J Med Educ*. 2017;34(5):Doc58.
47. Ten Cate TJ, Kusrakar RA, Williams GC. How self-determination theory can assist our understanding of the teaching and learning processes in medical education. *AMEE guide no. 59*. *Med Teach*. 2011;33(12):961–73.
48. Sandars J, Cleary TJ. Self-regulation theory: applications to medical education: *AMEE guide no. 58*. *Med Teach*. 2011;33(11):875–86.
49. Sargeant J, Mann K, van der Vleuten C, Metsemakers J. "Directed" self-assessment: practice and feedback within a social context. *J Contin Educ Heal Prof*. 2008;28(1):47–54.
50. Konings KD, van Berlo J, Koopmans R, et al. Using a smartphone app and coaching group sessions to promote residents' reflection in the workplace. *Acad Med*. 2016;91(3):365–70. <https://doi.org/10.1097/ACM.0000000000000989>.
51. LaDonna KA, Ginsburg S, Watling C. "Rising to the level of your incompetence": what physicians' self-assessment of their performance reveals about the imposter syndrome in medicine. *Acad Med*. 2018;93(5):763–8.
52. Schuwirth LW, van der Vleuten CP. Programmatic assessment and Kane's validity perspective. *Med Educ*. 2012;46(1):38–48.
53. Van Der Vleuten CPM, Schuwirth LWT, Driessen EW, Govaerts MJB, Heeneman S. Twelve tips for programmatic assessment. *Med Teach*. 2015;37(7):641–6.
54. Ten Cate O. Competency-based education, entrustable professional activities, and the power of language. *J Grad Med Educ*. 2013;5(1):6–7.
55. Ten Cate O, Chen HC, Hoff RG, Peters H, Bok H, van der Schaaf M. Curriculum development for the workplace using Entrustable Professional Activities (EPAs): *AMEE guide no. 99*. *Med Teach*. 2015;37(11):983–1002.
56. Dagnone D, Stockley D, Flynn L, et al. Delivering on the promise of competency based medical education - an institutional approach. *Can Med Educ J*. 2019;10(1):e28–38.
57. Macaluso M, Kinzie M, Cowley D, et al. The psychiatry milestones 2.0: how did we get from 1.0 to 2.0 and what can users expect? *Acad Psychiatry*. 2020;44(6):779–84.

58. Thomas CR, Keepers G. The milestones for general psychiatry residency training. *Acad Psychiatry*. 2014;38(3):255–60.
59. Leipzig RM, Sauvigne K, Granville LJ, et al. What is a geriatrician? American Geriatrics Society and Association of Directors of Geriatric Academic Programs end-of-training entrustable professional activities for geriatric medicine. *J Am Geriatr Soc*. 2014;62(5):924–9.
60. Wisman-Zwarter N, van der Schaaf M, Ten Cate O, Jonker G, van Klei WA, Hoff RG. Transforming the learning outcomes of anaesthesiology training into entrustable professional activities: a Delphi study. *Eur J Anaesthesiol*. 2016;33(8):559–67.
61. Brown CR Jr, Criscione-Schreiber L, O'Rourke KS, et al. What is a rheumatologist and how do we make one? *Arthritis Care Res*. 2016;68(8):1166–72.
62. Rose S, Fix OK, Shah BJ, et al. Entrustable professional activities for gastroenterology fellowship training. *Gastrointest Endosc*. 2014;80(1):16–27.
63. Weiss A, Ozdoba A, Carroll V, DeJesus F. Entrustable professional activities: enhancing meaningful use of evaluations and milestones in a psychiatry residency program. *Acad Psychiatry*. 2016;40(5):850–4.
64. Boyce P, Spratt C, Davies M, McEvoy P. Using entrustable professional activities to guide curriculum development in psychiatry training. *BMC Med Educ*. 2011;11:96.
65. RANZCP. The Royal Australian & New Zealand College of Psychiatrists. EPA Handbook. <https://www.ranzcp.org/Files/PreFellowship/2012-Fellowship-Program/EPA-forms/EPA-handbook.aspx>. Accessed 22 Jan 2017.
66. Young JQ, Hasser C, Hung EK, et al. Developing end-of-training entrustable professional activities for psychiatry: results and methodological lessons. *Acad Med*. 2018;93(7):1048–54.
67. Pinilla S, Lenouvel E, Strik W, Kloppel S, Nissen C, Huwendiek S. Entrustable professional activities in psychiatry: a systematic review. *Acad Psychiatry*. 2020;44(1):37–45.
68. Hung EK, Jibson M, Sadhu J, et al. Wrestling with Implementation: a step-by-step guide to implementing Entrustable Professional Activities (EPAs) in psychiatry residency programs. *Acad Psychiatry*. 2021;45(2):210–16. <https://doi.org/10.1007/s40596-020-01341-7>.
69. Norcini J, Burch V. Workplace-based assessment as an educational tool: AMEE guide no. 31. *Med Teach*. 2007;29(9):855–71.
70. Downing SM. Validity: on meaningful interpretation of assessment data. *Med Educ*. 2003;37(9):830–7.
71. Lockyer JM, Sargeant J, Richards SH, Campbell JL, Rivera LA. Multisource feedback and narrative comments: polarity, specificity, actionability, and CanMEDS roles. *J Contin Educ Heal Prof*. 2018;38(1):32–40.
72. Norcini J, Anderson B, Bollela V, et al. Criteria for good assessment: consensus statement and recommendations from the Ottawa 2010 conference. *Med Teach*. 2011;33(3):206–14.
73. Grujich NN, Razmy A, Zaretsky A, Styra RG, Sockalingam S. Evaluation of professional role competency during psychiatry residency. *Acad Psychiatry*. 2012;36(2):126–8.
74. Violato C, Lockyer JM, Fidler H. Assessment of psychiatrists in practice through multisource feedback. *Can J Psychiatr*. 2008;53(8):525–33.
75. Vesel TP, O'Brien BC, Henry DM, van Schaik SM. Useful but different: resident physician perceptions of Interprofessional feedback. *Teach Learn Med*. 2016;28(2):125–34.
76. Philibert I. Using chart review and chart-stimulated recall for resident assessment. *J Grad Med Educ*. 2018;10(1):95–6.
77. Young JQ, Lieu S, O'Sullivan P, Tong L. Development and initial testing of a structured clinical observation tool to assess pharmacotherapy competence. *Acad Psychiatry*. 2011;35(1):27–34.
78. Young JQ, Sugarman R, Schwartz J, O'Sullivan PS. Faculty and Resident Engagement With a Workplace-Based Assessment Tool: Use of Implementation Science to Explore Enablers and Barriers. *Acad Med*. 2020;95(12):1937–44.
79. Young JQ, Irby DM, Kusz M, O'Sullivan PS. Performance assessment of pharmacotherapy: results from a content validity survey of the Psychopharmacotherapy-Structured Clinical Observation (P-SCO) tool. *Acad Psychiatry*. 2018;42(6):765–72.
80. Young JQ, Rasul R, O'Sullivan PS. Evidence for the validity of the psychopharmacotherapy-structured clinical observation tool: results of a factor and time series analysis. *Acad Psychiatry*. 2018;42(6):759–64.
81. Young JQ, Sugarman R, Holmboe E, O'Sullivan PS. Advancing our understanding of narrative comments generated by direct observation tools: lessons from the psychopharmacotherapy-structured clinical observation. *J Grad Med Educ*. 2019;11(5):570–9.
82. Jibson MD, Broquet KE, Anzia JM, et al. Clinical skills verification in general psychiatry: recommendations of the ABPN task force on rater training. *Acad Psychiatry*. 2012;36(5):363–8.
83. Young JQ, McClure M. Fast, Easy, and Good: Assessing Entrustable Professional Activities in Psychiatry Residents With a Mobile App. *Acad Med*. 2020;95(10):1546–9.
84. O'Sullivan PS, Reckase MD, McClain T, Savidge MA, Clardy JA. Demonstration of portfolios to assess competency of residents. *Adv Health Sci Educ Theory Pract*. 2004;9(4):309–23.
85. Sockalingam S, Stergiopoulos V, Maggi JD, Zaretsky A, Stovel L, Hodges B. Evaluating psychiatry residents as physician-managers: development of an assessment tool. *Acad Psychiatry*. 2013;37(1):11–7.
86. Schumacher DJ, Holmboe E, Carraccio C, et al. Resident-Sensitive Quality Measures in the Pediatric Emergency Department: Exploring Relationships With Supervisor Entrustment and Patient Acuity and Complexity. *Acad Med*. 2020;95(8):1256–64.

87. Schumacher DJ, Holmboe ES, van der Vleuten C, Busari JO, Carraccio C. Developing resident-sensitive quality measures: a model from pediatric emergency medicine. *Acad Med.* 2018;93(7):1071–8.
88. Schumacher DJ, Martini A, Holmboe E, et al. Initial Implementation of Resident-Sensitive Quality Measures in the Pediatric Emergency Department: A Wide Range of Performance. *Acad Med.* 2020;95(8):1248–55.
89. Davis J, Roach C, Elliott C, Mardis M, Justice EM, Riesenber LA. Feedback and assessment tools for handoffs: a systematic review. *J Grad Med Educ.* 2017;9(1):18–32.
90. ten Cate O, Durning SJ. Approaches to assessing the clinical reasoning of preclinical students. In: ten Cate O, Custers E, Durning SJ, editors. *Principles and practice of case-based clinical reasoning education: a method for preclinical students.* Cham: Springer. Copyright 2018, The Author(s). 2018:65–72.
91. Cook RJ, Durning SJ. Clinical process modeling: an approach for enhancing the assessment of physicians' clinical reasoning. *Acad Med.* 2019;94(9):1317–22.
92. Sargeant J, Armson H, Chesluk B, et al. The processes and dimensions of informed self-assessment: a conceptual model. *Acad Med.* 2010;85(7):1212–20.
93. Tavares W, Ginsburg S, Eva KW. Selecting and simplifying: rater performance and behavior when considering multiple competencies. *Teach Learn Med.* 2016;28(1):41–51.
94. Lefebvre C, Hiestand B, Glass C, et al. Examining the effects of narrative commentary on evaluators' summative assessments of resident performance. *Eval Health Prof.* 2020;43:159. <https://doi.org/10.1177/0163278718820415>.
95. Young JQ, Sugarman R, Schwartz J, McClure M, O'Sullivan PS. A mobile app to capture EPA assessment data: utilizing the consolidated framework for implementation research to identify enablers and barriers to engagement. *Perspect Med Edu.* 2020;
96. Warm EJ, Held JD, Hellmann M, et al. Entrusting observable practice activities and milestones over the 36 months of an internal medicine residency. *Acad Med.* 2016;91(10):1398–405.
97. Saleem JJ, Herout J, Wilck NR. Function-specific design principles for the electronic health record. *Proc Human Factors Ergonom Soc Ann Meet.* 2016;60(1):578–82.
98. Mayer RE, Moreno R. Nine ways to reduce cognitive load in multimedia learning. *Educ Psychol.* 2003;38(1):43–52.
99. Massie J, Ali JM. Workplace-based assessment: a review of user perceptions and strategies to address the identified shortcomings. *Adv Health Sci Educ Theory Pract.* 2016;21(2):455–73.
100. Cheung WJ, Patey AM, Frank JR, Mackay M, Boet S. Barriers and enablers to direct observation of trainees' clinical performance: a qualitative study using the theoretical domains framework. *Acad Med.* 2019;94(1):101–14.
101. Holmboe E, Ginsburg S, Bernabeo E. The rotational approach to medical education: time to confront our assumptions? *Med Educ.* 2011;45(1):69–80.
102. Ramani S, Konings KD, Ginsburg S, van der Vleuten CPM. Twelve tips to promote a feedback culture with a growth mind-set: swinging the feedback pendulum from recipes to relationships. *Med Teach.* 2019;41(6):625–31.
103. Ramani S, Post SE, Konings K, Mann K, Katz JT, van der Vleuten C. "It's just not the culture": a qualitative study exploring residents' perceptions of the impact of institutional culture on feedback. *Teach Learn Med.* 2017;29(2):153–61.
104. Telio S, Ajjawi R, Regehr G. The "educational alliance" as a framework for reconceptualizing feedback in medical education. *Acad Med.* 2015;90(5):609–14.
105. Voyer S, Cuncic C, Butler DL, MacNeil K, Watling C, Hatala R. Investigating conditions for meaningful feedback in the context of an evidence-based feedback programme. *Med Educ.* 2016;50(9):943–54.
106. Sukhera J, Wodzinski M, Milne A, Teunissen PW, Lingard L, Watling C. Implicit bias and the feedback paradox: exploring how health professionals engage with feedback while questioning its credibility. *Acad Med.* 2019;94(8):1204–10.
107. Watling C, Driessen E, van der Vleuten CP, Lingard L. Learning from clinical work: the roles of learning cues and credibility judgements. *Med Educ.* 2012;46(2):192–200.
108. Telio S, Regehr G, Ajjawi R. Feedback and the educational alliance: examining credibility judgements and their consequences. *Med Educ.* 2016;50(9):933–42.
109. Bok HG, Teunissen PW, Favier RP, et al. Programmatic assessment of competency-based workplace learning: when theory meets practice. *BMC Med Educ.* 2013;13:123.
110. Harrison C, Wass V. The challenge of changing to an assessment for learning culture. *Med Educ.* 2016;50(7):704–6.
111. Harrison CJ, Konings KD, Schuwirth LWT, Wass V, van der Vleuten CPM. Changing the culture of assessment: the dominance of the summative assessment paradigm. *BMC Med Educ.* 2017;17(1):73.
112. Watling C, LaDonna KA, Lingard L, Voyer S, Hatala R. 'Sometimes the work just needs to be done': socio-cultural influences on direct observation in medical training. *Med Educ.* 2016;50(10):1054–64.
113. LaDonna KA, Hatala R, Lingard L, Voyer S, Watling C. Staging a performance: learners' perceptions about direct observation during residency. *Med Educ.* 2017;51(5):498–510.
114. Kogan JR, Hatala R, Hauer KE, Holmboe E. Guidelines: the do's, don'ts and don't knows of direct observation of clinical skills in medical education. *Perspect Med Educ.* 2017;6(5):286–305.
115. Lorwald AC, Lahner FM, Greif R, Berendonk C, Norcini J, Huwendiek S. Factors influencing the educational impact of mini-CEX and DOPS:

- a qualitative synthesis. *Med Teach*. 2018;40(4):414–20.
116. Young JQ, Sugarman R, Schwartz J, O'Sullivan PS. Overcoming the challenges of direct observation and feedback programs: a qualitative exploration of resident and faculty experiences. *Teach Learn Med*. 2020;32(5):541–51. <https://doi.org/10.1080/10401334.2020.1767107>.
 117. Kogan JR, Conforti LN, Bernabeo E, Iobst W, Holmboe E. How faculty members experience workplace-based assessment rater training: a qualitative study. *Med Educ*. 2015;49(7):692–708.
 118. van de Ridder JM, McGaghie WC, Stokking KM, ten Cate OT. Variables that affect the process and outcome of feedback, relevant for medical training: a meta-review. *Med Educ*. 2015;49(7):658–73.
 119. Sargeant J, Lockyer JM, Mann K, et al. The R2C2 model in residency education: how does it Foster coaching and promote feedback use? *Acad Med*. 2018;93(7):1055–63.
 120. Holmboe EH. Developing Faculty Competencies in Assessment. <https://www.acgme.org/Meetings-and-Educational-Activities/Other-Educational-Activities/Courses-and-Workshops/Developing-Faculty-Competencies-in-Assessment>. Accessed 20 May 2020.
 121. Iobst WI, Holmboe ES. Programmatic assessment: the secret sauce of effective CBME implementation. *J Graduate Med Educ*. In Press.
 122. Eva KW. On the generality of specificity. *Med Educ*. 2003;37(7):587–8.
 123. van der Vleuten CP, Schuwirth LW. Assessing professional competence: from methods to programmes. *Med Educ*. 2005;39(3):309–17.
 124. Eva KW, Bordage G, Campbell C, et al. Towards a program of assessment for health professionals: from training into practice. *Adv Health Sci Educ Theory Pract*. 2016;21(4):897–913.
 125. Thoma B, Bandi V, Carey R, et al. Developing a dashboard to meet competence committee needs: a design-based research project. *Can Med Educ J*. 2020;11(1):e16–34.
 126. Warm EJ, Kinnear B, Kelleher M, Sall D, Holmboe E. Transforming resident assessment: an analysis using deming's system of profound knowledge. *Acad Med*. 2018.
 127. Ross S, Binczyk NM, Hamza DM, et al. Association of a competency-based assessment system with identification of and support for medical residents in difficulty. *JAMA Netw Open*. 2018;1(7):e184581.
 128. Holmboe ES, Yamazaki K, Nasca TJ, Hamstra SJ. Using longitudinal milestones data and learning analytics to facilitate the professional development of residents: early lessons from three specialties. *Acad Med*. 2020;95(1):97–103.
 129. Kelleher M, Kinnear B, Sall DR, et al. Warnings in early narrative assessment that might predict performance in residency: signal from an internal medicine residency program. *Perspect Med Educ*. 2021;
 130. Govaerts M. Workplace-based assessment and assessment for learning: threats to validity. *J Grad Med Educ*. 2015;7(2):265–7.
 131. Watling CJ, Kenyon CF, Zibrowski EM, et al. Rules of engagement: residents' perceptions of the in-training evaluation process. *Acad Med*. 2008;83(10 Suppl):S97–100.
 132. Nicol DJ, Macfarlane-Dick D. Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Stud High Educ*. 2006;31(2):199–218.
 133. Harrison CJ, Konings KD, Molyneux A, Schuwirth LW, Wass V, van der Vleuten CP. Web-based feedback after summative assessment: how do students engage? *Med Educ*. 2013;47(7):734–44.
 134. Young JQ, Sugarman R, Schwartz J, McClure M, O'Sullivan P. A mobile app to capture EPA assessment data: utilizing the consolidated framework for implementation research to identify enablers and barriers to engagement. *Perspect Med Educ*. In Press.
 135. White CB, Gruppen LD, Fantone JC. Self-regulated learning in medical education. In: Swanwick T, ed. *Understanding Medical Education*. 2013:201–11.
 136. Sargeant J, Lockyer J, Mann K, et al. Facilitated reflective performance feedback: developing an evidence- and theory-based model that builds relationship, explores reactions and content, and coaches for performance change (R2C2). *Acad Med*. 2015;90(12):1698–706.
 137. Gawande A. Personal best. Top athletes and singers have coaches. Should you? In: *The New Yorker*. New York; 2011.
 138. Ericsson KA. Acquisition and maintenance of medical expertise: a perspective from the expert-performance approach with deliberate practice. *Acad Med*. 2015;90(11):1471–86.
 139. Palamara K, Kauffman C, Stone VE, Bazari H, Donelan K. Promoting success: a professional development coaching program for interns in medicine. *J Grad Med Educ*. 2015;7(4):630–7.
 140. Parks K, Miller J, Westcott A. Coaching in graduate medical education. In: *Coaching in medical education: a faculty handbook*. American Medical Association. 2017. pp. 50–53.
 141. Sargeant J, Eva KW, Armson H, et al. Features of assessment learners use to make informed self-assessments of clinical performance. *Med Educ*. 2011;45(6):636–47.
 142. Andolsek K, Padmore J, Hauer KE, Ekpenyong A, Edgar L, Holmboe EH. Clinical competency committees: a guidebook for programs. accreditation council for graduate medical education. [file:///C:/Users/jyoung9/OneDrive%20-%20Northwell%20Health/Academic/Presentations%20and%20Publications/Psychiatric%20Clinics/System%20Article/ACGME-ClinicalCompetencyCommitteeGuidebook%20\(1\).pdf](file:///C:/Users/jyoung9/OneDrive%20-%20Northwell%20Health/Academic/Presentations%20and%20Publications/Psychiatric%20Clinics/System%20Article/ACGME-ClinicalCompetencyCommitteeGuidebook%20(1).pdf). Published 2020. Accessed 20 May 2020.
 143. Hauer KE, Chesluk B, Iobst W, et al. Reviewing residents' competence: a qualitative study of the role of clinical competency committees in performance assessment. *Acad Med*. 2015;90(8):1084–92.

144. Teherani A, Hauer KE, Fernandez A, King TEJ, Lucey C. How small differences in assessed clinical performance amplify to large differences in grades and awards: a Cascade with serious consequences for students underrepresented in medicine. *Acad Med.* 2018;93(9):1286–92.
145. Klein R, Julian KA, Snyder ED, et al. Gender bias in resident assessment in graduate medical education: review of the literature. *J Gen Intern Med.* 2019;34(5):712–9.
146. Rojek AE, Khanna R, Yim JWL, et al. Differences in narrative language in evaluations of medical students by gender and under-represented minority status. *J Gen Intern Med.* 2019;34(5):684–91.
147. Donato AA, Alweis R, Wenderoth S. Design of a clinical competency committee to maximize formative feedback. *J Commun Hosp Intern Med Perspect.* 2016;6(6):33533.
148. Schwind CJ, Williams RG, Boehler ML, Dunnington GL. Do individual attendings' post-rotation performance ratings detect residents' clinical performance deficiencies? *Acad Med.* 2004;79(5):453–7.
149. Pack R, Lingard L, Watling CJ, Chahine S, Cristancho SM. Some assembly required: tracing the interpretative work of clinical competency committees. *Med Educ.* 2019;53(7):723–34.
150. Hauer KE, Cate OT, Boscardin CK, et al. Ensuring resident competence: a narrative review of the literature on group decision making to inform the work of clinical competency committees. *J Grad Med Educ.* 2016;8(2):156–64.
151. Kinnear B, Warm EJ, Hauer KE. Twelve tips to maximize the value of a clinical competency committee in postgraduate medical education. *Med Teach.* 2018;40(11):1110–5.
152. Birken SA, Powell BJ, Presseau J, et al. Combined use of the Consolidated Framework for Implementation Research (CFIR) and the Theoretical Domains Framework (TDF): a systematic review. *Implement Sci.* 2017;12(1):2.
153. Bowe CM, Armstrong E. Assessment for systems learning: a holistic assessment framework to support decision making across the medical education continuum. *Acad Med.* 2017;92(5):585–92.
154. Warm EJ, Edgar L, Kelleher M, et al. A guidebook for Implementating and changing assessment in the milestone era. Accreditation Council for Graduate Medical Education. <https://www.acgme.org/Portals/0/Milestones%20Implementation%202020.pdf?ver=2020-05-11-165927-097>. Published 2020. Accessed.
155. Young JQ, Frank JR, Holmboe ES. Advancing workplace-based assessment in psychiatric education: key design and implementation issues. *Psychiatr Clin North Am.* 2021;44(2):317–32.



Managing Resident and Faculty Performance Issues

18

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Introduction

Performance management of employees is a core function in most organizations and has been defined as “a continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goals of the organization.” [1] The origins of performance management, as known today, can be traced back over a century to World War I, when it was developed with the goal of identifying poor performers for termination or transfer in the military [2]. This approach may sound familiar to physicians who experienced the pyramidal system during their medical education; an anxiety-provoking process by which residents were cut from their training programs based on performance [3]. Like medicine, companies also started adapting performance management practices and aligned advancement opportunities based on achievement [2]. However, current approaches to performance management are less

one-sided toward the company or institution and instead focus largely on the development of individuals [2, 4].

More than a third of U.S. companies (e.g., Dell, General Motors, Accenture, OppenheimerFunds, Gap) have replaced traditional performance review processes with frequent informal feedback sessions based on individual goals created by employees [2]. An employee survey at Deloitte revealed that over half of their employees questioned whether performance reviews actually related to their work engagement or performance [5], calling into question the perceived value of annual reviews compared to real-time feedback sessions based on measurable outcomes. It is important to recognize that the concept of performance appraisals, or the annual employment review of individual strengths and weaknesses, is separate from well-designed performance management systems, which focus on growth and development [6].

Organizational research links performance management with employee engagement [7], a new concept that is gaining momentum both in research and practice. Employee engagement comprises job satisfaction, involvement, commitment, and empowerment [8]. Meta-analysis identifies employee engagement as a driver for business-level outcomes, including customer satisfaction, productivity, profit, employee turnover, and safety incidents [9]. Therefore, the connection between developmental approaches and

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performance management is not only beneficial to strengthening the relationship between employees and supervisors but also extends to key organizational outcomes [7].

Practically, measurement of individual behaviors, feedback by direct supervisors, and emphasis on workplace behaviors over results are three recommended steps in current performance management practices [4]. Leaders should also aim to allocate rewards that are meaningful to recipients and align those rewards with desired behaviors [4]. However, gaps remain between what is advised through organizational research and what occurs in practice. In a 2017 study, human resources executives across industries shared that with the alignment of competency models (i.e., the identification of knowledge, skills, abilities, and other characteristics related to a job), the actual measurement of those competencies on the job is limited [10]. In addition, while the value of 360-degree feedback systems (where employees receive feedback from individuals who are not their supervisor) is evident, less than a quarter of organizations utilized them in practice [10]. Issues related to performance management are not unique to medicine; they exist across industries, further demonstrating the need for guidance on how to design effective systems that align organizational and individual goals, competencies, measurement, feedback, and management.

Until recently, academic medicine grappled practically with the concept of competencies and the measurement of behaviors associated with the practice of medicine [11]. Global competencies are present in both undergraduate and graduate medical education. However, the connection between competencies for specific specialties or related to specific tasks lacks depth in medicine when it comes to evaluating individual performance. The push for assessment of entrustable professional activities (EPAs) and milestones has done a great deal in highlighting the need for competency-based measurement at a program-level [12], but the quality and accuracy of feedback associated with such developmental data is still lacking when it comes to practical use of these assessment tools [13, 14]. As residents transition into faculty roles, performance metrics

begin to focus more on healthcare outcomes. Patient-oriented and clinical data often drive performance management processes for clinical faculty [15], with limited focus on measurement of teaching competencies and a lack of meaningful rewards for those who excel at teaching and supervision of trainees [16].

Academic medicine also has a unique organizational structure that divides itself by specialty-based clinical departments. Workplace processes for non-healthcare employees are often standardized unlike the performance management of physicians and house staff, which tends to be less centralized in human resources and more often handled internally within departments. While decentralization of performance management allows flexibility to departmental leaders, it also requires internal development of data systems and processes. The aim of this chapter is to guide program directors and educational leadership on performance management of trainees and supervising faculty. We outline key components of performance management, specifically: evaluation methods, sources of data, assessments, intervention strategies, and outcomes.

Resident Performance Issues

In this section, we will explore issues related to resident performance. We will consider the role of program leaders in the identification and assessment of performance issues, communication with residents regarding their performance, development of appropriate interventions to improve performance, and potential outcomes. Resident performance issues can manifest in four main areas: (1) problematic behaviors related to professionalism, (2) resident impairment, (3) knowledge deficits, and (4) deficits of specific skills. Although we don't have data specific to psychiatry residents, it is estimated that 9–12% of residents across specialties struggle with performance during their training [17].

To set the stage for this chapter, we summarize the overall steps in managing resident performance issues in Table 18.1. These steps will be explained in detail in this chapter.

Table 18.1 Overall steps in managing resident performance issues

| | |
|------------------------------------|--|
| 1. Awareness of performance issues | An issue with resident performance is brought to the program director's awareness through formal evaluation or informal feedback mechanisms. |
| 2. Triage | The program director (PD) will evaluate the gravity of the situation and determine any needs for immediate action. |
| 3. Investigation | The program leader will gather data related to the resident's performance from a variety of perspectives, ideally face-to-face and with the goal of collaboration to support resident growth and professional development. Following a verbal discussion, the faculty and/or PD should summarize the discussion in writing (e.g., e-mail). Investigation should include consideration of factors that may influence resident performance and evaluation of resident performance by others. Using the information gathered, program leaders will synthesize the information and identify the primary performance issues using the ACGME Milestones. |
| 4. Intervention | The first option is generally an informal conversation with the resident or an informal remediation plan. This may include a meeting between (1) the resident and faculty member, (2) the resident and PD, or (3) the resident, faculty member, and PD. An informal improvement plan involves a discussion about the concerns, specific expectations, a timeline for improvement, and regularly scheduled meetings with the faculty and/or PD. Resident deficiencies and their ability to improve them should be documented in monthly evaluations and clearly communicated to the resident. If the resident does not satisfactorily complete the informal improvement plan, then the Clinical Competency Committee should discuss the next best step for the resident and the program. Options include developing a formal improvement plan, which is a pre-adverse action; or any of the following adverse actions: (1) non-renewal, (2) suspension, (3) probation, or (4) dismissal. The action will be tailored to the severity and/or persistence of the deficiency with the anticipation that most can be handled through informal processes to avoid moving forward to more formal approaches, which have the potential for adverse actions. The PD is ultimately responsible for determining the appropriate plan of action. |

Awareness of Performance Issues

Milestone Ratings

Residency program leaders are charged with monitoring resident progression throughout training to ensure a level of competency for all graduates. In 2013, the ACGME provided a framework for this assessment across multiple domains through the Milestones Project [18]. Using the Milestones requires formative assessment of resident knowledge and skills during clinical rotations and other professional activities. Residents receive timely feedback, including biannual assessment of their skills and longitudinal development from the Clinical Competency Committee (CCC), which is an ACGME-required committee of faculty in each program charged with reviewing each resident a minimum of twice annually. Through the adjustment to the Milestones process, programs gained insight into the importance of these steps and the potential for early recognition of the struggling resident.

The Milestones provide a helpful framework for defining where residents may have performance challenges.

- Patient Care [18] (PC) domains best capture *clinical skills* in the following areas: (1) Psychiatric evaluation, (2) formulation and differential diagnosis; (3) treatment planning and management; (4) psychotherapy; (5) somatic therapies; and (6) clinical consultation. Identification of performance issues in the PC domains depends primarily on direct observation of the resident in the patient care setting.
- Medical Knowledge (MK) domains capture the areas of *knowledge* needed for the care of psychiatric patients and can be assessed in clinical settings, education settings (e.g., didactics, journal clubs, case conferences), and through structured knowledge assessments like the Psychiatry Resident In-Training Exam (PRITE®).

- Systems-Based Practice (SBP) and Practice-Based Learning and Improvement (PBLI) skills are assessed both in the clinical work setting and through the resident's performance in formal program activities and other professional and community settings.
- Milestones in professional behavior (PROF) reflect overall *values and expectations* of behavior, attitudes, and responsibilities to patients and the profession.
- Interpersonal and Communication Skills (ICS) are evident in patient, colleague, and team *relationships and information sharing*. Performance issues related to the PROF and ICS domains may be identified through interpersonal interactions with residents on clinical rotations, in teaching settings, and through administrative situations.

Use of behaviorally anchored descriptions to determine the appropriate Milestone score is critical to the accuracy of this system. Electronic evaluation systems can be leveraged to improve the validity of these scores. It is unlikely and unnecessary for the evaluating faculty to memorize the Milestones, but faculty development on the use of Milestone ratings is important to optimize reliability of assessment. Some programs may use assessment tools to improve the reliability of their Milestone ratings, and some domains may be easier to evaluate compared to others [19]. For a detailed discussion of competency-based assessment, please see Chap. 17.

With confidence in the data generated by the Milestones, program directors can consider the identification of residents with performance concerns. Use of the Milestones [20] has increased the identification and reporting of deficiencies and the discussion of these deficiencies with residents. In addition, when struggling residents are identified earlier in training, there is greater opportunity to remediate their performance. The Psychiatry Milestones do not have a rating for deficiencies, per se, but do have the designation of "has not achieved level 1" to capture skills that are not at the level of an incoming resident. As residents progress through their training, they

may be evaluated at a level below what is expected for their level of training, which likely signals a deficiency of their performance or their training. In addition, if a resident appears to perform at a lower subcompetency rating than previously achieved in CCC review, the regression of skills represents a performance or training issue.

Evaluation Comments

Beyond the Milestone assessments of resident performance in subcompetency areas, signals of resident performance concerns may be found in the evaluator comments in formal written evaluations. The process of evaluation review differs across programs and training settings. If evaluations are reviewed only during CCC meetings, there is vulnerability of a delay in identifying performance concerns. In addition, if evaluation comments are only cursorily reviewed, the concerns may be missed. Programs should consider mechanisms for faculty who identify performance issues to communicate their feedback directly to prevent the information being "lost in the shuffle." Concerns that may indicate that a resident requires closer supervision or that their deficiencies pose a risk of harm to patients should be immediately communicated to the program director. These challenges highlight the importance of faculty education and training regarding evaluation and optimal communication.

Faculty Development on Resident Evaluation

Faculty development efforts in evaluation of residents are important to optimize the identification and development of effective interventions for performance-related difficulties. Priorities for faculty development include (1) overcoming evaluator resistance or denial, (2) emphasizing the importance of early detection and remediation vs. "kicking the can the down road," (3) skills in clear documentation of behaviors and specific examples, and (4) creating a format/structure of assessment to operationalize performance evaluation. Faculty are vulnerable to the minimization of performance deficiencies due to a desire to support and compliment trainees. In addition, giving negative feedback can be challenging and time-con-

suming, especially on busy clinical services. Faculty also may avoid giving negative feedback due to concern for their own evaluation by residents or due to fear that they will be labeled as harsh or difficult to work with. A strategy is to reframe the importance of formative assessment as an opportunity to support positive development. When trainees and programs are aware of weaknesses, efforts are focused to target improvements in skills. For example, a PGY1 supervisor identifies a resident struggling with interviewing skills during their first rotation. A targeted intervention that pairs the resident and a senior faculty member to facilitate observed interviews with formative feedback can lead to a bolstering of skills that will carry forward through the rest of the resident's training. With early detection, trainees have more time and opportunities for better outcomes. Along with identification, faculty will likely need training on how to communicate helpful details clearly by focusing on behaviors and providing specific examples of performance issues. Programs may also consider if the use of structured assessments (e.g., Direct Observation or Global Assessment Forms) is indicated to ensure standardization of evaluations.

Informal Feedback

Program leaders may receive informal feedback about residents in almost any setting and situation. Common settings for informal verbal feedback include the elevator and hallway of a hospital. When concerns are communicated outside of the normal evaluation process, assessment can be more challenging and requires sensitivity and care. The biggest challenge with informal feedback is gathering clear and specific information. When evaluators provide verbal feedback, whether face-to-face or virtually, it is important to ask them to summarize their concerns in writing. As discussed above, some may be hesitant to do this. This resistance may be multifactorial and exploration is warranted, especially if the feedback gives reason for concern for safety. We will discuss potential sources of performance information in the next section. Inherent in this discussion will be the considerations of how to address next steps with informal evaluation.

Sources of Resident Performance Information

Program leaders will receive information about resident progress from multiple sources. Formal evaluation of residents may be completed by clinical rotation supervisors, psychotherapy supervisors, interprofessional team members, patients, other learners, and the resident themselves. Informal feedback about resident performance may come from these sources and from individuals who do not directly supervise or evaluate residents, such as program coordinators, clinical service personnel, lecturers, or mentors. Unfortunately, resident performance issues may also contribute to adverse events. In these cases, program leaders may or may not be aware of the events in real time, but may later hear of concerns as outcomes of a formal review process. It is important to consider the source and context of information when assessing each situation.

Clinical Supervisors/Psychotherapy Supervisors

On clinical rotations, resident performance is assessed through a variety of methods, such as (1) direct observation, (2) chart review, (3) reports and/or evaluations from staff, other services, or patients, (4) verbal or written presentations, and/or (5) clinical skills examinations/verifications (CSE/CSV). Barriers to accurate performance assessment in clinical settings are multifactorial and require attention in the creation and review of resident rotations. Practical barriers for the evaluator include lack of sufficient contact with the trainee, bias/labels/assumptions about the trainee, and the impact of other trainees in the learning environment [21]. In addition to accuracy of evaluation, evaluators should provide clear, specific, and timely feedback and appropriately document resident difficulties to facilitate the next steps in management.

Data suggest that clinical supervisors are vulnerable to the "failure to fail" effect, leading to minimization [22] of resident deficiencies due to professional and personal considerations, including concern for negative impact on trainees and feeling unprepared for the next steps if a resident is not "passed." Strategies to ameliorate this issue

include better preparation of evaluators through faculty development efforts, creating a culture of formative assessments with a focus on resident growth and development, and emphasis on shared responsibility to patients and the profession. The assessment of performance by psychotherapy supervisors will depend on the program's structure for this activity, and primarily on whether residents are observed by their supervisor. If direct supervision of psychotherapy occurs, assessment issues are similar to the clinical supervisor role. If not, supervisors may recognize performance issues related to professionalism and accountability (e.g., not coming to supervision appointments, not being prepared) or identify patient care or medical knowledge deficiencies through discussion of the psychotherapy work.

Interprofessional Colleagues

Residents work with non-physician colleagues in almost every clinical setting. Although a formal process of evaluation by interprofessional colleagues may not be in place, it is important to consider this source of information regarding resident skills. Three hundred and sixty-degree evaluations can provide valuable information about resident work in general and specifically about skills in the Interpersonal and Communication Skills (ICS) and Professionalism domains of the Psychiatry Milestones. Non-physicians may be more likely to report performance deficiencies in these areas that can signal important opportunities for correction and remediation [23]. It is possible that residents exhibit different behaviors with coworkers who they do not perceive as high-stakes observers, as well. This perception can negatively impact teamwork and collegiality.

Other Sources

Feedback about resident performance from peers, including chief residents, students, and the resident themselves may be obtained through formal evaluation. There is often valuable information in these evaluations, although residents who are having difficulty are often unaware of their difficulties. In fact, several studies of resident self-

assessment and skills show that those with lower levels of competence tend to overrate their skill level higher than their more skilled peers [24]. Their resident peers may be reluctant to report due to concerns about anonymity and peer dynamics. Other factors may influence the perspective of students whom the resident may also be evaluating. Complaints from patients will be first filtered through the rotation sites and consideration of a reporting scheme from those leaders to the program may differ across sites and systems. In these cases, almost invariably, program leaders will want to seek input from the direct supervisor. Medical service personnel may provide valuable practice habit information gleaned from chart/medical record audits.

In summary, resident performance assessments will ideally come from multiple sources across multiple contexts. The CCC is charged with the task of incorporating and synthesizing information from these sources to determine the progress of residents across the competency domains defined by ACGME. Accurate performance assessments lead to enhanced opportunities to identify and remediate performance deficiencies.

Triage

The program director should evaluate the gravity of the situation and determine any needs for immediate action. If a resident's performance deficits represent unsafe work practices or compromise patient or staff safety, the resident should first be removed from work. Probation might be considered if patient safety is threatened. This is considered a last chance for a trainee to correct performance deficiencies and should be discussed with the institutional Graduate Medical Education (GME) office. If issues are identified as related to medical or psychiatric issues, program leaders should consider if fitness of duty determination is appropriate. Immediate action may need to precede the data-gathering step in these cases. It is up to the discretion of the program to determine appropriate next steps, which will be covered in the next section.

Investigation

After the resident with deficiencies in performance is identified, the work of assessment begins. The process should be timely, comprehensive, fair, and consistent. The steps of assessment include (1) data gathering, (2) consideration of other factors, and (3) synthesis

Data Gathering

The first step for program leaders is to gather information from a variety of perspectives. As discussed in the section on data sources, there are many important considerations in the understanding of resident feedback that will drive the exploration. Program leaders should meet individually with the individuals involved to review the facts and different points of view. These conversations are most effective face-to-face, but may require virtual meetings if meeting in-person is not possible. Program directors may also consider meeting with the resident or supervisor with another leader present (e.g., an associate program director) to facilitate effective communication and understanding in certain situations. When applicable and based on resident preference, a resident union representative or institution ombudsperson could also be in attendance.

A useful framework for conversations regarding resident performance starts with setting the expectation of collaboration with the mutual goal of resident development. To start, present the standards and expectations for the program while referencing the ACGME Milestones. It is important to consider both subjective experience and objective observations. Understanding the subjective/emotional factors from both sides will assist the assessment and delineation of the objective, observable behavior. Documentation of the information gathered through these conversations is critical to ensure accuracy and continuity. Take notes! Evaluators themselves should provide summary documentation of performance deficiencies, with guidance to provide objective data without judgment or assessment.

Information about a resident's performance should be considered in the context of (1) resi-

dent level of training and time point during the year, (2) clinical environment, (3) the individual evaluator, and (4) the resident's performance history. Considering the developmental stage of the resident, the clinical setting, and the evaluator's patterns of feedback is important for the assessment of bias or potential mismatch of expectations. As residents progress through the training program, patterns may emerge in areas of weakness or challenge. Review of previous rotation and semiannual evaluations or CCC discussions will ensure incorporation of the history and guide next steps.

Additional information on resident performance should come from other sources and across settings where they work and learn. Review of previous rotation evaluations and discussion with other supervisors may be helpful. Program directors can consider direct observation and assessment by other faculty who have previously not worked with the resident. Evaluation in authentic clinical settings or through simulation are options for this step.

Consideration of Other Factors

In addition to deficiencies in skills or knowledge reflected in the Milestones, performance difficulties can be related to (1) personal issues, (2) educational or system issues, (3) bias, and/or (4) other interpersonal factors.

Personal

Personal issues can influence resident performance. These include medical/psychiatric [25] illness, the impact of stress and fatigue, substance use, or learning difficulties. Discussion with the resident can illuminate the potential impact of personal factors. The resident's comfort with revealing personal struggles depends on many factors. If this information is volunteered, questions should focus on how medical or psychiatric symptoms impact their work function, while communicating empathy and support. The work of residency itself is stressful and residents will have variable ways of coping with both physical and emotional stressors. Trainees will invariably face personal stressors during residency related

to family, finances, health, and life transitions. The misuse of substances is common in physicians and residents and can impact performance across skill and professionalism domains to varying degrees. Concerns about knowledge acquisition through clinical performance or test scores may signal undiagnosed learning difficulties, as well. Considering the complexities related to personal factors, approaches to addressing them may be more situation- and person-dependent.

Educational/System Issues

Larger educational and systems factors can challenge a resident's [26] ability to meet expected standards of performance. Examples of system issues include inadequate supervision, overwhelming workloads, unclear expectations, and a lack of timely feedback. Consider potential barriers to effective resident performance, including language barriers, cultural differences, interpersonal problems, and external stressors on both resident and evaluators. Educators bring their own biases, life stressors, and expectations to the learning environment. These factors can not only impact the resident's performance negatively, but also have potential to impact the evaluation process.

Racial Bias

Racial bias and discrimination occur across the medical education continuum. Efforts to increase awareness and recognition of individual and institutional bias may lessen the impact in the future, but we still have much work to do in this area. Equity in assessments [27] can be improved through efforts already discussed in this section, including gathering assessment data of resident performance from multiple observers in multiple contexts. Residents should be evaluated in work with patients from different racial and ethnic backgrounds. Programs can evaluate the potential for inequity in learning environments by reviewing rotation assignments, patient workload, and diversity of the workforce. Education on racism, microaggressions, stereotype threat, and unconscious bias in systems of care promote awareness of the impact on resident assessment and performance.

Gender Bias

The impact of resident gender on evaluation of performance is complex and multifactorial. Research [28] in this area suggests the core issue lies in societal and cultural ideas of gender normative behavior and the potential mismatch with resident behaviors. Although this mismatch is more pronounced in specialties whose expectations of professional behavior may be more entrenched, psychiatry programs are not immune to gender bias in assessment. Efforts to promote open dialogue about gender and bias within resident and faculty groups can mitigate its negative impact. Identification of trends across sites and evaluators, as well as transparent discussion of the potential for bias should be a focus of discussion in the CCC.

Other Interpersonal Factors

Residents and evaluators can be vulnerable to additional dynamic factors that influence the evaluation. Evaluators may use initial, limited, or snapshot impressions of trainees to form favorable (halo effect) or unfavorable (horn effect) judgments, also known as cognitive biases. Such biases can influence evaluation ratings. For example, a faculty member may rate an attractive resident positively after seeing their photo in an evaluation system, making the assumption that the resident's attractiveness must also make them a friendly person and good doctor (halo effect). In contrast, a program director may judge an overweight resident as ineffective during patient counseling sessions because of their weight, despite no influence of personal weight on their counseling skills (horn effect) [29]. Program directors will need to consider these factors with an objective lens, as much as possible. The power differential inherent in medical training can be exacerbated by institutional culture or system factors that may lead to labeling or issues of fairness. Factors to consider include previous experiences of both resident and evaluator, including potential conflicts of interest, incidents of harassment/mistreatment, or other forms of bias.

Synthesis

Using information gathered from multiple sources and consideration of additional factors, program directors will identify the primary performance issue(s). Performance deficiencies can fall into any of the Milestone core competency areas: (1) patient care, (2) medical knowledge, (3) systems-based practice, (4) practice-based Learning, (5) professionalism, and (6) interpersonal and communication skills. Across these categories, it may be helpful to characterize the problem as primarily related to a knowledge or skill deficit, an attitude or behavioral problem, or a combination of both. Clearly identifying the performance issue is critical to the development of the most appropriate plan. Some discussions may be best brought to the CCC, to ensure fairness and standardization of process. To achieve the goals of equity and fairness, Colbert et al. [30] recommend committees focus on evidence related to the resident's performance using the Milestones and discourage inferences about the resident or anecdotal examples not supported by documentation, which underscores the importance of clear documentation of issues. Identified performance deficiencies should be linked to expected target behaviors at this stage and the next, intervention planning and reassessment.

Intervention Strategies

Program directors have the task of taking identified performance deficiencies and developing a strategy for intervention.

The process of investigation itself may reveal the need for resident support and assistance that is not performance related. If stress and burnout are contributing, consider options that promote resident wellness and resilience. A leave of absence may be needed in some cases, but most often, resident peers and chief residents can assist in exploring options to alleviate some work responsibilities to ease stress. Disability related to an underlying medical condition may require referral to physicians or counselors, with a priority of maintaining confidentiality. As previously mentioned, a "fitness for duty" assessment may

apply, as well. GME resources may be available to residents, including consideration of reasonable accommodations as outlined in the Americans with Disabilities Act (ADA). We recommend seeking guidance from the Designated Institutional Official (DIO), Human Resources, and appropriate legal counsel when managing disability considerations in training. In situations when resident performance is negatively impacted by external factors related to the system, program directors can provide feedback to these systems and advocate for improvements. If educational barriers exist in the current rotation, program leaders may decide to reassign the resident to another rotation or supervisor. However, it is important to also consider the effect that such changes have on patient care and other residents who might be affected by the change.

A successful intervention plan is clear, structured, and specific to the individual resident's needs. Careful documentation of the plan will include the specific goals of the intervention and expectations of the resident, as well as goals, timelines, plan for reassessment, and potential next steps. The resident should be informed of specific deficiencies and the expectations of the program. Intervention activities should be linked to the specific Milestones where the resident is deficient and follow a set timeline for expected improvements and points of reassessment. Intervention components should provide multiple opportunities for resident self-reflection and reassessment. Table 18.2 highlights examples of activities to target specific areas of resident performance.

Informal Intervention

In some cases, the most appropriate next step is further monitoring of performance after providing feedback to the resident. The resident can work with rotation attendings and staff in deliberate practice of skills, role-modeling, and training/education specific to the resident's needs. Residents with clinical skill deficiencies may benefit from enhanced supervision and support. For example, a resident who is deficient in clinical reasoning may be asked to review each case formulation, differential diagnosis, and

Table 18.2 Remediation examples by performance [31] type (adapted)

| Performance Area | Methods |
|------------------------|---|
| Communication | Observation of role models Skills training Observed interviews and feedback Observed handoffs Chart review/audit activities |
| Organizational skills | Skills training Time management, workflow |
| Self-directed learning | Individualized learning plan Mentorship |
| Fund of knowledge | Evidence-based medicine (EBM) practice Tutoring Case scenarios Prepare lectures/presentations for other learners |
| Clinical reasoning | Practice cases Simulation |
| Accountability | Professionalism mentorship or coaching Personal reflection |
| Interpersonal skills | Conflict resolution training Role play/simulations Participate in interdisciplinary team simulations |

treatment plan with an upper level trainee or attending before functioning more independently. Careful consideration of any patient safety issues may result in a return to closer supervision. Assignment of a mentor or coach to provide guidance on a multitude of skills across Milestone domains can not only improve performance but also alleviate burnout [32] in residents. Mentors should be chosen carefully with consideration of the mentorship goals. Mentors should be available, objective, and nonjudgmental. Development of an individualized learning plan (ILP) can be a way to organize informal intervention plans, with recommendations of target behaviors linked to strategies. ILPs can also be used as part of a more formal remediation plan. Most informal intervention plans address mild issues, are not meant to be reportable to outside agencies like state licensing boards, and are not intended for inclusion in end-of-training verifications.

Formal (Reportable) Interventions

Performance deficiencies may require more formal implementation of a remediation plan. There

are various terms for this type of structured and reported intervention. Formal remediation plans have labels such as Corrective Action Plan (CAP), Performance Improvement Plan (PIP), etc. Some institutions provide centralized remediation programs where residents can be referred either initially or stepwise if internal program remediation efforts are not successful. It is important for program leaders to understand the internal and external resources available. Early consultation with the DIO and the institution's legal counsel, as well as clear documentation, is essential, particularly when a formal or reportable intervention is needed. [33]

Probation becomes inevitable when multiple remediation attempts fail to improve outcomes or when egregious unprofessional or unethical behavior occurs. Dismissal is one step further, when the behavior or lack of progress leads program leaders to determine that the resident cannot continue in the program. Depending on timing during the academic year and severity of concerns, non-renewal of residency contract for the subsequent academic year may be an option.

Each state medical board has specific criteria and deadlines for program director (PD) reporting, so all program directors should be aware of their duty to report for their specific state medical board. In addition, PDs should be aware of their state medical board's Verification of Postgraduate Training and Professional Evaluation Forms, so the resident graduate and PD future responses are in alignment. During and at the end of the intervention process, the PD should clearly notify the resident about what will and will not be reported to state licensing boards and future employers.

Providing Feedback

With an intervention plan in hand, program directors will re-engage with the resident. General principles of effective feedback apply to this conversation. Starting the conversation with an exploration of the resident's perspective on their performance and reaction to evaluation of deficiencies provides helpful context. It is important to explore the resident's areas of strengths and weaknesses. Clear and concise communication of the areas needing improvement should be

paired with support and orientation to the goal of fostering growth and development. Research supports that effective remediation strategies engage residents as stakeholders and promote self-efficacy and personal ownership of their professional development [34]. Collaboration in developing the intervention plan preserves a level of autonomy in the resident's professional development. This should be built on a program culture of formative evaluation that promotes remediation as a mechanism for growth, not punishment. It is important to get the resident's perspective and explore any perceived barriers or concerns. At the conclusion of the meeting, specific guidance of next steps for remediation of performance deficits should be communicated verbally and in written form. Next steps, including methods and timeline for reassessment, requirements, and consequences for failed remediation, should be included. The resident may benefit from a follow-up meeting the following week, particularly if the resident's emotional response blurs their ability to fully engage during the initial feedback conversation. In addition, regular check-in meetings with the resident and any faculty involved in the resident's remediation plan should be scheduled.

Reassessment/Measuring Outcomes

Outcomes of the intervention should be evaluated at levels appropriate to the type of intervention implemented. In some cases, informal follow-up with attendings and review of evaluations may be appropriate. Mentors can be asked to provide regular updates and/or reach out with concerns. There is some controversy around the handoff of learners with performance difficulties between sites and supervisors. Arguments against this practice are based on research [35] that suggests that having negative information about prior performance biases evaluator performance ratings. Sensitivity to this factor is important with mentors, clinical supervisors, and those involved in reassessment. Interventions that have specific time points and benchmarks should be followed

and consistent. As in the initial assessment, reassessment should include collecting data across multiple settings and from multiple sources. Additional information will be the resident's adherence to the intervention plan including attendance at regular meetings with program leaders and mentors. Discussion of progress in remediation in the CCC will protect the integrity of the process, ensure due process, and ensure consistency across residents with performance issues. Outcomes of reassessment processes include successful completion of the performance intervention plan, continuation with adjustments or escalation of requirements, or progression to more significant steps.

Resident Vignette

Resident Sam is working in his first rotation on an inpatient psychiatry unit. Sam has experience as a transfer into your program after 2 years in an OB-GYN residency program. You hear from an upper level (PGY4) resident that Sam is having difficulty adjusting to the team structure and expectations of the unit. In a telephone discussion with the upper level resident, they identify that Sam performed a risk assessment independently and recommended that the patient was not an acute risk and did not require 1:1 supervision. When the patient was assessed by the attending, they felt differently and provided Sam feedback that he should discuss his assessment with the attending before making recommendations. Sam later wrote and signed an order for medications that was above the dose recommended by the team. The upper level resident and attending are concerned that Sam may not seek sufficient supervision in the future. You contact the attending by email and ask for feedback about Sam's performance. The attending confirms the information, affirms that there were no negative patient outcomes, and shares that they believe Sam is a strong resident who just needs time to adjust. You email Sam to request a meeting to discuss the feedback. In the meeting with Sam, he expresses enjoyment of the rotation and feels

reaffirmed that his transfer to Psychiatry was the right decision. He acknowledges that the move has required readjustment but feels that he is performing his duties as a resident and working with the team effectively. He acknowledges that he received feedback that his safety assessment was not consistent with the judgment of the attending in that case. He was functioning more independently as an OB resident and feels he is taking a step backwards as a psychiatry resident.

You determine that the resident has current deficiencies in SBP2, related to transitions of care and care coordination in healthcare teams. As there are no current concerns for acute risk to patient safety, you recommend that he seek supervision from his attending and the PGY4 resident on his current as well as during his next rotation when he is performing safety assessments and writing orders. You point out to Sam that this is his first psychiatry rotation, and you expect him to need more support while transitioning to the new role as psychiatry resident on the healthcare team. He acknowledges the feedback and recommendation and expresses gratitude for the support. You plan to review at midpoint of the next rotation and plan to meet with him in 2 weeks for support, mentorship, and reassessment.

Faculty Issues

This final section will review concerns about faculty performance, noting differences from resident concerns as they relate to potential interventions and common challenges. The program director (PD) seldom has direct authority and oversight of faculty performance reviews, so the PD may need to involve the faculty member's direct supervisor when an issue arises. While the focus of the program director's efforts lies mostly with trainees, faculty are occasionally the source of concern, and the situation can be particularly challenging when the faculty member is a supervisor of a core, required rotation or is senior in rank to the PD.

Sources of Feedback

Most commonly, trainees are the source of negative feedback about a faculty member. Although there is an opportunity for residents to complete written/electronic evaluations of faculty, trainees are often hesitant to "put things in writing" for fear of retribution, regardless of anonymity safeguards. Instead, the PD often hears about faculty performance concerns after some delay as well as after repeated problematic encounters, and in more informal or group settings, like during semi-annual evaluation meetings or through chief residents. Less commonly, concerns are reported by faculty peers, staff, or patients.

Faculty Considerations

Unlike residents who may struggle with medical knowledge, faculty concerns are usually related to interpersonal and communication skills or unprofessional behavior. A faculty member's erratic or unprofessional behavior could be a result of medical or psychiatric conditions (e.g., a mood or substance use disorder), burnout, or personal or family stressors. Alternatively, there may be systems factors, such as an understaffed clinical service or interpersonal team conflicts, contributing to concerning faculty feedback. For a junior faculty member or a supervisor who is new to direct teaching, lack of teaching experience or unclear expectations can present a perfect storm for even a well-intentioned supervisor. Whether or not to involve the faculty member's direct supervisor depends on multiple factors, including but not limited to the severity and nature of the concern as well as whether the issue is a new or repeating one. If a safety or clinical competence deficiency is suspected, early communication with the faculty member's supervisor is warranted and may involve a fitness for duty evaluation. In most cases, involving the faculty's supervisor can be helpful to discern other relevant factors and may be a source of additional support for the faculty member.

Interventions and Potential Challenges

After the program director gathers sufficient data, an informal “cup of coffee” conversation [36] with the faculty member to share the concerns and offer support could be all that is needed for a positive outcome. The feedback should be delivered in a private setting and should be specific in order to minimize ambiguity. Although the PD does not routinely keep files about faculty, it can be helpful to have a brief summary of the informal meeting as such notes can be helpful if a similar concern involving the same faculty member arises in the future. During this meeting, the program director can learn more about the faculty member’s perspective, explore reflection, and end with expressing appreciation for and shared goals with the faculty member. When there is a repeated pattern of concern or the concern is egregious, the program director should not only consider involving the faculty’s supervisor but should also consider a more formal plan within the PD’s authority. For instance, the PD could remove the trainee from the faculty member’s service. Alternatively, the faculty member’s supervisor could reassign the faculty member to a non-teaching service. Either way, the faculty member’s teaching role would cease until there is a successful remediation plan that is satisfactory to the PD before trainees return to work with the faculty member. Similar to providing a professionalism mentor for a struggling resident, a professionalism mentor could be assigned to the struggling faculty member. Possible mentors for the faculty member include (1) an experienced faculty member at the same or different clinical site, (2) a department chairperson, (3) a vice chair for education, (4) a direct supervisor, or (5) an educational leader from outside the department.

There are different challenges for addressing concerns about a faculty member as opposed to a trainee. As fellow faculty members, the program director could have a close friendship with the faculty member, so addressing concerns from a work perspective could cause strain in their personal relationship. If the faculty member is in a

more senior role compared to the program director, the program director could feel inhibited by the power differential and seniority. Having a more senior faculty leader, like the vice chair of education, department chair, or site supervisor, involved could provide support for the program director. In certain situations, involving the DIO may also make sense. If the faculty member is not able to reflect about their role or take some responsibility, it will be essential to garner the support of their supervisor to ensure a safe and effective learning environment for trainees. The inherent power differential between residents and faculty makes it difficult for many residents to provide negative feedback about faculty; residents often feel inhibited about reporting due to fear of their identification and perceived risk of retaliation. It is also important to remember that per the ACGME requirements, the PD appoints the teaching faculty and therefore can remove a faculty member from working with residents for cause. In most institutions, removal of faculty is a nuanced process that also involves the department chair and others.

Faculty Vignette

Dr. Young was an experienced clinician and new medical director for the inpatient psychiatric service, a core rotation for both psychiatry interns and more senior residents. Over the first several months, residents had shared among themselves their dread about rotating on-service with Dr. Young. The chief residents eventually shared the common resident sentiment about Dr. Young with the program director. The chief residents stated that while residents did not feel threatened by Dr. Young, he had a brusque and direct style of communication, particularly during rounds, which could feel intimidating to junior residents. Review of written evaluations for Dr. Young and his rotation did not reveal any concerns, so the PD only had verbal, anonymous reports of concern from the chief residents. Since Dr. Young was new to his teaching role and seemed eager to work with trainees, the PD opted to start with an informal “cup of coffee” conversation. The PD scheduled a time slot in a private setting for this

informal intervention [34]. The PD shared resident feelings of intimidation and dread about working with Dr. Young, especially during rounds, and gave Dr. Young an opportunity to reflect and respond. Dr. Young expressed surprise, embarrassment, and rationalization, followed eventually by curiosity about how to improve his relationship with residents. After some discussion, Dr. Young asked the PD for permission and support to address the entire residency group to improve his working relationship with residents. The PD supported Dr. Young's request, and both of them attended the following monthly resident business meeting. During the group meeting, Dr. Young expressed remorse for unintentionally creating a hostile learning environment and expressed a genuine wish to improve. Dr. Young reiterated his eagerness to be an excellent teacher and invited additional feedback about his future behavior and interactions, both directly or indirectly per resident comfort. He also shared some personal anecdotes from his training. In the following months, the chief residents shared with the PD that residents had commented on a better learning experience during Dr. Young's rounds since his conversation with the group.

Summary

While performance management of residents and faculty can seem daunting, proactive and early interventions can mitigate and even prevent negative outcomes. We recommend establishing a process that integrates evaluation methods, sources of data, assessments, intervention strategies, and outcomes. A systematic algorithm for managing resident and faculty concerns is imperative, and early consultation is wise to promote positive outcomes [31].

References

1. Aguinis H. Performance management. 3rd ed. Boston: Pearson; 2013.
2. Cappelli P, Tavis A. The performance management revolution. *Harv Bus Rev*. 2016;94(10):58–67.
3. Ludmerer KM. Let me heal: the opportunity to preserve excellence in American medicine. Oxford University Press; New York, NY; 2014.
4. Aguinis H, Joo H, Gottfredson RK. Performance management universals: think globally and act locally. *Bus Horiz*. 2012;55(4):385–92. <https://doi.org/10.1016/j.bushor.2012.03.004>.
5. Buckingham M, Goodall A. Reinventing performance management. *Harvard Business Review*. Published online April 1, 2015. <https://hbr.org/2015/04/reinventing-performance-management>. Accessed 5 July 2021.
6. Aguinis H, Joo H, Gottfredson RK. Why we hate performance management—and why we should love it. *Bus Horiz*. 2011;54(6):503–7. <https://doi.org/10.1016/j.bushor.2011.06.001>.
7. Gruman JA, Saks AM. Performance management and employee engagement. *Hum Resour Manag Rev*. 2011;21(2):123–36.
8. Macey WH, Schneider B. The meaning of employee engagement. *Ind Organ Psychol*. 2008;1(1):3–30.
9. Harter JK, Schmidt FL, Hayes TL. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *J Appl Psychol*. 2002;87(2):268.
10. Gorman CA, Meriac JP, Roch SG, Ray JL, Gamble JS. An exploratory study of current performance management practices: human resource executives' perspectives. *Int J Sel Assess*. 2017;25(2):193–202. <https://doi.org/10.1111/ijsa.12172>.
11. Englander R, Cameron T, Ballard AJ, Dodge J, Bull J, Aschenbrener CA. Toward a common taxonomy of competency domains for the health professions and competencies for physicians. *Acad Med*. 2013;88(8):1088–94. <https://doi.org/10.1097/ACM.0b013e31829a3b2b>.
12. Englander R, Carraccio C. From theory to practice: making entrustable professional activities come to life in the context of milestones. *Acad Med*. 2014;89(10):1321–3. <https://doi.org/10.1097/ACM.0000000000000324>.
13. Branfield Day L, Miles A, Ginsburg S, Melvin L. Resident perceptions of assessment and feedback in competency-based medical education: a focus group study of one internal medicine residency program. *Acad Med*. 2020;95(11). https://journals.lww.com/academicmedicine/Fulltext/2020/11000/Resident_Perceptions_of_Assessment_and_Feedback_in.53.aspx.
14. Reddy ST, Zegarek MH, Fromme HB, Ryan MS, Schumann S-A, Harris IB. Barriers and facilitators to effective feedback: a qualitative analysis of data from multispecialty resident focus groups. *J Grad Med Educ*. 2015;7(2):214–9. <https://doi.org/10.4300/JGME-D-14-00461.1>.
15. Pimperl AF, Rodriguez HP, Schmittiel JA, Shortell SM. The implementation of performance management systems in U.S. physician organizations. *Med Care Res Rev*. 2018;75(5):562–85. <https://doi.org/10.1177/1077558717696993>.

16. Ma OJ, Hedges JR, Newgard CD. The academic RVU: ten years developing a metric for and financially incenting academic productivity at Oregon Health & Science University. *Acad Med.* 2017;92(8):1138–44. <https://doi.org/10.1097/ACM.0000000000001570>.
17. Reamy BV, et al. Residents in trouble: an in-depth assessment of the 25-year experience of a single family medicine residency. *Fam Med.* 2006;38(4):252–7.
18. Psychiatry Milestones 2.0. Accreditation Council for Graduate Medical Education. 2020. <https://www.acgme.org/globalassets/PDFs/Milestones/PsychiatryMilestones2.0.pdf>. Accessed 15 Nov 2021.
19. Lloyd RB, Park YS, Tekian A, Marvin R. Understanding assessment systems for clinical competency committee decisions: evidence from a multisite study of psychiatry residency training programs. *Acad Psychiatry.* 2020;44(6):734–40. <https://doi.org/10.1007/s40596-019-01168-x>.
20. Ross S, et al. Association of a competency-based assessment system with identification of and support for medical residents in difficulty. *JAMA Netw Open.* 2018;1(7):e184581. <https://doi.org/10.1001/jamanetworkopen.2018.4581>.
21. Stafford M, Johnson B, Hessler D. A systematic approach to working with medical learners in difficulty: a faculty development workshop. *MedEdPORTAL.* 2020;16:10872.
22. Yepes-Rios M, et al. The failure to fail underperforming trainees in health professions education: a BEME systematic review: BEME Guide No. 42. *Med Teach.* 2016;38(11):1092–9.
23. Kinnear B, et al. Critical deficiencies paper data. *Acad Med.* 2017;92:820–6. First published online September 20, 2016 doi: <https://doi.org/10.1097/ACM.0000000000001383>
24. Rahmani M. Medical trainees and the dunning-Kruger effect: when they don't know what they don't know. *J Grad Med Educ.* 2020 Oct;12(5):532–4. <https://doi.org/10.4300/JGME-D-20-00134.1>.
25. Yao DC, Wright SM. The challenge of problem residents. *J Gen Intern Med.* 2001;16(7):486–92.
26. Steinert Y. The “problem” learner: whose problem is it? AMEE Guide No. 76. *Med Teach.* 2013;35(4):e1035–45. <https://doi.org/10.3109/0142159X.2013.774082>.
27. Lucey, et al. Medical education's wicked problem: achieving equity in assessment for medical learners. *Acad Med.* 2020;95:S98–S108. First published online September 1, 2020 <https://doi.org/10.1097/ACM.0000000000003717>.
28. Klein R, et al. Gender bias in resident assessment in graduate medical education: review of the literature. *J Gen Intern Med.* 2019;34(5):712–9. <https://doi.org/10.1007/s11606-019-04884-0>.
29. MacDougall M, Riley S, Cameron H, Mckinstry B. Halos and horns in the assessment of undergraduate medical students: a consistency based approach. *J Appl Quant Methods.* 2008;3(2):116–28.
30. Colbert CY, et al. Fairness; the hidden challenge for competency-based postgraduate medical education programs. *Perspect Med Educ.* 2017;6:347–55. <https://doi.org/10.1007/s40037-017-0359-8>.
31. Guerrasio J. Remediation of the struggling medical learner. Table 7.10, p 165–169. LaVergne, Lightning Source; 2013.
32. Palamara K, et al. Promoting success; a professional development coaching program for interns in medicine. *J Grad Med Educ.* 2015. <https://doi.org/10.4300/JGME-D-14-00791.1>.
33. Czelusta K. Evaluation of resident difficulties. In: Sudak D, editor. *Handbook of psychiatric education.* Second ed; 2021. p. 209–20.
34. Chou CL, et al. Guidelines; the dos don'ts and don't knows of remediation in medical education. *Perspect Med Educ.* 2019;8:322–38. <https://doi.org/10.1007/s40037-019-00544-5>.
35. Humphrey-Murto S, LeBlanc A, Touchie C, et al. The influence of prior performance information on ratings of current performance and implications for learner handover: a scoping review. *Acad Med.* 2019;94:1050–7. <https://doi.org/10.1097/ACM.0000000000002731>.
36. Hickson GB, Pichert JW, Webb LE, et al. A complementary approach to promoting professionalism: identifying, measuring, and addressing unprofessional behaviors. *Acad Med.* 2007;82(11):1040–8.



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Psychiatry is a broad field with a multitude of practice opportunities. While general psychiatry residency provides a range of clinical experiences with diverse patient populations, many residents elect to pursue subspecialty training to enhance their depth of knowledge and experience in a particular disorder or area, or with particular patient populations. Subspecialists are essential not only for providing high-quality clinical care but also for the production and dissemination of clinical knowledge through cutting-edge research. Further, subspecialists are critical in training the future generation of psychiatrists to perpetuate and advance skills and knowledge in their particular areas of specialization. Although not essential to practice in a subspecialty area, subspecialty training and subsequent Board-certification in that subspecialty are increasingly preferred in many practices, required in some settings, and certainly necessitated at academic institutions.

While the shortage of psychiatrists in the United States (U.S.) is significant, the shortage of

psychiatry subspecialists is especially dire. Out of nearly one million physicians in the country, serving a population of 330 million, there are fewer than 10,000 child and adolescent psychiatrists (CAP), roughly 1300 geriatric psychiatrists, and about 800 addiction psychiatrists [1]. Their distribution is also inequitable, with many areas, especially rural communities, having little or no access to qualified subspecialists. For example, 41 states are reported to have “severe” shortages of CAP, defined as 17 or fewer child and adolescent psychiatrists per 100,000 children. Seventy-two percent of U.S. counties do not have a single CAP. Two states do not have a single geriatric psychiatrist. There are no addiction psychiatrists in four states, and none in 92% of counties [1]. Even those psychiatrists who are trained in a particular subspecialty do not always practice directly in that area or with the patient population due to a variety of reasons. Some work part-time, or only spend a portion of their clinical time working with a subspecialty population. Others may work primarily in academic settings, research, or administration with little time to devote to clinical work [2].

The Accreditation Council for Graduate Medical Education (ACGME) 2020 Data Resource Book notes that while there was an expansion of about 33% for general psychiatry residency programs from 2015 to 2020, the increase in subspecialty programs was far less – 18% for addiction psychiatry, 12% for CAP, 14%

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for forensic programs, and 10.5% each for geriatric and consultation-liaison (C/L) fellowships. In the past 4 years, general psychiatry has seen a 24% increase in resident recruitment, but specialty fellowships have not followed suit, with geriatric psychiatry dropping by 28%, and addiction psychiatry by 2.5% [3]. The American Psychiatric Association (APA) Resident Census for 2019–2020 shows that numerous fellowship positions went unfilled: an estimated 40% of addiction psychiatry positions, 38% of consultation-liaison psychiatry positions, and 36% of forensic psychiatry positions [4]. National Resident Matching Program (NRMP) data for 2020 shows that nearly 18% of CAP positions went unfilled. Over the past 5 years, the number of CAP (826->889), forensic (72->80), and C/L (79->86) fellows have remained relatively flat, whereas the number of geriatric psychiatry fellows decreased drastically by 28% (58->42) – despite the projection that 20% of the U.S. population will be over 65 by 2030 [5].

More medical students are matching into psychiatry than at any point in the past, and psychiatry programs continue to expand [6]. Despite this increased interest in psychiatry, recruitment into subspecialty fellowships has plateaued or declined. Recruitment into general psychiatry programs may have an impact on recruitment into fellowships. Historically, international medical graduates (IMGs) have made up a significant proportion of psychiatry fellows. In 2020, IMGs composed 55% of the fellows in geriatric fellowships, about 30% for each of CAP and C/L fellowships, and 20% each for addiction and forensic psychiatry fellowships. As more U.S. medical school graduates have applied to and entered psychiatry residencies, the number of IMGs in residency training has decreased (only 15.9% of trainees matching into general psychiatry programs were IMGs in 2020, compared to 25.5% in 2015) – which may in turn further hamper efforts to recruit into fellowships [5].

The burgeoning debt that U.S. and Caribbean medical student graduates endure also hampers recruitment into subspecialty training, as salaries for most subspecialists are similar to those of general psychiatrists. Many residents simply do

not see the value in prolonging their training. Other residents may feel that the exposure they received during residency training was sufficient and may not appreciate the nuances of a particular subspecialty. Fellowship may also require moving to a new city for 1–2 years to receive training if the desired fellowship is not available locally, which may be particularly difficult for trainees who are at the point in their personal lives where they are beginning their own families and cannot feasibly relocate [7, 8].

Why should a general psychiatry residency program director ensure that their residents are prepared for fellowship training? To begin with, all general psychiatry programs are required by the ACGME to provide rotations or experience in all ACGME-accredited psychiatry fellowship areas with supervision by a faculty member with appropriate competency and training. In the case of CAP rotations, faculty must possess Board-certification in CAP [9]. Without efforts to promote subspecialty faculty recruitment and retention, it may fall on general residencies to increase the amount of training in subspecialty topics to ensure competence when treating these patients, who are often among the most vulnerable. By proactively encouraging interested residents to pursue fellowships and preparing them effectively for subspecialty training, general psychiatry program directors can develop a network of trained subspecialists who are affiliated with their program and may be more inclined to return to their general psychiatry residency program to contribute to educational and/or academic pursuits. Clinical supervision of psychiatry residents by diverse fellowship-trained faculty contributes to the richness of residents' patient care experiences and encourages cross-disciplinary collaboration. This networking is particularly helpful for smaller or community-based programs, which may otherwise struggle to provide subspecialty exposure to residents. Providing high-quality exposure to a variety of subspecialty clinical and academic experiences contributes to the overall quality of a residency program and can make a program stand out when recruiting applicants. For those applicants who plan to pursue an academic career, knowing that a program prepares

its residents well for fellowship can make a program more appealing.

Overview of Fellowship Opportunities

Numerous opportunities exist for subspecialty training beyond the rotations and experiences included in a general psychiatry residency. The first step to effectively preparing residents for fellowships begins with gaining knowledge about the variety of programs available, differences in requirements for each type of program, information about application processes, and any programmatic nuances. For ease of discussion, fellowship opportunities can be divided into three groups: ACGME-accredited psychiatry fellowships, ACGME-accredited fellowships in other specialties open to psychiatry residents, and non-accredited fellowships. Details on the unique aspects of these programs can be found below.

ACGME-Accredited Psychiatry Fellowships

With the exception of Child and Adolescent Psychiatry, all individual fellowships in this category are 1 year in length and require completion of all 4 years of general psychiatry training prior to matriculation into fellowship. Some programs also offer extended two-year fellowships that include both a typical fellowship year and additional time dedicated towards research. The American Board of Psychiatry and Neurology (ABPN) requires initial Board-certification in Psychiatry before one is eligible to be Board-certified in the specific subspecialty.

- **Addiction Psychiatry**

Addiction psychiatrists evaluate and manage patients with substance use disorders as well as those with other co-occurring mental health disorders. Some addiction psychiatrists may also treat patients with behavioral addictions such as gambling or internet addiction. The American Academy of Addiction

Psychiatry (AAP) maintains a list of all Addiction Psychiatry programs. Residents should begin researching programs about a year and a half prior to graduation from residency. Beginning in 2021, most Addiction Psychiatry Fellowships utilize the Electronic Residency Application Service (ERAS®). Applications should be submitted early in the fourth Post Graduate (PG) year, as programs may begin interviewing as early as July. As of this writing, most Addiction Psychiatry programs are moving toward using the fellowship Match through the National Resident Matching Program (NRMP) and will follow the interview and rank order timelines associated with the Match.

- **Child and Adolescent Psychiatry**

Child and adolescent psychiatrists (CAPs) practice a holistic approach to the evaluation, diagnosis, and treatment of patients from birth through adulthood. Biomedical, developmental, psychological, and social perspectives are integrated to understand problems with thoughts, feelings, and/or behaviors. CAP programs differ from other fellowships in that they are 2 years in length. There are also multiple pathways to CAP training.

- *Traditional track* refers to entering CAP fellowship following completion of 4 years of general psychiatry training, similar to other fellowships.

- *“Fast-tracking”* is another exception to the standard rule when it comes to fellowships. Applicants interested in CAP fellowship may enter fellowship after only 3 years of general psychiatry training. ACGME requires completion of specific components of the general psychiatry residency for fast-tracking applicants, which are detailed in the section [“Logistics”](#) of this chapter.

- *Alternate schedules* in some programs vary the order of training. While most residents enter CAP fellowship after completing general psychiatry training, some programs may offer fellowship positions to residents who have completed only the PG1 or PG2, with the expectation that the remainder of

the general psychiatry requirements will be completed following fellowships. In these circumstances, program directors should be cautious to ensure ACGME continuity requirements are met and that trainees are aware that eligibility to take the Board Certification exams may be delayed. ACGME requires that residents must first complete a year of general psychiatry or primary care before entering a CAP fellowship [10].

- *Post Pediatric Portal Program (PPPP)* is an ACGME-approved pilot program for pediatricians who complete a 3-year training experience following Pediatrics residency that allows them to be eligible for both General Psychiatry and CAP Board Certification. ABPN has assumed oversight of PPPP programs as of this writing.
- *CAP Tracks* refer to programs that integrate both general Psychiatry and CAP training into one 5- or 6-year program. Typically, programs that offer this option dedicate a small number of their Postgraduate Year (PGY)1 Psychiatry positions to the CAP Track for medical students who are confident in their desire to pursue CAP training [11].
- *Triple Board* programs offer combined training in Psychiatry, CAP, and Pediatrics during a 5-year program with Board-eligibility in all three disciplines.

Up-to-date information on CAP programs is listed in the Fellowship and Residency Interactive Database (FREIDA™) [12]. We recommend that trainees begin researching programs midway through the PG2 year if fast-tracking, or midway through the PG3 year if planning to complete 4 years of residency. Most CAP fellowships participate in the Psychiatry Fellowship Match through the NRMP. Applications are typically accepted beginning in July of each year, with interviews occurring throughout the late summer and early fall. Rank order lists are completed in mid-December, and Match results are announced to programs and applicants in early January. In some cases, trainees and programs

may come to an agreement prior to July known commonly as “early decision.” This typically occurs in special circumstances when a trainee is determined to attend a specific fellowship program without interviewing elsewhere (for example, a resident who wishes to be guaranteed a position at their home institution).

- *Consultation/Liaison Psychiatry* (previously known as Psychosomatic Medicine)

C/L psychiatrists evaluate and treat psychiatric symptoms in patients receiving medical or surgical treatment. They may work in inpatient or outpatient settings and focus on understanding how psychological problems influence physical health and how medical conditions are impacted by psychiatric factors. The Academy of Consultation-Liaison Psychiatry (ACLIP) maintains a list of C/L psychiatry fellowships. C/L Psychiatry fellowships participate in the Psychiatry Fellowship Match through the NRMP. Applications are typically accepted beginning in July of each year, with interviews occurring throughout the late summer and early fall. Rank order lists are completed in mid-December and Match results are announced to programs and applicants in early January.

- *Forensic Psychiatry*

Forensic psychiatrists provide consultation in both criminal and civil cases and work in settings in which psychiatry overlaps with the legal system, such as correctional settings or state hospital systems. The American Academy of Psychiatry and the Law (AAPL) maintains a list of Forensic Psychiatry fellowships. Trainees should begin researching programs and preparing their applications midway through their PG3 year. Forensic Psychiatry programs typically begin accepting applications earlier than other fellowships, in the late spring of each year. Programs each follow their own timeline with regard to applications, interviews, and offers, so applicants should contact programs well in advance.

- *Geriatric Psychiatry*

Geriatric Psychiatry focuses on the evaluation and treatment of psychiatric symptoms in

older adult patients. Fellows develop expertise in the relationships between psychiatry, neurology, and medicine while caring for patients who are nearing the end of their life. There is an emphasis on the complex interplay between biological factors such as medical comorbidities, the psychological aspects of aging, and common psychosocial stressors encountered by geriatric patients and their caregivers. The American Association for Geriatric Psychiatry (AAGP) maintains a list of Geriatric Psychiatry fellowship programs. Trainees should begin researching programs during their PG3 year. While each program has its own timeline for applications, interviews, and offers, applications are typically submitted during the beginning of the PG4 year.

ACGME-Accredited Fellowships in Other Specialties Open to Psychiatry Residents

This category includes fellowships that are accredited by ACGME Review Committees other than Psychiatry, but which psychiatrists can complete. After finishing the fellowship, psychiatrists can apply for Board-certification through specialty boards other than the ABPN.

- **Addiction Medicine**

Addiction Medicine Fellowships are accredited by the ACGME. Addiction Medicine differs from Addiction Psychiatry in that applicants may have completed residency training in psychiatry or one of 23 other primary specialties prior to beginning fellowship. Addiction Medicine programs have a comprehensive curriculum that includes the prevention and management of patients with substance use disorders primarily in a clinical medical setting. In contrast to Addiction Psychiatry programs, where the primary focus is on managing a patient's psychiatric and substance use disorders, rotations in most Addiction Medicine fellowships focus on the

intersection of a patient's medical and addictive disorders. Requirements regarding exposure to psychotherapeutic modalities and the use of psychoactive medications in patients with mental health disorders in an Addiction Psychiatry program may align better with previous training in a psychiatry residency program. However, psychiatry residents may consider an Addiction Medicine program instead if they intend to practice in an integrated primary care or cross-discipline setting such as within a consult team or in a pain management specialty. Board Certification in Addiction Medicine is granted by the American Board of Preventive Medicine (ABPM). Most fellowships accept applications through ERAS® and have recently started using the fellowship Match for interviews and acceptance. A list of programs is available through the American College of Academic Addiction Medicine (ACAAM).

- **Pain Medicine**

Pain Medicine specialists focus on the prevention of pain as well as the evaluation, treatment, and rehabilitation of patients with pain as a symptom or a disorder. Pain Medicine is a subspecialty of Anesthesiology, Child Neurology, Neurology, or Physical Medicine and Rehabilitation. ACGME permits residents who have completed training in any specialty to enter a Pain Medicine fellowship; however, requirements vary by program and may be more restrictive. Board Certification is granted by the American Board of Pain Medicine (ABPM). Information on programs can be found through FREIDA™. Most programs accept applications through ERAS®. Many programs participate in the NRMP's Anesthesiology Match, which begins accepting applications in December of the PG3 year, with ranking completed in September and Match announcements in early October. Pain fellowships may be highly competitive, and interested trainees should begin researching programs and strengthening their application as early as possible by identifying a mentor, engaging in scholarly activity, etc.

- Hospice and Palliative Care

Subspecialists in Hospice and Palliative Care manage the symptoms of patients with life-limiting illnesses, coordinate care with other providers, and address the psychosocial needs of patients and their families. Applicants must have completed a residency in Child Neurology, Family Medicine, Internal Medicine, Pediatrics, Physical Medicine and Rehabilitation, Neurology, or Radiation Oncology; or at least three clinical years of residency in Anesthesiology, Emergency Medicine, Obstetrics and Gynecology, Psychiatry, Radiology, or Surgery. Additional information and program lists can be obtained through the American Academy of Hospice and Palliative Medicine (AAHPM). Programs participate in the NRMP Medical Specialties Match. Applications are submitted beginning in July of a trainee's final year of residency, with applicant and program rank lists in mid-November and Match announcements in early December.

- Sleep Medicine

Sleep Medicine physicians evaluate and treat sleep disorders in an interdisciplinary setting. Sleep medicine fellows first complete a residency in Internal Medicine, Psychiatry, Pediatrics, Neurology, Family Medicine, Otolaryngology, or Anesthesiology. Board Certification is available from the relevant primary specialty's Board. Further information on this fellowship can be obtained from the American Academy of Sleep Medicine (AASM). Programs typically accept applications through ERAS® beginning in July of the final year of residency. Most Sleep Medicine fellowships participate in the Medical Specialties Match, in which programs and applicants create rank lists in mid-November and Match results are announced in early December.

- Brain Injury Medicine

Brain Injury Medicine physicians work to prevent, evaluate, treat, and rehabilitate individuals with brain injury from a variety of pathologies. Brain Injury Medicine physicians must first complete an ACGME-accredited

residency in Physical Medicine and Rehabilitation, Psychiatry, Neurology, Child Neurology, or Sports Medicine, though some programs may be more restrictive. Board-certification is available through the American Board of Physical Medicine and Rehabilitation in partnership with the ABPN. Programs typically accept applications through ERAS® in the summer with interviews occurring in September and October of an applicant's final residency year. Programs participate in the NRMP Rehabilitation Medicine Match, which typically announces results in mid-December. Additional information, including a list of programs, is available through the Association of Academic Physiatrists (AAP).

Non-Accredited Fellowships

Numerous institutions offer additional training in areas for which there is no ACGME accreditation. Typically, residents receive formal recognition for completing one of these fellowships, but there is no Board certification available. The following list of fellowships is by no means comprehensive, as many institutions continue to develop unique fellowships targeted towards clinical or research areas of need.

- Public Psychiatry

Public Psychiatry (also referred to as Community Psychiatry) focuses on patients with mental disorders who are typically treated through publicly funded programs. Public Psychiatrists focus on aspects such as the social determinants of health, co-occurring mental disorders and substance use disorders, and issues related to systems of care. The American Association for Community Psychiatry (AACCP) maintains a list of Public Psychiatry fellowship programs. Trainees should begin researching programs during their PG3 year, as programs typically begin accepting applications beginning in July of their PG4 year. Timelines vary between programs; thus applicants should directly contact programs to which they plan to apply.

- Behavioral Neurology and Neuropsychiatry
Behavioral Neurologists and Neuropsychiatrists (BNNPs) develop expertise in the evaluation and treatment of patients with complex neuropsychiatric and neurobehavioral disorders. Eligible applicants must complete a residency in either Psychiatry or Neurology prior to matriculation into fellowship. The American Neuropsychiatric Association (ANPA) offers guidance on applying to BNNP fellowship on its website. The United Council for Neurologic Subspecialties (UCNS) accredits BNNP programs, maintains a directory of accredited BNNP fellowships, and offers certification for graduates. There is no standardized application process. Trainees should begin researching programs midway through the PG3 year and should contact programs directly regarding the timeline for applications, interviews, and offers.
 - Women’s Mental Health and Reproductive Psychiatry
Fellowships in Women’s Mental Health and/or Reproductive Psychiatry focus on the mental health and well-being of women, their children, and families and are typically based out of universities or hospitals. Both the Maternal Mental Health Leadership Alliance (MMHLA) and the International Society of Reproductive Psychiatry have posted lists of Reproductive Psychiatry Programs. Programs typically require completion of a Psychiatry residency prior to matriculation, though at least one program is also open to nurse practitioners. There is no standardized application process, thus applicants should directly contact programs of interest. Of note, some C/L fellowships also offer a Women’s Mental Health or Reproductive Psychiatry track.
 - Cultural Psychiatry and Minority Mental Health (e.g., Hispanic Psychiatry, Transgender Psychiatry, LGBTQ+ Mental Health, Minority Health Policy)
A variety of non-accredited programs offer advanced training in culturally sensitive care for specific patient populations. There is no unified directory of programs and no standardized application process. Fellowships are typically affiliated with larger academic medical centers or federal agencies.
 - Global Mental Health
Global Mental Health fellowships may integrate mental health policy, epidemiology, research, and intervention. Programs vary in focus, curriculum, and matriculation requirements, but are often open to a variety of health professionals. There is no standardized application process.
 - Emergency Psychiatry
Emergency Psychiatry fellowships train physicians to effectively identify and manage behavioral health emergencies. There is no standardized application process, thus applicants should directly contact programs of interest.
 - College Mental Health
These programs may also be referred to as Student Mental Health. Fellowships focus on the treatment of transitional age youth or treatment in college or university settings. There is no standardized application process thus applicants should directly contact programs of interest.
 - Psychotherapy
Fellowship programs are available to a variety of mental health professionals in a specific psychotherapy modality, such as psychoanalysis and psychodynamic psychotherapy (often sponsored by a regional psychoanalytic institute or society).
 - Research
Many academic psychiatry departments and agencies such as the National Institute of Mental Health (NIMH) offer the option of additional training time focused on a specific area of research.
- Additional information and details on many of these fellowships can be obtained by reviewing the “How and Why to Apply” documents updated regularly by the Recruitment Committee of the American Association of Directors of Psychiatric Residency Training (AADPRT, www.aadprt.org). The documents are designed to provide medical students and residents with a wealth of

Table 19.1 Subspecialty organizations

| Organization | Website | Description |
|---|---|---|
| American Academy of Addiction Psychiatry (AAAP) | www.aaap.org | Information on applying to Addiction Psychiatry, program lists & other helpful information as well as educational resources |
| American Academy of Child and Adolescent Psychiatry (AACAP) | www.aacap.org | Maintains a wealth of information for medical students and residents interested in CAP |
| Academy of Consultation Liaison Psychiatry (ACLP) | www.clpsychiatry.org | Information on C/L fellowships, mentorship, applying to fellowship, and teaching resources |
| American Academy of Psychiatry and the Law (AAPL) | www.aapl.org | Information on applying to Forensic Psychiatry fellowship and list of programs |
| American Association for Geriatric Psychiatry (AAGP) | www.aagponline.org | Geriatric Psychiatry career information, mentorship opportunities, and more |
| American College of Academic Addiction Medicine (ACAAM) | www.acaam.org | Fellowship resource center contains up-to-date Addiction Medicine fellowship information |
| American Academy of Hospice and Palliative Medicine (AAHPM) | www.aahpm.org | Directory of Hospice & Palliative Care fellowships as well as guidance for fellows and programs |
| American Academy of Sleep Medicine (AASM) | www.aasm.org | Residency and fellowship information for careers in Sleep Medicine |
| Association of Academic Psychiatrists | www.psychiatry.org | Information on Brain Injury Medicine and list of fellowship programs |
| The American Association for Community Psychiatry (AACP) | https://sites.google.com/view/aacp123/home | Lists resources and curriculum related to Public Psychiatry |
| American Neuropsychiatric Association (ANPA) | www.anpaonline.org | Guidance on applying to BNNP fellowships |
| United Council for Neurologic Subspecialties (UNCS) | www.ucns.org | Maintains a list of certified BNNP fellowships |
| Maternal Mental Health Leadership Alliance (MMHLA) | www.mmhla.org | Houses a directory of Women's Mental Health & Reproductive Health fellowships |
| International Society of Reproductive Psychiatry | www.reproductivepsychiatry.com | Maintains a list of Reproductive Psychiatry programs as well as educational resources |

information on a variety of psychiatric subspecialties. Table 19.1 lists the websites for various subspecialty organizations, which often contain guidance on applying to fellowships, information on programs, and opportunities for interested trainees to attend meetings or become more involved.

Preparing Residents for Fellowship

The next step in appropriately preparing residents to pursue fellowship training includes providing them with high-quality exposure to different subspecialty areas. Consideration should be given to rotation/experience timing, content, supervision, and related didactics.

Ideally, subspecialty experience should occur within the first 2 years of postgraduate (PG) training. This gives trainees ample time to iden-

tify an area of interest, develop their application, seek letters of recommendation, and make an informed decision regarding fellowship training. As noted above, some CAP programs offer an “early decision” program in which applicants commit to a program before the end of the PG2 year. In these instances, exposure to CAP in the first year or early in the second year is essential for interested residents. While many programs schedule required rotations in Addiction, CAP, Consultation/Liaison, Forensic, and Geriatric psychiatry during the PG2 year, this approach may not be realistic for all programs. Some programs may have the ability to integrate subspecialty experiences into other core rotations, for example, residents may spend a portion of their outpatient rotation seeing child and adolescent patients or may gain forensic experience on a specialized inpatient unit.

With regard to rotation content, thought should be given to the quality of the rotation experience. While a rotation or experience may be brief, consideration should be given to the breadth of exposure within a given subspecialty. Exposing residents to only the most severe patients in an acute care setting may discourage them from pursuing a fellowship by limiting their experience. A carefully thought-out rotation utilizing all available treatment settings in a particular subspecialty, even within the first 2 years of residency training, could help broaden the training experience and exposure to the subspecialty. Many subspecialists practice within a range of treatment settings, and allowing residents to experience all the aspects of that subspecialty will go a long way in enriching their experience. For example, including both inpatient and outpatient components of a geriatric rotation provides a more balanced experience for all residents. While some programs may be tempted to reduce CAP months for residents planning to fast-track, this can actually be detrimental as residents are then expected to commit to a fellowship with only minimal exposure to CAP. The quality of role-modeling by faculty and the importance of mentoring residents during these rotations cannot be stated enough. One of the goals of any such rotation should be to foster excitement and enthusiasm for that subspecialty so that residents may begin to imagine a life-long career working in that area. This can be achieved by the faculty sharing their experience about their own training, day-to-day challenges and successes, and their love for the specialty that keeps them going. Involving residents in ongoing scholarly projects or helping them develop cross-discipline collaborations are some of the other ways to engage them early. Another way to engage and motivate residents is to encourage them to attend annual conferences organized by the national organizations for that subspecialty and connect them to mentors outside of their parent institution via these organizations.

Clinical supervision of residents by a subspecialty-trained faculty member also allows for unique mentoring opportunities and encour-

ages residents to gain a better understanding of the nuances that particular psychiatric subspecialty has to offer. Although formal clinical supervision by the subspecialty faculty may be limited to a particular rotation or elective, mentorship can be offered outside of these constraints and even during the first year of residency based on the resident's interest.

Didactics offered by subspecialty faculty are a wonderful way of introducing residents to the breadth of knowledge psychiatry has to offer. For those programs where residents only have subspecialty rotations beginning in their second postgraduate year, having subspecialists provide didactics in the first year could assist with fostering early mentor-mentee relationships. Programs with limited resources may consider numerous tele-didactic opportunities offered by subspecialists from other programs with more resources or access resources available through AADPRT. Some national organizations (see Table 19.1) provide extensive reading lists, slide sets, and even recorded presentations that can be used in place of or alongside more traditional didactics. For example, psychiatry case conferences are offered virtually by both the Academy of Consultation-Liaison Psychiatry and the American Academy of Psychiatry and the Law for the benefit of trainees who do not have access to these subspecialty resources at their home institutions. Similarly, the American Academy of Child and Adolescent Psychiatry recently began a journal club focused on adolescent substance use disorders which is open to all AACAP members and trainees. Smaller programs may also consider hiring faculty from another program to present didactics or teach psychotherapy, and may consider combining didactics for consecutive postgraduate years to save on faculty time. Local chapters of the American Psychiatric Association or the Veterans Affairs may be another source for recruiting teaching faculty. In recent years, most national conferences or organizations, such as the National Neuroscience Curriculum Initiative, have offered multiple asynchronous online learning modules that can be incorporated in the didactic curriculum.

Finally, senior residents or fellows can be tapped to teach junior residents as part of their teaching requirements.

For other ACGME-accredited and non-accredited fellowships, the role of elective and/or away rotations is critical. These rotations allow interested residents to experience firsthand the clinical care, structure, and content of training for that subspecialty. These away rotations are also critical in developing relationships and networks with subspecialists who can mentor, provide letters of recommendation, and assist with choosing the right fellowship program. Since these subspecialties generally have a narrow focus, away rotations allow residents to consider a lifelong career in that particular area or how to appropriately incorporate their subspecialty experience in practicing more broadly as a psychiatrist.

Along with acquiring formal and informal experiences in a particular subspecialty, residents should also be coached on how to build up their professional resume. Although not as competitive as most residency applications, some subspecialty programs are quite competitive, either due to the quality of their training, the breadth of experience they offer, or the geographical region they are located in. Those residents who prefer to train at a particular subspecialty program that is competitive, or who do not have much flexibility in the choice of fellowship programs, may want to stand apart from other candidates by having a solid profile. Any demonstrated interest in that subspecialty is helpful, and most fellowship programs look for this in an applicant's profile or during interviews. One of the ways to exhibit this interest is to participate in local, regional, and/or national professional organizations for that subspecialty. Most committees at these organizations strongly encourage resident representation. Residents could also be involved in special-interest groups or present their scholarly work at the annual meetings hosted by these organizations. Establishing professional relationships with mentors not only provide residents with exposure to a subspecialty but is also critical when requesting letters of recommendation. Equally important is a demonstration of community involvement, especially in that particular

subspecialty. This can take many forms, ranging from volunteering at the local shelter, providing free psychiatric consultation to the underserved, or being on the Boards of mental health organizations like the National Alliance on Mental Illness. Participating in advocacy work regionally or nationally is another way of showcasing commitment and leadership skills. Finally, many programs prefer some demonstration of scholarly activity, and residents who are considering applying to competitive programs may benefit from formal, published research work in that subspecialty.

There is much variability in the fellowship recruitment process as described above, and Program Directors should meet with interested residents well in advance to make sure that they are aware of the application timeline and other procedural considerations. Program Directors who engage in networking and frequent communication with fellowship program directors benefit by being aware of recent changes in fellowship application processes in other subspecialties and at other programs. Residents also benefit from networking opportunities to learn more about specific programs. Many subspecialty organizations host mentorship or recruitment programs as part of their annual meetings. Most fellowship programs have their own webpage affiliated with their parent institution, and a list of available fellowships can generally be found on each subspecialty national organizations' website (e.g., AACAP for child & adolescent psychiatry; ACLP for consult-liaison psychiatry, AAAP for addiction psychiatry, etc.), or on the FREIDA™ website. Interested residents should carefully peruse the application instructions on these subspecialty websites and reach out to respective Program Directors or coordinators in case of doubt.

Program Directors play an important role in evaluating whether a resident is a good fit for the subspecialty they have expressed an interest in. They should assess whether the resident has had an adequate amount of and sufficiently diverse clinical experience in that subspecialty to make an informed choice. Are they ready to take on the additional 1–2 years of training given their personal, family, or financial burdens? Have they

considered the practice setting and/or the income potential after graduation and does it align with their choice of subspecialty training? Would subspecialty training require moving to a different geographical area for a few years? Finally, are they meeting all of their current psychiatry milestones adequately to be successful in a fellowship program? A Program Director should, in collaboration with other faculty or with the residents' mentor, have these conversations early on with the resident especially if they feel their resident is not a good fit for the subspecialty they have expressed interest in pursuing. Critically evaluating and addressing some of these deficiencies may either confirm the resident's choice, or perhaps veer the resident to a more appropriate subspecialty. At the end of the day, a resident is still free to choose to apply to whatever subspecialty they are interested in. If the Program Director strongly disagrees with this choice, they may choose to communicate their concerns in their letter of recommendation.

In the case of CAP, program directors must also assess a resident's readiness to fast-track. In general, residents who are in good standing and who have met all rotation requirements for ABPN Certification in Psychiatry are eligible to fast-track. Program directors should also assess a resident's ratings based on the ACGME Psychiatry Milestones to identify any deficient areas. While there are no minimum Milestone requirements, areas in which a resident ranks significantly below their peers should be identified and appropriate feedback provided to the resident. For programs with an affiliated CAP fellowship, having input from the CAP Program Director during Clinical Competency Committee meetings may be helpful. Some programs may opt to form a committee focused exclusively on this area, such as the University of Kansas School of Medicine-Wichita Psychiatry Residency Program's Child and Adolescent Psychiatry Preparation and Mentorship Team (CAPPMT), which includes early support and ongoing mentorship for residents interested in CAP along with assessment of readiness for fast-tracking [13]. For residents with significant areas of concern, feedback should be given as early as possible to allow resi-

dents time to improve before fast-tracking. Feedback should be specific and include strategies for improving readiness, keeping in mind that many CAP applicants complete 4 years of residency before matriculating into fellowship and that the additional year of training is rarely viewed as a negative.

Residents applying to a particular subspecialty are usually good at communicating their interests during the actual fellowship interviews. However, residency Program Directors should identify residents who have less effective interview skills but are otherwise strong fellowship candidates and help them develop strategies to be able to put their best foot forward. This is essential even when interviewing virtually since interviews are typically where a candidate "makes it or breaks it." Conversations between residency Program Directors and residents preparing for fellowship interviews should include discussion about overall appearance, demeanor, appropriate versus inappropriate interview topics and questions, etc., and are especially important for residents who have clear deficits in any such areas.

Logistics

The final step in preparing residents for fellowship is making sure they meet all the residency requirements before they transfer over, and being aware of other logistic issues when applying to fellowships. All residents, and especially those who are "fast-tracking" to CAP, still need to complete all the required rotations and experiences for an appropriate amount of time as specified by the ACGME and ABPN. There are specific experiences that may be "double-counted" when a resident fast-tracks to a CAP fellowship. Program Directors should be aware of these; however, they should still strive to get the resident to complete all the requirements to avoid any future credentialing problems. For example, residents must successfully complete at least two, if not all three Clinical Skills Evaluations (CSE) in Psychiatry before fast-tracking into CAP fellowship; otherwise, they will be ineligible to sit for the Psychiatry Board Examination. Further, they

must have had clinical experiences in forensic, community, and emergency psychiatry along with the required number of rotations. Residents applying to fellowships other than CAP must complete all three CSEs and all other required rotations/experiences before beginning fellowship. An updated list of these requirements can be found in the ACGME program requirements for fellowships (<https://www.acgme.org/specialties/program-requirements-and-faqs-and-applications/pfcatid/21/psychiatry/>).

As a residency program director, it is important to pay attention to the differences in the application processes and timelines for each fellowship. As described above, some specialties offer an “early acceptance” toward the end of a resident’s PG2 year in the case of fast-tracking into CAP, or more commonly, toward the end of their PG3 year for other fellowships. Each fellowship has its own recruitment timeline, but most have some consensus within their subspecialty.

Conclusion

Psychiatry is a broad specialty with many areas of sub-specialization. However, there is a significant shortage of psychiatrists in the United States and an even more substantial need for appropriately trained subspecialists. This, combined with the inequitable distribution of subspecialists in primarily urban areas creates a challenge for many patients and families in accessing quality mental health care. Residency training programs in psychiatry are uniquely positioned to encourage and prepare trainees to pursue subspecialty fellowships. The first step is for the training leadership and faculty mentors to be aware of the various accredited and non-accredited fellowships, and other opportunities that exist for residents. The next step is to prepare residents appropriately for fellowships by skill- and resume-building. The final step involves making sure they have met all residency requirements and are aware of the logistics, timelines, and administrative differences between fellowships

to ensure a stress-free application process. Each fellowship program within a subspecialty may have differences, with some accepting applications via a common application process, while others utilize the ERAS® application system and the ERAS® timeline. Depending on the subspecialty, fellowships may participate in the Match (for example, most CAP fellowships) whereas many others may offer positions outside of Match (most of the other fellowships besides CAP and C/L). The “How and Why” documents referenced earlier in the chapter provide updated guidelines about each subspecialty recruitment process.

Applying for fellowships can be daunting for a resident, especially when it involves exploring a program other than their home institution or a program in a geographical region unknown to the resident. However, with support, it can also be an incredibly gratifying experience to have found the right subspecialty fellowship to train in.

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References

1. Beck A, Page C, Buche J, Rittman D, Gaiser M. Estimating the distribution of the U.S. psychiatric subspecialist workforce. University of Michigan Behavioral Health Workforce Research Center. Ann Arbor, UMSPH; 2018. <https://www.healthworkforceta.org/research-alerts/estimating-the-distribution-of-the-us-psychiatrist-subspecialistworkforce/>.
2. Mann A, Tarshis T, Joshi SV. An Exploratory Survey of Career Choice, Training, and Practice Trends in Early Career Child and Adolescent Psychiatrists and Fellows. *Acad Psychiatry*. 2022;46(1):45–9. <https://doi.org/10.1007/s40596-019-01167-y>. Epub 2020 Jan 3. PMID: 31900876.
3. ACGME. Data resource book, academic year 2019–2020. Accreditation Council for Graduate Medical Education; ISSN 2473-8670. <https://www.healthworkforceta.org/research-alerts/estimating-the-distribution-of-the-us-psychiatrist-subspecialistworkforce/>.
4. APA. 2019 Resident-Fellow Census. American Psychiatric Association. <https://www.healthworkforceta.org/research-alerts/estimating-the-distribution-of-the-us-psychiatrist-subspecialistworkforce/>. Accessed 14 Feb 2020.

5. NRMP. Results and data: 2020 main residency match. National Resident Matching Program, Washington, DC. <https://www.nrmp.org/main-residency-match-data/>.
6. Pheister M, Cowley D, Sanders W, Keeble T, Lu F, Pershern L, et al. Growing the psychiatry workforce through expansion or creation of residencies and fellowships: the results of a survey by the AADPRT Workforce Task Force. *Acad Psychiatry*. 2021;1–7.
7. Agapoff Iv JR, Olson DJ. Challenges and perspectives to the fall in psychiatry fellowship applications. *Acad Psychiatry*. 2019;43(4):425–8.
8. Becker MA, Bradley MV, Montalvo C, Nash SS, Shah SB, Tobin M, et al. Factors affecting psychiatry resident decision to pursue consultation-liaison psychiatry or other subspecialty fellowship training. *J Acad Consult Liaison Psychiatry*. 2021;62(1):38–45.
9. ACGME. ACGME program requirements for graduate medical education in psychiatry; effective 1 July 2021.
10. ACGME. ACGME program requirements for graduate medical education in child and adolescent psychiatry; effective 1 July 2021.
11. Sengupta S, Jacobson S, Williamson E. Straight on through: the current state of child tracks in psychiatry residency. *Acad Psychiatry*. 2022;46(1):65–9.
12. AMA. American Medical Association; FREIDA. <https://freida.ama-assn.org/>.
13. Bowman C LM, Engel K, Klaus N, Netson K, Jones K, Macaluso M. Assessing readiness for fast tracking into child and adolescent psychiatry fellowships. AADPRT Annual Meeting 2019.



Mentoring and Career Counseling for Residents

20

Douglas Gray and Kristi Kleinschmit

Introduction

In Greek mythology, Odysseus went off on a 10-year Odyssey. He entrusted his friend “Mentor” to raise his son [1]. Mentor did his job well! In modern terms, faculty mentoring of psychiatry residents involves a relationship, good communication, goals, and the resident benefiting from the experience and wisdom of the faculty member.

Mentoring should be differentiated from other developmental relationships. There is general agreement that mentoring has both relational and developmental context, has a career development function, and includes a number of specific phases [2]. The phases of mentoring have been well described. These include an initiation phase where a possible mentoring relationship is explored, a cultivation phase where the majority of the work takes place, a separation phase where the mentee’s autonomy increases, and a redefinition phase where the mentor and mentee become mutually supportive colleagues [3]. A good men-

toring relationship is a trusting, close, and meaningful relationship, which occurs within a professional context. The process of mentoring has many possible components, including befriending, providing guidance, teaching, coaching, nurturing, sponsoring, and helping with career development [2]. Mentors may advocate for their resident mentee, and use their experience to alert the mentee to potential obstacles they may face. Within this context, the goal of mentoring psychiatry residents is to help them with their personal and professional development as they work towards graduation and to help them build the skills they need to take on a challenging career. Although there are a number of definitions of mentoring in the literature, definitions are expanding and changing over time. Inclusiveness, equity, and social justice have recently received more focus as a component of the mentoring relationship.

This chapter will review several aspects of mentoring residents and fellows in psychiatry graduate medical education (GME) programs. These include the multiple roles that program directors have in mentoring residents and in leading the administration of mentoring programs, the program director’s role in helping struggling residents, and the limits of program director mentoring when a resident requires a disciplinary process. We will cover mentoring done by faculty, chief residents, and experienced resident peers; group mentoring as well as individual mentoring;

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and mentoring specific to career development. We will discuss mentoring for specific groups of trainees, such as underrepresented resident groups, rural track residents, and residents with a strong interest in research. We will look at how good mentoring relationships begin and end and we will discuss mentoring failures. Finally, we will discuss future directions for mentoring research.

Program Director Mentoring Relationship Considerations

The relationship between the program director and the residents in the training program is complicated, and often dictated by the leadership style of the program director. Are the residents employees or students? For tax purposes, in 2011, the US Supreme Court decided that residents are employees [4], yet residents are clearly involved in many daily educational activities and are closely supervised by faculty. Program directors may alternatively see themselves as leaders providing administrative skills to a complex organization, with clear employer–employee boundaries, or as faculty, master educators, resident mentors, role models, and sometimes “surrogate parents.” These overlapping roles (employer, mentor, and parental figure) can complicate mentoring if/when residents share aspects of their personal life. Therefore, embarking into the mentoring dyad requires clear communication between the program director and the trainee to determine whether an outside mentor would be more appropriate and effective.

Mentoring the Resident Group

While every program director mentors residents in some aspect of their training, in a small training program, program directors might have time to get to know each of the residents very well and to assign them individually to specific mentors based on their needs and interests. However, in a larger program, the program director role should be focused on their administrative role, with the

goal of organizing a formal mentoring program for the resident group.

Program directors meet with the resident group on a regular basis. This affords them multiple opportunities to mentor the residents as a group. The director has opportunities to explain many resources to the residents, which should include wellness resources, as well as how to get help for mental health problems. Such conversations about wellness resources should occur in a tone that makes it acceptable to seek help when needed. The program director can also inform the residents about local and national conferences, advocacy organizations, research opportunities, and national awards or programs that suit individual interests. The program director has many opportunities to impart their philosophy of resident education, explain why they chose the educational mission of the department, and explain how the department can support residents to build their careers. The program director can educate the residents about mentorship relationships, and the goals and expectations of mentorship programs within the residency program. Regular meetings with the resident group or subgroups provide many chances to demonstrate the program’s dedication to helping each resident get the training that they need to be successful. During appropriate times, the program director should also discuss normal disciplinary procedures, reassure the residents that few of them will have trouble, and explain that the goal of these procedures is to support and graduate a competent and successful resident. If residents have the sense that they are being taken care of, that they will be warned well before any serious trouble, and that the program director has their back and will fight for them to succeed, the director can earn the trust of the resident group.

Clarifying Program Administration Mentoring Roles

Program administration, including program directors and associate/assistant program directors, could be considered the “generalists” of the mentoring faculty. In their administrative roles,

especially within the context of Accreditation Council for Graduate Medical Education (ACGME) required twice yearly meetings, program directors help residents identify career and research interests, can guide choices of electives and conference attendance, and can serve as connectors to other faculty members with similar academic or career interests. Chief residents can sometimes serve as mentors for personal life issues and can also serve as problem-focused “coaches,” to help residents further develop specific skills or address learning deficits [5]. Programs can help connect residents to specific faculty members as additional mentors, especially in the context of specialized academic or career interests, such as identifying an adjunct faculty member in the community who is an expert in preschool mental health. Faculty mentors can also serve as coaches for performance issues, such as working on interviewing skills or psychotherapy skills.

Faculty Mentoring of Residents

While the ideal would be a formal mentoring program developed within the training program, there are a number of ways to set up a good mentoring/career counseling program. There are several questions to consider in doing this. For example, should mentors be assigned early in training, or is it best for residents to be assigned an advisor, who is responsible for connecting residents to an appropriate mentor as their professional interests develop? Should residents be allowed to choose their own mentors? What are the mentoring roles of chief residents and senior residents? Where can non-physician faculty play a role in mentoring? For example, can a resident be assigned a psychologist mentor, if the resident wants psychotherapy to be a key part of their future career? The answers to these questions will likely depend upon the individual resources of the program. For example, one program has a single chief resident, while another has three chief residents and a junior chief. One program has a strong psychotherapy program run by psychologists who are psychiatry faculty, while

another program has psychiatrists with strong expertise in psychotherapy.

There are advantages with the training program assigning mentors, and some benefits when residents choose their own mentors. Studies have suggested that mentees prefer to have a choice in their mentors, feeling it increases the likelihood of having good “chemistry” with the mentor [6, 7]. However, that may be difficult in a small program with limited faculty availability. In programs with a large faculty group, residents may not have the opportunity to interact with faculty who have experiences that align with their career or professional/personal goals, and could miss out on a valuable relationship. Assigning mentors (or advisors) early in training demonstrates that mentorship is a priority for the training program and ensures that all the residents at least start out with a mentor/advisor. Assigning mentors is especially helpful for underrepresented groups (see Mentoring Across Differences section of this chapter). Residents can also add mentors of their choosing as their needs develop, or transition to new mentors. Programs may also wish to use peer mentors, either one-on-one or in the context of group mentoring. Although additional studies are needed regarding peer mentorship, non-psychiatry residency peer mentorship programs have increased scholarly work, improved communication skills, and enhanced resident group cohesion [8]. Whatever approach the program chooses, the goal is to find a good “fit” for an individual resident, and to help them develop and grow with their career and personal needs.

One aspect of a successful faculty-resident mentoring relationship mentioned repeatedly in the literature is the need for residents to take an “active role” in the process [9]. How can a resident go about this? Residents can work with the faculty mentor to develop specific goals for the relationship, which can be reviewed and changed as needed over time. These goals might be educational, related to career development, or personal. When goals are set by the mentor and mentee, the mentor must always keep in mind that the goals should come from the mentee, and not be projections of the mentor’s goals for the mentee. The faculty member needs to find a middle ground

between pushing the mentee towards their goal at times, while keeping the mentee from becoming overwhelmed. In addition, the mentor must remain flexible, as the mentee's ideas and goals will change over time. In psychiatry, the mentee's own background, culture, and experiences play a role in their practice of psychiatry and development into a fully trained and competent psychiatrist. It is not surprising that mentors often learn about the mentee's personal history, since this may be important in understanding aspects of the resident's career development. When the faculty member is supportive and available to the resident, and gains their trust, the potential for understanding and growth is accelerated. The benefits of these relationships are great, although in any close interpersonal relationship, the mentee and especially the mentor must be aware of relationship boundaries. This is especially true if either the mentor or mentee is struggling in their own personal life. Self-awareness and discussion of boundaries as needed is important, and like boundary concerns with patients, should be discussed in the relationship or with a third party early on before any lines are crossed.

Another frequently cited aspect of successful mentoring programs by faculty is that they are aligned with institutional and departmental goals and that faculty development regarding mentoring is offered by the program [10]. This is especially true with mentoring programs for women residents and residents who are underrepresented in medicine.

Research or Scholarly Mentoring

Residents who are clearly interested in an academic career with research as an important component will need experienced mentors with research projects, savvy, connections, and a desire to develop the next generation of faculty researchers. This type of mentoring is very resource dependent. In a program where the number of senior faculty researchers/mentors is limited, faculty will only be interested in mentoring residents who make a strong commitment to

research. This could mean residents in an MD/PhD research track, or residents with more limited research background who are willing to make a significant commitment of time and money and sacrifice to dedicate themselves to research projects. For example, a resident who is serious about research should be willing to forgo moonlighting, work weekends on research projects, and present data nationally at conferences. Novel approaches include resident group mentoring with a research curriculum led by research faculty [11]. Well-resourced research programs may be able to provide residents who are ambivalent about research with some research experience. Programs with more limited resources may focus on giving residents interested in clinical careers a didactic general understanding of research, while having residents complete scholarly review papers or quality improvement projects, including presentations to resident peers and faculty.

Mentoring in Rural Tracks

Residents in rural tracks may encounter limited mentoring resources for a variety of reasons. There are limited full-time faculty at rural training sites, which means more of the adjunct faculty might have to serve as mentors. For career development opportunities, there may be a lack of access to subspecialists and specialized psychiatric systems of care. Rural residents need mentoring specific to rural practice, including a curriculum covering rural systems of care, tele-psychiatry, and the business side of rural practice [12]. Residents and faculty in rural tracks are often more autonomous and self-directed in their educational pursuits, but have to find ways to avoid becoming isolated. Rural supervisors have specialized knowledge and experience regarding working in under-resourced areas. For rural tracks, when residents want to pursue a specialized interest, a program should consider setting up a formal mentorship program to combat any limitations. Specialists from the sponsoring institution can be recruited and mentoring sessions can be conducted virtually. Rural residency

tracks may also be an opportunity for group mentoring, as many of the challenges with rural care and opportunities for career/ professional development should overlap amongst trainees.

National Mentors

Residents who have a strong interest in professional service on a national level, or residents who would benefit from a mentor in a specialized area not available within their training program, should be advised to join a national organization that best fits their needs. National organizations might include the American Psychiatric Association (APA), or more specific organizations related to the resident's interests. For example, a resident who plans to apply for an addiction fellowship in the future might join the American Academy of Addiction Psychiatry (AAAP). National organizations have a reduced fee schedule for resident memberships to make membership more affordable. Most organizations have mentoring programs for residents and specialized organizations have mentoring programs that include fellows. Once a resident has joined a national organization, separate from the formal mentoring programs, residents can apply via the organization's website to join a committee, caucus, or workgroup suited to their interests. They might first check to see if their psychiatry department is able to help fund travel and/or accommodations for resident roles on national committees. If the resident is not selected as a resident member for their committee of interest, they can still attend the organization's national conference on their own, and then attend the committee meeting as a non-voting visitor. For example, take a resident who has a strong interest in serving children in the deaf community as part of their larger plan to become a child psychiatrist. The resident should be encouraged to join the American Academy of Child and Adolescent Psychiatry (AACAP), paying the reduced membership fee. Then he or she could use the AACAP website to sign up for their formal mentoring program. Alternately, the resident can use the AACAP website to try and join a committee specific to

their career interest and needs. The resident in this example could apply to join the AACAP "Deaf/Hard of Hearing and Blind/Low Vision Committee." If they are selected as a resident member of the committee, they can talk with their program director and/or department to see if they can help fund attendance at the annual AACAP Conference, where the committee meets. There are many benefits of serving on a national committee, and psychiatric organizations encourage and welcome resident participation. If the committee does not currently have an opening for a resident member, the resident in this example would still have the option of attending the conference on their own, attending the committee as a visitor, and using the opportunity to meet potential mentors. The resident could also stay on the waiting list for a committee opening. This type of networking offers the resident the experience of meeting and sharing ideas with psychiatry specialty experts and national leaders, and opens up the possibility of new mentoring relationships.

Mentoring Lessons from Business Environments

The literature on mentoring in business schools and workplaces offers some interesting insights. For example, in the business world, they have known for a long time that mentoring has many benefits, including increased psychological safety within the organization [13]. Furthermore, the quality of mentorship for top leaders/CEOs has been associated with increased organizational innovation [13]. The degree of increased innovation is mediated by two factors: psychological safety within the organization and the cognitive adaptability of the company leader. The greater the perception of psychological safety and the less cognitive adaptability of the leader, the greater the effect of mentoring. Psychiatry training institutions primarily focus on mentoring trainees and new faculty, and may want to consider a focus on mentorship programs for top leaders as part of their normal custom and culture. In a study of Chinese business training pro-

grams, educational leaders with a “bottom-line” mentality (prioritizing organizational goals over resources for teacher development) had negative effects on teacher innovation and psychological safety, although this was moderated somewhat when organizational values aligned with the teacher’s values [14]. Multinational research has shown that females in business, compared with males, put a greater emphasis on the organizational values within their workplace [15]. Participative leadership versus bottom-line leadership improved psychological safety, cohesiveness, communication, and team functioning. In residency training programs, the program director mentors the resident group with hopes of greater cohesion. Business research shows that employee productivity improves as “employee cohesion” increases, and this becomes more vital as the intensity of the workload increases [16]. “Task cohesion” is a separate but strong determinant of performance in a business environment [17]. Task cohesion is primarily influenced by strong leadership and consistent communication of goals. Program directors who want to shape the philosophy of a program will need to develop and continually communicate training program priorities to both faculty and trainees. In a study of a business entrepreneurship program, students who were assigned mentors who were entrepreneurs were more likely to become entrepreneurs, more likely to choose an early-stage venture, and were more likely to select better performing ventures [18]. This seems to validate the need for specific mentors for specific types of students/trainees in any setting.

Career Development

To help the residents with career development, program directors have multiple approaches at their disposal. Using their connections with department faculty, adjunct faculty, and outside faculty from other institutions, program directors can connect residents with faculty with similar interests to serve as career mentors. Mentorship has been shown to be influential in selecting careers, especially in choosing to pursue a career

in academic medicine [19]. With mentoring early in residency, the career mentor’s role is to help with the career and professional development of the resident, not to be a recruiter into the faculty member’s specific interest area. Mentors should be open and encouraging as residents may change their interests over time. Mentoring later in residency may involve facilitating connections with other faculty members and/or local and national colleagues specifically to match the resident’s interests with the interest and skills of the prospective mentor.

Program directors can help residents pursue scholarly work within their desired career field and identify opportunities for electives within this field to further clarify their interest and also to help make professional connections. For example, a resident interested in addiction psychiatry should be encouraged to take addiction electives that can give them a broader perspective compared with the required rotation, or explore experiences with specific subpopulations they might be interested in, such as pregnant women with an opioid use disorder. A resident exploring a career as an academic educator could be connected with teaching faculty within the medical school to help develop medical student curriculum or lead didactics or case-based learning groups. Near the end of training, when residents have settled on their career choice, mentors may want to encourage a “Junior Attending” rotation, if the program offers this type of experience. Junior attending rotations provide the resident greater autonomy and decision-making compared with previous rotations, while providing ongoing supervision to reinforce their skills and confidence. For residents who have an interest in leadership or administration, program directors can sponsor their residents by recommending them for leadership positions within their institution, as well as identify and recommend them for national scholarships, committee memberships, and travel awards to further national networking in their desired field. Programs can develop didactics that support career development in a variety of ways. Programs can ask practicing psychiatrists in the community and at other institutions to speak to the resident group, especially

about career opportunities that may not be available at the home institution. Programs can provide support and review for the development of a Curriculum Vitae (CV) and cover letter as residents are applying for jobs, and provide “near-peer” coaching from recent graduates about the job market and “lessons learned” from recent job searches. Finally, programs can help connect residents with local professional organizations, job fairs, and expanded networking opportunities.

Mentoring Across Differences

Women and physicians who belong to ethnic and cultural groups underrepresented in medicine (URM) continue to be underrepresented in academic medicine, as well as in faculty leadership positions [20]. These groups also receive less mentorship. Mentoring has been demonstrated to be important for career development, job satisfaction, retention, publications, and pursuit of academic careers. With women and URM physicians less present in senior leadership and faculty positions, it can sometimes fall on women and URM junior faculty to be tasked with mentoring residents from these groups. However, multiple studies have shown that mentoring can be effective across differences, and that mentor activities that are most effective are providing career guidance, offering support, actively listening, being open and honest, and focusing on work–personal life balance [10].

To combat the lack of mentorship for women and URM physicians, residency programs may wish to implement formal mentorship programs. However, faculty development surrounding mentoring skills, especially in the context of navigating differences, is integral to the success of cross-differences pairings. One such effective training is the “Mentoring Across Differences” sessions developed at Brigham and Women’s [21]. Residents may also benefit from access to persons with shared backgrounds and experiences for additional support or mentorship. Program directors could connect residents with female or URM faculty in other departments or at other institutions to serve in this role. Many

higher education institutions are developing more organized supports for URM, women, and LGBTQ medical students and residents/fellows, so reaching out to the medical school or Graduate Medical Education (GME) office could help facilitate these connections. Finally, programs may also wish to connect their residents with national support networks to look for expanded mentorship opportunities that may continue even after residency training [20]. See Table 20.1 for a list of such national networks.

Studies have also identified a critical need to create safe and inclusive environments for LGBTQ faculty and trainees. In a study using data from surveys and focus groups, including 252 LGBTQ health professionals and trainees, only 46% were open about their LGBTQ status professionally, although 79% were involved with research, clinical, or community efforts specific to LGBTQ populations [22]. Thirty-one percent of this LGBTQ study sample identified as an ethnic or racial minority and 57% were physicians or residents. Forty-two percent of LGBTQ faculty and trainees avoided disclosure of sexual orientation in the past year due to fear of discrimination or harassment. Another study looking at the experience of LGBTQ health professional trainees, including residents, demonstrated that 72% of trainees felt it was very important to have at least one LGBTQ mentor [23], while 59% felt an LGBTQ mentor was needed for career development. LGBTQ mentors were not available in some programs, while other programs offered formal mentoring programs and peer-support programs. The most important results of LGBTQ mentoring identified in surveys and focus groups were enhanced academic productivity and personal development. Interestingly, 81% of the LGBTQ faculty and residents surveyed were interested in academia, making LGBTQ role modeling and retention critical to academic faculty growth) [22].

Generational differences have the potential to negatively affect mentoring. There are many myths, stereotypes, and misunderstandings about each generation, especially regarding “Millennials.” Programs may wish to offer faculty development regarding generational dif-

Table 20.1 National Mentorship Possibilities for URM/Women/LGBTQ+ Psychiatry Residents

| | |
|---|--|
| American Psychiatric Association: | American Academy of Addiction Psychiatry |
| <i>Join the Minority and Underrepresented (M/UR) Caucuses:</i> | <i>AAAP Mentoring Program</i> |
| American Indian/Alaska Native/ Native Hawaiian | Join or Start a Chapter of the following medical student organizations: |
| Asian-American | <i>Student National Medical Association</i> |
| Black | <i>Latino Medical Student Association</i> |
| Hispanic | Other National Organizations |
| International Medical Graduates | <i>GLMA: Health Professionals Advancing LGBTQ Equality</i> |
| LGBTQ | <i>National Research Mentoring Network</i> |
| Women | Women’s organizations: |
| American Academy of Child and Adolescent Psychiatry | <i>Association of Black Women Physicians Sister to Sister Mentorship Program</i> |
| <i>American Academy of Child and Adolescent Psychiatry (AACAP) Mentorship Network</i> | <i>American Medical Women’s Association</i> |
| <i>AACAP Committees (join or connect with members):</i> | <i>Association of Women Psychiatrists</i> |
| Medical Students and Residents | <i>Physician Moms Group (mypng.com)</i> |
| Indigenous Native Child and Adolescent Diversity and Culture | |
| Global Mental Health and International Relations | |
| Religion and Spirituality | |
| Sexual Orientation and Gender Identity Issues | |
| Women in Child and Adolescent Psychiatry | |

ferences, to work on combatting these misperceptions and enhance the ability of faculty to mentor across generations. One such example may be reframing a young faculty member’s frequent emails giving updates about their research project as their learned communication method and preference for quick feedback instead of being seen by a senior faculty member as evidence of disorganization or having limited boundaries [24].

Mentoring Residents in Personal Crisis

During a personal crisis for a resident, the program director will need to get involved quickly, either with the resident directly, or with other residents, faculty, or even the resident’s family members. For example, a resident in a car accident may be very stressed for many reasons, but concern about who will take care of his/her patients on a busy clinical service can be relieved by the program director. When a resident is dealing with a death in the family, or a relationship

crisis, assessing their ability to move forward and function, especially if they want to continue on with their rotation, is vital. A resident who is not performing well due to grief, physical or emotional pain, or any other reason, may find that taking leave under the Family Medical Leave Act (FMLA) is a wise choice. It is better for the resident to take a break from duties and return when their performance is up to par again, than to harm their self image and clinical reputation, or put patients at risk. Although some residents in crisis are good observers of their own status, others may need guidance and support to come up with an immediate plan. Explaining a resident’s temporary absence or reduced workload to the resident group, some of whom have to pick up their duties, depends on the nature of the crisis and the resident’s willingness to share their difficulties with the resident group. This is complex and decisions are best approached on a case-by-case basis, often with the input of select training program leaders and current supervisors. The chief residents can also have a key role in some situations. The balance is between keeping the resident’s situation as confidential as possible, while

making sure that the needs of the resident and the clinical needs of their patients and the resident call schedule are appropriately addressed.

Mentoring and Disciplinary Issues

The dual role of the residency program director makes mentoring and boundary issues complicated. For residents who function well in the program and make time to contribute to the program while supporting their fellow residents, relationship boundaries can be broader. For residents who struggle in their training and require a lot of support, and especially those who may face disciplinary measures by the program, monitoring and separating specific roles with boundaries becomes very important. For example, if a resident is disciplined and appeals the decision, some residents will choose to focus on their relationship with the program director as the primary issue, rather than focusing on their own difficulties with knowledge, skills, or relationship issues. While the program director must be supportive of the resident who is struggling, it is best for that resident to have other experienced faculty providing supervision and evaluation of the resident's skills, as well as a separate faculty member or chief resident providing advocacy. This allows for separation of the disciplinary and evaluation and advocacy roles, protecting the resident, the program director, and the program. During a disciplinary process, a good program director not only outlines specific problems and the goals the resident needs to reach but also outlines specifically what the training program will do to help the resident to succeed.

Mentoring the Disruptive Resident

The infrequent resident with a difficult personality and a seeming need to defy training program leadership and to create a split between the program director and the residents is the most difficult problem an education leader must face. Initially, it is important to understand the perspective of the resident and to see whether open

and clear communication can solve some of the issues. If that fails, limits may have to be set. In these situations, the program director will need the support of the training team and department leadership (education vice-chair and/or department chair), and possibly support from Risk Management and/or the Designated Institutional Official (DIO). Distancing the program director from any roles supervising or grading the resident's performance will help protect everyone involved. If disciplinary procedures are needed, program directors should never meet with a resident alone. Include the resident's advisor/mentor, another program director from the department, or one of the department leaders. Have the Graduate Medical Education (GME) office review any written disciplinary procedures and edit any letter of corrective action or probation letter. Procedures for managing resident performance issues are described in more detail elsewhere in this book (see Chap. 18). One of the most difficult problems in this situation is that the program director cannot say a word to the resident group about the problem resident, while the resident can say whatever they please. This can lead to "splitting" sides within the program. If the resident group confronts the program director about the situation, of course, he/she has to let the residents know that they are not allowed to talk about individual residents with the group. However, the program director is allowed to talk, in general terms, about their desire for every resident to succeed, about the types of help that any resident in the program can/will receive if they ever struggle, and the disciplinary process which involves many layers and chances to find the correct course. Leadership does not always mean confronting splitting head-on.

While some disruptive residents fail to function well in their program, others perform well clinically, and do well in exams. It becomes clear that they are on track to graduate, despite the frustration of the training team, the chief residents, and/or their resident colleagues, because they are talented. The training team may be frustrated because problems of professionalism are corrected just enough to get by, the resident peers may feel that the disruptive resident has not been

honorable or fair in covering on call duties, and the chief residents may be disappointed with the effects on the resident group. The key for the program director is to not let themselves act on a desire to punish the disruptive resident beyond a measured response to individual incidents. The need to punish out of frustration may backfire into additional investigations or a civil lawsuit, creating a forest fire out of a brushfire. A steady ship, a measured response, and time will provide the best response.

How Does Mentoring End?

Mentoring may end when the mentor refers the resident to a new mentor who has the right experience to help the resident with their new career goal or specific skill set (Example: a resident becomes very interested in eating disorders). In many cases, when the fit was never good between the mentor and mentee, or when their interests have diverged too much, neither unsatisfied party makes the effort to schedule, so the relationship fades. Some mentoring relationships continue on after graduation, especially if the mentee joins the faculty, wants help transitioning into practice, or will continue to work with their mentor on research. Still other mentor–mentee relationships morph into collegial relationships and sometimes close friendships. The colleague who was the mentor brings more experience and savvy to the relationship, but the young faculty member has more recent training in new psychotherapeutic or psychopharmacologic techniques, is typically better with new technology, and brings experience working in other hospitals or clinics associated with the training program.

Mentoring Failures

Current studies indicate that mentoring failures result from personality differences, communication difficulties, lack of commitment from either

person, or mentors who lack experience. Most of our knowledge of failed mentoring comes from a study of faculty mentees, which may or may not be applicable to resident mentees [10]. In some research mentorship relationships, failure can also result from competition (actual or perceived) and occasionally from intellectual property disputes. In the hierarchy of medicine, it might be difficult for a resident to leave a mentoring relationship that is not helpful, or to change mentors. The program director or faculty member leading the mentoring program needs to help residents transition to a mentor who is a better “fit,” in a way that does not stigmatize the previous faculty member or resident for the failed relationship.

Future Directions

Research on how we educate and mentor residents must develop to match other areas of research at academic institutions. Educational research should have equal status with other types of important research and should count towards promotion. Future research on mentoring should include a control group not receiving formal mentoring, or at a minimum, a comparison group [19]. For example, an informal assessment of the status of a program could begin the year before a formal and well-organized mentoring program begins, as a means of comparison. In addition, different approaches to mentoring should be compared. We also need to learn more about how to prevent mentoring failures.

Since mentoring is an important component in all of health care education, and in many professions outside of medicine, including business workplaces, we need to continue to monitor the research done outside of psychiatry departments, outside of health sciences, in many other settings. The future of mentoring research should consider multidisciplinary approaches and sound study designs. Designing a mentoring study across multiple medical schools, by involving

departmental and school leaders, might yield the kind of large scale and detailed studies that will help us to learn more about the specific components of mentoring that are the most effective.

References

- Mentor (*Odyssey*). In: Wikipedia [Internet]. 2021 [cited 2021 Sep 9]. Available from: [https://en.wikipedia.org/w/index.php?title=Mentor_\(Odyssey\)&oldid=1036400376](https://en.wikipedia.org/w/index.php?title=Mentor_(Odyssey)&oldid=1036400376)
- Mullen CA, Klimaitis CC. Defining mentoring: a literature review of issues, types, and applications. *Ann NY Acad Sci*. 2021;1483(1):19–35.
- Kram KE. Phases of the mentor relationship. *Acad Manag J*. 1983;26(4):608–25.
- Mayo Foundation for Medical Education & Research v. United States. In: Wikipedia [Internet]. 2020 [cited 2021 Sep 9]. Available from: https://en.wikipedia.org/w/index.php?title=Mayo_Foundation_for_Medical_Education_%26_Research_v._United_States&oldid=953214127.
- Khan NR, Rialon KL, Buretta KJ, Deslauriers JR, Harwood JL, Jardine DA. Residents as mentors: the development of resident mentorship milestones. *J Grad Med Educ*. 2017;9(4):551–4.
- Jackson VA, Palepu A, Szalacha L, Caswell C, Carr PL, Inui T. “Having the right chemistry”: a qualitative study of mentoring in academic medicine. *Acad Med J Assoc Am Med Coll*. 2003;78(3):328–34.
- Williams LL, Levine JB, Malhotra S, Holtzheimer P. The good-enough mentoring relationship. *Acad Psychiatry J Am Assoc Dir Psychiatr Resid Train Assoc Acad Psychiatry*. 2004;28(2):111–5.
- Pethrick H, Nowell L, Paolucci EO, Lorenzetti L, Jacobsen M, Clancy T, et al. Peer mentoring in medical residency education: a systematic review. *Can Med Educ J*. 2020;11(6):e128–37.
- Sambunjak D, Straus SE, Marusic A. A systematic review of qualitative research on the meaning and characteristics of mentoring in academic medicine. *J Gen Intern Med*. 2010;25(1):72–8.
- Straus SE, Johnson MO, Marquez C, Feldman MD. Characteristics of successful and failed mentoring relationships: a qualitative study across two academic health centers. *Acad Med J Assoc Am Med Coll*. 2013;88(1):82–9.
- Posporelis S, Sawa A, Smith GS, Stitzer ML, Lyketos CG, Chisolm MS. Mind the gap: promoting careers in academic research to psychiatry residents. *Acad Psychiatry J Am Assoc Dir Psychiatr Resid Train Assoc Acad Psychiatry*. 2014;38(2):185–90.
- Bonham C, Salvador M, Altschul D, Silverblatt H. Training psychiatrists for rural practice: a 20-year follow-up. *Acad Psychiatry J Am Assoc Dir Psychiatr Resid Train Assoc Acad Psychiatry*. 2014;38(5):623–6.
- Moore JH, Wang Z. Mentoring top leadership promotes organizational innovativeness through psychological safety and is moderated by cognitive adaptability. *Front Psychol*. 2017;8(MAR):1–10.
- Wan W, Liu L, Long J, Fan Q, Wu YJ. The bottom-line mentality of leaders in education and training institutions: where to go for innovation? *Front Psychol*. 2021;12:1–14.
- Riisla K, Wendt H, Babalola MT, Euwema M. Building cohesive teams—the role of leaders’ bottom-line mentality and behavior. *Sustain Switz*. 2021;13(14):1–19.
- Beal DJ, Cohen RR, Burke MJ, McLendon CL. Cohesion and performance in groups: a meta-analytic clarification of construct relations. *J Appl Psychol*. 2003;88(6):989–1004.
- Castaño N, Watts T, Tekleab AG. A reexamination of the cohesion-performance relationship meta-analyses: a comprehensive approach. *Group Dyn*. 2013;17(4):207–31.
- Eesley C, Wang Y. Social influence in career choice: evidence from a randomized field experiment on entrepreneurial mentorship. *Res Policy*. 2017;46(3):636–50.
- Sambunjak D, Straus SE, Marusic A. Mentoring in academic medicine: a systematic review. *JAMA*. 2006;296(9):1103–15.
- Roberts SE, Nehemiah A, Butler PD, Terhune K, Aarons CB. Mentoring residents underrepresented in medicine: strategies to ensure success. *J Surg Educ*. 2021;78(2):361–5.
- Osman NY, Gottlieb B. Mentoring across differences. *MedEdPORTAL J Teach Learn Resour*. 2018;14:10743.
- Sánchez NF, Rankin S, Callahan E, Ng H, Holaday L, McIntosh K, et al. LGBT trainee and health professional perspectives on academic careers—facilitators and challenges. *LGBT Health*. 2015;2(4):346–56.
- Sánchez NF, Callahan E, Brewster C, Poll-Hunter N, Sánchez JP. The future LGBT health professional: perspectives on career and personal mentorship. *LGBT Health*. 2018;5(3):212–20.
- Waljee JF, Chopra V, Saint S. Mentoring Millennials. *JAMA*. 2018;319(15):1547–8.



Prevention of Physician Burnout Advocating for Well-Being in Residents and Faculty

21

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Introduction to Burnout

Burnout is an urgent problem for individual physicians, patients, healthcare systems, and residency programs. The World Health Organization (WHO) describes burnout in ICD-11 as “a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion; increased mental distance from one’s job, or feelings of negativism or cynicism related to one’s job; and reduced professional efficacy” [1]. This characterization is primarily based on the work of Christina Maslach, PhD, who developed the most widely used burnout assessment tool, the Maslach Burnout Inventory, and defines burnout as the triad of “emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment” [2].

Physician burnout is rampant across medical specialties and throughout all stages of career, but the prevalence is particularly high during residency training [3–6]. Burnout in internal medicine residents ranks among the highest of all specialties, with rates as high as 76% [7]. A meta-analysis from 2021 of 114 studies of burnout

among residents found a pooled rate of burnout of 47.3%, and discouragingly, this rate is unchanged over the last two decades [8]. Burnout affects about 20% of psychiatry residents in Canada, according to a national survey [9]. In Singapore, 54.8% of the 104 psychiatry residents surveyed were burned out [10]. An international review of 22 studies looking at burnout among psychiatry residents, mainly from North America, found that 33.7% were affected by burnout [11]. Additionally, burnout and depression frequently co-occur in physicians in training. Sharp et al. conducted a national survey among fellows in training in pulmonary and critical care medicine. They found that 50% of fellows showed positive results for either burnout or depression symptoms and 23% showed positive results for both [12].

While burnout is increasingly understood to be highly prevalent among physicians and residents, in particular, more studies are needed to assess the prevalence and consequences of burnout specifically for women, LGBTQ+, and underrepresented minorities in residency training. A report by the National Academy of Medicine from 2019 found few high-quality studies. However, the data suggest that women physicians are more likely to experience burnout than men. It is not fully understood if the discrepancy is mediated by discrimination, responsibilities outside of work, or other factors [13]. One study demonstrated discrimination experienced by

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LGBTQ+ physicians [14], but scant data are available in this cohort.

A recent review of the existing literature regarding the differential impact of burnout on underrepresented minorities in medicine underscores the limited information available on the disproportionate challenges these physicians face [15] and found only one study of residents [16]. These authors point out that previous research has recognized that underrepresented minorities in medicine experience racism, microaggressions, isolation, and feelings of not belonging – in addition to the expectation to serve on diversity committees, mentor, and take on other responsibilities; described as the “minority tax” [17]. In a recent secondary analysis of survey data from US physicians, burnout was less likely among physicians who identified as racial/ethnic minorities than among non-Hispanic whites [18]. Future research could help increase the understanding of burnout in various racial and ethnic groups.

It is possible that the unique challenges facing psychiatry residents who are women, LGBTQ+, and/or underrepresented minorities will increase their risk of burnout and that the strategies required to prevent burnout might vary between these groups. Unfortunately, there are many limitations of the existing studies on the prevalence of burnout in psychiatry residents, and particularly lacking are studies with enough statistical power to examine various sociodemographic differences. Despite these methodological issues, there seem to be enough data and trends to raise concern.

Physician burnout negatively impacts organizations and patients. Burnout is associated with lapses in professionalism [19], absenteeism, self-reported delivery of suboptimal patient care [7], reduced productivity [20], reduced work effort [21], contagion to colleagues [22], early retirement and reduction of hours [23], and medical errors [5, 24, 25]. Among Canadian psychiatry residents surveyed, burnout was associated with reduced empathy, decreased consultation with supervisors, and the use of unhealthy coping strategies [9]. Burned-out psychiatry residents in Singapore reported higher levels of stress and a poorer perception of the learning environment

[10]. Reducing psychiatry resident burnout will support national objectives to increase patient safety and to reduce organizational costs.

While the impact of physician burnout on others is significant, it is also important to recognize that burnout causes real suffering in physicians experiencing this professional distress. Burnout is, importantly, not classified as a medical condition, but rather an occupational phenomenon. Increasing evidence helps clinicians to distinguish burnout from depression and understand that these different syndromes have different consequences [25]. Burnout and depression may impact peripheral inflammatory biomarkers in different ways, perhaps mediated by gender [26]. However, there is a strong relationship between burnout and clinician distress. Burnout can increase the risk for depression, anxiety, substance use disorders, suicidal ideation, and other health problems in individual physicians [25, 27–31]. Preventing burnout in psychiatry residents is clearly essential to the healthcare organization, our patients, and the physicians themselves and should be a core value of all graduate medical education (GME) programs.

Promoting Well-Being, Quality Education, and Professional Fulfillment Is an Approach to Burnout Prevention

Focusing on physician well-being and professional fulfillment is a positive psychology approach that mobilizes energy and directs effort to reach a positive, sustainable outcome. Such a positive focus emphasizes the organization’s role alongside the individual physician’s and avoids placing undue blame on the physician. Furthermore, this approach can unite the individual with the organization’s resources to achieve the desired outcome. Physician well-being can be understood as the ability to appropriately respond to expected and unexpected stress in order to be healthy, happy, and prosperous in work and life [32]. Promoting physician well-being by fostering a sense of control and autonomy, facilitating the pursuit and achievement of goals, offering

opportunities for learning, increasing confidence and a sense of mastery, providing positive feedback, and emphasizing positive relationships with colleagues were all associated with greater well-being across four studies [33, 34]. How to best promote well-being among psychiatry residents will vary according to the residents' specific needs, the training program's culture, the institutional environment, and current internal and external events. However, some general principles and practices are discussed below and elsewhere in this text (see Chap. 10 by Anzia) and are also described by the Accreditation Council for Graduate Medical Education (ACGME).

The ACGME has outlined clear expectations regarding each psychiatry residency program's responsibilities in promoting well-being – including facilitating meaningful work, mindfulness regarding scheduling and workload, and ensuring a safe workplace – in addition to requiring that residents have access to mental health services and protected time to care for their health (see Table 21.1) [35]. ACGME regulations also require training programs to engage individual residents in planning for personal and professional well-being.

Physicians are highly resilient. Adults entering medical school have a higher level of well-being than their peers who do not pursue medical education [36], and physicians are able to thrive with only 20% of their time spent doing meaningful work [37]. Physicians in a large US survey who were more resilient than their peers were less likely to be burned out. However, 29% of the physicians with the highest possible resiliency score were burned out [38]. Burnout in residents can be understood as the suspension of one's ability to achieve well-being, quality education, and professional fulfillment. The pathway to resident burnout is multifactorial and includes institutional and systemic factors (e.g., long hours, electronic health record, productivity expectations), programmatic factors (e.g., ratio of service to learning, lack of control in the role of resident), internalization of cultural expectations (e.g., perfectionism, reluctance to ask for help,

Table 21.1 ACGME requirements regarding well-being

The responsibility of the program, in partnership with the Sponsoring Institution, to address well-being must include the following:

- (a) Efforts to enhance the meaning that each resident finds in the experience of being a physician, including protecting time with patients, minimizing non-physician obligations, providing administrative support, promoting progressive autonomy and flexibility, and enhancing professional relationships (Core)
- (b) Attention to scheduling, work intensity, and work compression that impacts resident well-being (Core)
- (c) Evaluating workplace safety data and addressing the safety of residents and faculty members (Core)
- (d) Policies and programs that encourage optimal resident and faculty member well-being; and (Core)
- (e) Residents must be given the opportunity to attend medical, mental health, and dental care appointments, including those scheduled during their working hours. (Core)
- (f) Attention to resident and faculty member burnout, depression, and substance abuse. The program, in partnership with its Sponsoring Institution, must educate faculty members and residents in identification of the symptoms of burnout, depression, and substance abuse, including means to assist those who experience these conditions. Residents and faculty members must also be educated to recognize those symptoms in themselves and how to seek appropriate care. The program, in partnership with its Sponsoring Institution, must:
 - (i) Encourage residents and faculty members to alert the program director or other designated personnel or programs when they are concerned that another resident, fellow, or faculty member may be displaying signs of burnout, depression, substance abuse, suicidal ideation, or potential for violence (Core)
 - (ii) Provide access to appropriate tools for self-screening (Core)
 - (iii) Provide access to confidential, affordable mental health assessment, counseling, and treatment, including access to urgent and emergent care 24 h a day, 7 days a week (Core)
 - (iv) There are circumstances in which residents may be unable to attend work, including but not limited to fatigue, illness, family emergencies, and parental leave. Each program must allow an appropriate length of absence for residents unable to perform their patient care responsibilities (Core)

imposter syndrome), and individual factors (e.g., boundary-setting, self-care habits, social support, health challenges, and the stress experienced outside of work). Residency program leadership can find great utility in understanding the factors that contribute to burnout and attempting to ameliorate them. Still, as previously described, a focus on promoting resident well-being, quality education, and professional fulfillment is likely to be the most durable and rewarding approach to preventing burnout.

Learning from Scenarios When Burnout Happens

Despite the best efforts of a residency program and the tremendous resiliency of physicians, burnout is likely to impact even the most resilient of residents, and residency programs must be prepared to intervene. While the best strategy is prevention, considering circumstances when burnout impacts residents offers an opportunity to learn how to best protect trainees. Below are common scenarios illustrating how burnout and other distress might present in psychiatry residents. Possible responses by the residency program director are then described and include immediate interventions and suggestions for integrating the lessons learned to prevent future burnout.

Community Building

Members of the intern class rarely speak up during didactics, the upper-level residents have not yet learned their names, and you can see that the interns are “checked out.”

Response:

- Gather the first-year class as a group to ask about how they are experiencing the first several months of residency and note that the group seems quiet and reserved. There is little interaction between the interns, and you are concerned that they are fatigued by the schedule and not finding their clinical rotations rewarding.

- Efforts directed at building community are critical for resident well-being. These interventions aim to promote inclusion and a sense of belonging within the department, offer peer relationships that provide validation and support, and provide mentorship from senior residents and faculty. Various strategies include protecting residents’ time for more structured resident gatherings.
- Process groups [39] led by an expert therapist offer residents both the individual and professional benefits of examining and working through individual and group experiences and feelings, increased understanding of group dynamics and group therapy, and the simple opportunity to spend time with peers.
- Support groups and camaraderie groups [40] offer residents a more flexible and less time-intensive opportunity to gather and share their experiences, support one another, and build cohesiveness.
- Journal clubs, interest groups, and other discussion groups have a specific learning or productivity goal and are less about the resident experience, but provide another structured and protected time to meet regularly and build connections.
- Chief residents and faculty can organize retreats to create the space to step away from work, dedicate time to focus on the well-being of the residency program, offer residents an avenue to discuss residency business and communicate with the program, and promote a cohesive resident community.
- Protecting time to gather and share a free and nutritious meal is a concrete demonstration of the program’s caring for residents and offers a uniquely effective opportunity to build community. In addition, meals can be provided as part of another activity (e.g., camaraderie groups and retreats), as a regular weekly occurrence, and as a special event.

Residents are uniquely able to support and promote the well-being of other residents. They may provide this support informally in casual conversations between didactics sessions, over

text, during social gatherings outside of work hours, or in more formal ways through organized opportunities to support one another. Colleagues might offer support in an established “buddy” or “family” program within the residency that will connect residents, often from different post-graduate cohorts, to offer ongoing support. Peer support is an established means of reducing burnout and promoting well-being among physicians [41, 42] and includes the formal training of designated peer supporters who can then be available to offer brief peer support and refer the resident to other resources.

Training and Support for Physician Educators and Supervisors

Multiple residents report to you that an attending is grouchy when they page him for urgent consultation. He was witnessed yelling at a resident for not submitting an order and expecting them to round at irregular times convenient to him.

Response:

- Support the residents and gather more information.
- Schedule a meeting with the attending to understand their perspective.
- Offer leadership and educator training and other support to attending.
- Assess suitability to be teaching and supervising.
- Consider involving the department chair, designated institutional official (DIO), or other supervisor of attending.

One of the most powerful predictors of health-care providers’ well-being is their relationship with leaders, including supervisors [43–45]. Offering educational materials, specific training, and clear guidelines for resident supervisors and other educators can improve their effectiveness in teaching and leading residents while also promoting healthy positive relationships between residents and their educators and strengthening the well-being of residents. Regularly surveying

residents regarding their impressions of supervisors and other educators in meeting these goals and including these results in performance reviews is a way of holding the faculty educators accountable.

Positive coaching programs have been developed for physicians to contribute to resident well-being [46]. These programs aim to train faculty mentors who are not resident evaluators to provide support and guidance with the aim of increasing resident wellness, resiliency, leadership skills, and professional fulfillment. Coaches get to know residents, help to create and foster the residents’ visions for their education and career, and offer mentorship to residents. A positive psychology approach is used to identify and promote strengths and goals, then to look for internal and external challenges, and finally to use creative and supportive problem solving to address them. A positive coaching program is likely to increase the organizational culture of well-being and professional fulfillment in academic institutions.

Creating an Environment Free of Discrimination to Promote Safety for Residents

You hear from another resident that a Vietnamese American resident was repeatedly yelled at by a patient he had been caring for over the last week on the inpatient unit, ranting, “You Chinese people are trying to kill us with COVID,” using racial epithets, and refusing to let the resident speak with the patient.

Response:

- Reach out to the affected resident and express your concern regarding this racist mistreatment by a patient. Offer to communicate by phone or in-person to discuss further. Inform the resident of your planned action and request feedback.
- Create or refer to your department’s policy on patient mistreatment/abuse of staff and other types of mistreatment based on race, ethnicity,

gender, sexual orientation, ability, or other identities and personal characteristics.

- Reach out to the attendings on the service and review safety protocols.
- Consider discussing discrimination, harassment, and abuse with the residency or department as a whole.

Ensuring that the work environment is a safe place for residents – not just free of racism, discrimination, harassment, and abuse of any kind, but antiracist [47] – is a critical foundational element that will demonstrate a focus on promoting well-being. The expectation of safety and zero tolerance for any abuse or discrimination should be clearly stated by program and departmental leadership. Policies should be in place and regularly reviewed to promote resident and patient safety and to guide the response to any occurrence of discrimination, harassment, or abuse. Certainly, these policies will vary according to the individuals involved (e.g., patients, learners, faculty), but all individuals should be expected to maintain high standards of respect and safety. Faculty should clearly understand their role in advocating for residents when these incidents occur.

Clinical Distress Appearing like Burnout in a Resident

Your chief resident informs you that she was giving a junior resident feedback about seeming disengaged when the resident became tearful and confided in the chief that they were having suicidal thoughts.

Response:

- Offer to meet with the resident in person or over the phone. Consider offering to have the resident's support person present as well. Use principles of psychological first aid [48].
- Support and validate the resident's concerns and distress.
- Assist in identifying their social supports and healthy coping strategies.
- Offer a list of resources, including emergency services (ED/hospitalization, crisis line), intensive care (IOP), and connection with out-

patient services (mental health/wellness program, EAP, list of community providers).

- Offer clinical coverage, encourage the resident to take time off, consider a switch to a less demanding rotation (e.g., one without night shifts/call), or other accommodations.
- Communicate an emphasis on confidentiality – you will offer to facilitate mental health services, but do not require any details of care that the resident might receive.

An off-service attending reports that a first-year resident is often late, does not seem engaged with their work, and requires a lot of supervision by senior residents to make sure that they prioritize and complete their responsibilities created during rounds.

Response:

- When you discuss the feedback with the resident, they are tearful and ashamed of not meeting expectations. They want to do a good job, but express feeling overwhelmed and unsure how to organize tasks, often feeling frozen.
- You start by asking the resident what support could help them to be more successful and quickly recognize that time management strategies are in order. Then, you reassure the resident that it is not uncommon for very bright individuals to progress all the way through medical school without developing effective efficiency and time management strategies, and often the demands of intern year overwhelm their ability to “power through.”
- Consider referring the resident to a trusted attending or senior resident who has expertise in efficiency with the electronic health record and can help with strategies to keep a to-do list, schedule, and prioritize tasks.
- Recruit a local executive functioning coach (in your organization or in the community) who could provide ongoing consultation and coaching regarding time management strategies.
- Offer to block their schedule, to provide administrative time for the resident to learn and practice employing these efficiency strategies.

- Coach the resident on communicating with the team to express their desire to contribute and interest in the clinical role, and emphasize how to ask for help when they feel overwhelmed.
- Consider recommending further discussion with their providers to assess any contributing medical, psychiatric, or psychological issues (e.g., ADHD, anxiety, depression, insomnia, or other medical conditions).

Although psychiatry program directors are, of course, psychiatrists, these leaders must remember that they are not their residents' treating clinicians, medical or psychiatric evaluators. The role of the program director is to offer support, referrals if needed, and protect residents' schedules for them to access personal health care. Program directors should orient direct interventions around performance goals with clear expectations (e.g., concrete goals and rubric for evaluation, end date, thorough documentation (see chapter on performance problems). When dealing with issues of resident disability, it is often helpful to consult with the designated institutional official (DIO) in the Graduate Medical Education office, department chair, faculty peers at other institutions, and mentors.

The ACGME requires that all residents have access to mental health services. One model is at Oregon Health & Sciences University (OHSU), a medium-sized US academic hospital, where the authors (MS, MK, and MM) are on the faculty. OHSU established the Resident and Faculty Wellness Program (RFPW) in 2004 to serve residents in the School of Medicine and later expanded to serve faculty [49, 50]. The RFPW team includes psychiatrists, psychologists, and a psychiatric mental health nurse practitioner who offer direct mental health services to physicians (e.g., medication consultation and counseling), educational outreach (e.g., workshops and trainings), and consultation with program directors and other leaders in the School of Medicine. The RFPW was designed specifically to reduce physicians' perceived barriers to seeking care by prioritizing confidentiality (no charting in the hospital's EHR), providing free clinical services

(i.e., not billing insurance, no copays, etc.), offering expanded appointment hours and extensive outreach and education to reduce stigma. In addition, the program proactively addresses misinformation about reporting psychiatric treatment to credentialing/licensing boards. At the same time, both chief residents and faculty leaders support reaching out for care, often by self-disclosing the benefit they received from participation in the program. As a result, the RFPW is highly utilized: 41% of residents and fellows and 12% of faculty received services in this OHSU wellness program in the previous academic year.

All psychiatry programs do not have access to a comprehensive on-site mental health program. Still, program directors can develop a strong understanding of and relationship with mental health professionals who are available to residents. When a program director can trust these mental health clinicians, it will be easier to refer to them and accommodate their recommendations for the resident, allowing the program director to maintain the boundaries of their leadership role.

Promoting Professional Fulfillment

Your second-year class is burned out! You are getting multiple complaints from the residents themselves and reports from others working with them that they are frustrated with multiple aspects of their work. The class requests a meeting with the program director the week following their retreat. They present a list of concerns, including working long hours, providing high acuity care without adequate faculty support, being assigned "low value" work with little educational benefit. It is clear that they have multiple frustrations with the imperfect, "broken" medical system.

Response:

- Schedule a meeting to listen to their concerns in person.
- Validate their hard work and the reasonable expectation that they will be offered clinical support, meaningful learning opportunities, and appreciated.
- Solicit their suggestions for change. Identify a handful of options that you can initiate now and consider others in the future.

- Schedule follow-up meetings/listening sessions and create an easy mechanism for residents to communicate with the program leadership
- Invite the chief residents to organize a weekly case conference or presentation on the service.
- Offer professional development to faculty attendings to improve teaching and management skills, and remind all department faculty that residents deserve appreciation for their hard work.
- Offer support for educational opportunities to increase professional fulfillment, including elective rotations, support for research activities, shadowing, conferences, etc.

As previously stated, facilitating quality educational experiences and opportunities for residents to engage in meaningful work is highly likely to lead to increased well-being in residents. Program directors are acutely aware of the expectations on residents to provide clinical services. Still, it is essential to prioritize rich educational experiences and allow residents' interests to guide scheduling rotations, secure time for scholarly activity, and facilitate residents' pursuing other professional interests.

Promoting Professionalism

The nurses on the inpatient unit report to you that the new chief resident is rude and dismissive. You gather more information from the nurses and learn that the chief responds in a curt manner, rolling her eyes, and often fails to communicate the plan to nurses.

Response:

- Meet with the chief to discuss the nursing complaint with open-mindedness to try and best understand the chief's perspective, determining if they were aware of the issue, what the context is, and what the chief's concerns and goals are.
- The chief may report that several aspects of the unit processes are slowing her and the team's progress, do not seem clinically neces-

sary but are demanded by nursing staff – the chief worries about the hardship caused to the interns and herself.

- Consider using a collaborative problem-solving approach – understanding all parties' concerns, identifying the goals that are not being met, and working together collaboratively to offer resources to help all parties meet the goals.

Be on the lookout for issues that frustrate the chief and make her job harder, contributing to irritability. Identify inefficiencies and challenges that residents face, or "pebbles in the shoe," which can contribute to burnout and negatively impact well-being and professional fulfillment. Examples include inefficiencies in the electronic health record, long commutes, scheduling challenges, etc. Consider surveying residents about what they notice gets in the way of providing efficient, timely, high-quality patient care and meeting their learning objectives. Working together to problem solve and address these challenges can provide significant relief.

Residents want to be successful in all of their various roles, including clinician, learner, educator, colleague, and leader. Remembering that they are likely doing the best that they can (given the resources they have) will provide a critical lens with which to receive criticism of the trainee, allowing the program director to advocate for the residents and help them meet the expectations of their role. In addition, providing education on leadership, group dynamics, difficult conversations, and clear expectations will provide residents with valuable tools for future leadership roles.

Facilitating Individual Efforts

After conducting semi-annual evaluations in the winter for multiple years, you notice a pattern of residents reporting less satisfaction with rotations (even those getting high marks at other times of the year) and lower self-evaluation scores of performance. You decide to survey the residents twice per year anonymously. Once you have enough responses to ensure confidentiality, you review the results and recognize that burnout is much higher during the winter.

Response:

- Report the results of your anonymous surveys to residents and facilitate a discussion, including soliciting suggestions for change.
- First, clearly emphasize the role of the institution, program, and the strains of the profession on burnout and your commitment to fully consider their suggestions for change and implement when possible.
- Discuss the opportunity for individual strategies to help find meaning in the work, increase self-compassion, and care for oneself in order to continue the hard work required of residents.

In addition to institutional efforts to create a work and learning environment that fosters well-being and professional fulfillment, residents themselves have a role in promoting their own well-being. The fundamentals of self-care are well known and understood to be remarkably impactful, but are not always easy to access consistently. Programs may be helpful in protecting resident schedules to allow for self-care, modeling self-care by faculty, and reminding residents of the importance of self-care strategies. But, it is important to validate the challenge in practicing these strategies during busy rotations with other competing demands. The goal is for program efforts at reducing barriers to resident self-care to increase resident openness to reminders and suggestions to maintain self-care. Engaging with residents in collaborative problem solving will promote resident success in sustaining self-care.

Self-compassion, defined by Kristen Neff, PhD, includes these three elements: mindfulness, self-kindness, and common humanity [51, 52]. Compared with other US workers, physicians have lower levels of self-valuation and remarkably, in one study of burnout, adjusting for lower self-valuation removed the association of burnout and being a physician [53]. This analysis suggests the possibility that self-compassion is an important mediator of burnout among physicians. In addition, encouraging self-compassion among psychiatry residents could reduce perfectionism and offer permission-giving for residents to

spend time and energy on boundary setting, nurturing personal relationships, and other forms of self-care as described below.

Adequate quality sleep promotes physical and emotional wellness, energy, readiness to learn, has myriad other benefits [54] and is specifically associated with increased well-being among residents [34] and other physicians [55]. However, trainees have limited control over their schedules and are frequently sleep-deprived. Providing psychoeducation to residents regarding the benefits of sleep will increase the likelihood that they will protect enough time to sleep when they have the opportunity to do so. In addition, offering specific tips to mitigate the challenges of a residency schedule can also be helpful (e.g., wearing dark glasses on the drive home after a night shift, using a consistent bedtime routine/ritual no matter what time they hope to fall asleep, and the strategic use of napping). Wong et al. offer additional countermeasures to mitigate the effects of fatigue for physicians who must work overnight. These countermeasures include the use of scheduling interventions, microbreaks, caffeine use during overnight and extended shifts, and the use of bright lights in the clinical setting when possible or personal blue light devices when the room lights must be turned off [56].

Healthy nutrition is often overlooked as an important strategy to promote well-being. However, acknowledging the challenge of obtaining, let alone cooking, well-rounded nutritious meals is an important means of validating resident experiences and is demonstrated by the training program providing access to quality food during work hours. Ideally, this access should include sufficient funds to purchase healthy food on-site and the provision of healthy snacks that are readily available.

Most residents, like most physicians, understand that physical activity is an essential component of a healthy lifestyle. Promoting all healthy habits will be more successful when the message includes positive motivation strategies with a large dose of understanding that behavioral change is difficult. Common barriers for most residents include long work hours and fatigue. Offering on-site access to gyms, yoga classes,

etc., and encouraging their use can reduce some of these barriers. Reminding residents that brief periods of physical activity and spreading physical activity throughout the day are effective ways to access the benefits of exercise in a busy workday.

Residents need to have protected time to attend health maintenance and other healthcare appointments. One example of promoting this well-being effort is Oregon Health Sciences University's approach to offer to post-graduate medical trainees "wellness half-days," protecting one half-day each quarter for residents to schedule and attend healthcare appointments. Residents need coverage for this time to step away.

Time management and efficiency strategies (e.g., competency with the EHR, keeping a schedule, prioritizing to-do lists, among others) are powerful well-being tools. Unfortunately, many bright and hardworking individuals often find that residency is when their intelligence and hard work are not sufficient to meet the high demands of advanced clinical training. Residency programs, including program directors, mentors, and fellow residents, can offer a bounty of time management and efficiency strategies. Consider offering a didactic session on these strategies, identifying faculty and resident mentors who are available for consultation, and offering recommendations for professional coaches/counselors who can provide intensive training to residents who are especially in need of enhancing these skills. Encourage all residents to consider their time management and efficiency strategies, identify areas of strength and room for improvement, and encourage the further development of organizational skills as part of the educational journey of residency and professional development.

Burned Out Program Director

You have been a program director for the last five years, having taken the role out of a passion for medical education and contributing to increasing access to qualified psychiatrists. However, for the last couple of years, you are finding the residents to be less open to teaching, and your institution is putting up barriers to providing the training you want to offer. As a result, the job is no longer meaningful to you, and you feel that it is "a lost cause."

Response:

- First, recognize that you may be experiencing burnout.
- Focus on your own self-care – take some of your accumulating protected time off (PTO) and get back into a good routine with sleep, nutrition, and exercise.
- Seek peer support and mentorship, including from the American Association of Directors of Psychiatric Residency Training (AADPRT).
- Consider seeking your own mental health coaching and counseling.
- With your renewed energy, look for ways to re-engage in meaningful aspects of your work and advocate for change in the specific areas that contribute to frustration with your position.

Program directors, of course, are not immune to burnout. Among internal medicine program directors, one third were found to be burned out and nearly half had considered resigning the preceding year with program director turnover associated with burnout and contemplation of resigning [57]. They are susceptible to occupational stress, personal life stress, and the human challenges in maintaining self-care habits and resiliency. Therefore, preventing and attending to burnout is critical for program directors and faculty and will improve the well-being of our residents. It would be difficult for residents to avoid burnout if their faculty are experiencing burnout. In family medicine program directors, resiliency was directly correlated with having a moderate to great amount of personal time, healthy work–life balance, and ability to stop thinking about work, and negatively correlated with the presence of financial stress [58].

Attending to the health of the healthcare organization is also critical to promoting faculty and resident well-being, and to addressing the needs of all healthcare workers. Shanafelt and others have written extensively to offer workplace interventions that are designed to improve the well-being of physicians and other healthcare workers [59, 60]. Organizational considerations can be made at various levels – inpatient units/services

and outpatient clinics, hospital sites, healthcare organizations, departments, and of course, within the psychiatry residency.

Staffing Coverage

You notice that a resident who is historically cheerful and engaged appears exhausted and irritable during didactics. During a break, you inquire about how her current rotation is going, and eventually, she reluctantly tells you that her uncle died last week. She missed the funeral because she worried that her supervising attending faculty would not cover her patients. She was concerned that the intern would be burdened with extra work, and she decided it would be too difficult to arrange coverage on her own.

Response:

- Assess the residency program's coverage protocol, looking closely at where the burden falls when a resident needs to take time away from the clinical schedule for urgent/emergent and routine leave.
- Consider the role of faculty in covering for residents' absences.
- Evaluate the administrative process for enlisting coverage and make sure there is not an undue burden on the resident who needs the time off.

Having a robust and transparent system of staffing coverage is a concrete but impactful strategy to promote resident well-being. Program leadership should assure residents that the program will assist with finding coverage so they can attend to urgent/emergent health and well-being issues or to the needs of loved ones. It is important that residents have support during these difficult times and not fear overburdening their peers. Residents should have administrative assistance for unexpected and urgent schedule change needs so that arranging coverage is not their responsibility when they have a crisis. Residents will feel supported when programs readily offer administrative and coverage assistance when the need arises; even those who do not currently need this support will benefit from knowing that a plan is in place if they experience a crisis in the future

Conclusion

Burnout is a common and impactful problem among physicians, including psychiatry residents, and can manifest in many ways visible to a residency program. The ideal intervention regarding burnout is prevention, and the good news is that organizational interventions to reduce burnout are successful and even more impactful than individual strategies [61]. The National Academy of Medicine published a consensus study report in 2019 on clinician burnout and advocates for a systems approach to improve professional well-being, emphasizing a focus on addressing the structure, organization, and culture of health care [62]. The cornerstones of burnout prevention are providing a high-quality learning environment, meaningful professional experiences, adequate support to residents, a workplace free of discrimination and inclusive of all individuals, and normalizing self-care and help-seeking to promote well-being.

Communication is a powerful tool that can promote well-being among psychiatry residents, reduce burnout, and facilitate a rapid response to burnout when it occurs. Goals of healthy communication from the program to residents include the consistent and predictable delivery of information, clear communication of expectations of residents, and timely constructive feedback. Facilitating communication from residents to the program might consist of providing opportunities to express agency and voice, the presence of a direct line of communication (e.g., promoting email, text, and in-person opportunities to talk), regular feedback, and options for confidential reporting. Communication will also allow the transfer of the program's core values to the residents highlighting the priority of physician well-being.

Tate Shanafelt, MD, a leading expert on physician well-being and burnout, calls for a culture shift in medicine from perfectionism to a culture of excellence combined with self-compassion and a growth mindset [63]. This cultural shift would benefit physicians, organizations, and patients, and could begin in psychiatry residency programs. Our psychiatry residents will easily

understand the benefit of self-compassion, a growth mindset, and embracing one's humanity (and limitations) as part of a healthy psychological mindset. Program directors and other leaders can model how to integrate these personal values with our long-standing professional values – altruism, hard work, and the devoted care of patients. Training psychiatrists with the skills to promote well-being in their careers will also facilitate their leadership in advocating for other physicians and healthcare workers and will contribute to ongoing positive shifts in the culture of medicine.

References

1. World Health Organization. International classification of diseases, 11th revision (ICD-11). <https://www.who.int/classifications/icd/en/>. Accessed 1 Oct 2021.
2. Maslach C. Burnout: the cost of caring. Englewood Cliffs, NJ: Prentice Hall; 1982.
3. Ishak WW, Lederer S, Mandili C, Nikravesh R, Seligman L, Vasa M, Ogunyemi D, Bernstein CA. Burnout during residency training: a literature review. *J Grad Med Educ*. 2009;1(2):236–42. <https://doi.org/10.4300/JGME-D-09-00054.1>.
4. Dyrbye LN, Varkey P, Boone SL, Satele DV, Sloan JA, Shanafelt TD. Physician satisfaction and burnout at different career stages. *Mayo Clin Proc*. 2013;88(12):1358–67. <https://doi.org/10.1016/j.mayocp.2013.07.016>.
5. Abedini NC, Stack SW, Goodman JL, Steinberg KP. “It’s not just time off”: a framework for understanding factors promoting recovery from burnout among internal medicine residents. *J Grad Med Educ*. 2018;10(1):26–32. <https://doi.org/10.4300/JGME-D-17-00440.1>.
6. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, West CP, Sloan J, Oreskovich MR. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med*. 2012;172(18):1377–85. <https://doi.org/10.1001/archinternmed.2012.3199>.
7. Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med*. 2002;136(5):358–67. <https://doi.org/10.7326/0003-4819-136-5-200203050-00008>.
8. Naji L, Singh B, Shah A, Naji F, Dennis B, Kavanagh O, Banfield L, Alyass A, Razak F, Samaan Z, Profetto J, Thabane L, Sohani ZN. Global prevalence of burnout among postgraduate medical trainees: a systematic review and meta-regression. *CMAJ Open*. 2021;9(1):E189–200. <https://doi.org/10.9778/cmajo.20200068>.
9. Kealy D, Halli P, Ogrodniczuk JS, Hadjipavlou G. Burnout among Canadian psychiatry residents: a national survey. *Can J Psychiatr*. 2016;61(11):732–6. <https://doi.org/10.1177/0706743716645286>.
10. Chew QH, Ang LP, Tan LL, Chan HN, Ong SH, Cheng A, Lai YM, Tan MY, Tor PC, Gwee KP, Sim K. A cross-sectional study of burnout and its associations with learning environment and learner factors among psychiatry residents within a National Psychiatry Residency Programme. *BMJ Open*. 2019;9(8):e030619. <https://doi.org/10.1136/bmjopen-2019-030619>.
11. Chan MK, Chew QH, Sim K. Burnout and associated factors in psychiatry residents: a systematic review. *Int J Med Educ*. 2019;10:149–60. <https://doi.org/10.5116/ijme.5d21.b621>.
12. Sharp M, Burkart KM, Adelman MH, Ashton RW, Biddison LD, Bosslet GT, Doyle ST, Eckmann T, Khan MM, Lenz PH, McCallister JW. A national survey of burnout and depression among fellows training in pulmonary and critical care medicine: a special report by the Association of Pulmonary and Critical Care Medicine program directors. *Chest*. 2021;159(2):733–42.
13. Templeton K, Bernstein C, Sukhera J, Nora LM, Newman C, Burstin H, Guille C, Lynn L, Schwarze ML, Sen S, Busis N. Gender-based differences in burnout: issues faced by women physicians. *NAM Perspectives*. Discussion Paper. Washington, DC: National Academy of Medicine; 2019. <https://doi.org/10.31478/201905a>. Accessed 1 Oct 2021.
14. Eliason MJ, Dibble SL, Robertson PA. Lesbian, gay, bisexual, and transgender (LGBT) physicians’ experiences in the workplace. *J Homosex*. 2011;58(10):1355–71. <https://doi.org/10.1080/00918369.2011.614902>.
15. Afzal KI, Khan FM, Mulla Z, Akins R, Ledger E, Giordano FL. Primary language and cultural background as factors in resident burnout in medical specialties: a study in a bilingual US city. *South Med J*. 2010;103(7):607–15. <https://doi.org/10.1097/SMJ.0b013e3181e20cad>.
16. Lawrence JA, Davis BA, Corbette T, Hill EV, Williams DR, Reede JY. Racial/ethnic differences in burnout: a systematic review. *J Racial Ethn Health Disparities*. 2022;9(1):257–69. <https://doi.org/10.1007/s40615-020-00950-0>.
17. Zambrana RE, Harvey Wingfield A, Lapeyrouse LM, Dávila BA, Hoagland TL, Valdez RB. Blatant, subtle, and insidious: URM faculty perceptions of discriminatory practices in predominantly White institutions. *Sociol Inq*. 2017;87(2):207–32. <https://doi.org/10.1111/soin.12147>.
18. Garcia LC, Shanafelt TD, West CP, Sinsky CA, Trockel MT, Nedelec L, Maldonado YA, Tutty M, Dyrbye LN, Fassiotto M. Burnout, depression, career satisfaction, and work-life integration by physician race/ethnicity.

- JAMA Netw Open. 2020;3(8):e2012762. <https://doi.org/10.1001/jamanetworkopen.2020.12762>.
19. Dyrbye L, Shanafelt T. A narrative review on burnout experienced by medical students and residents. *Med Educ*. 2016;50(1):132–49. <https://doi.org/10.1111/medu.12927>.
 20. Dewa CS, Loong D, Bonato S, Thanh NX, Jacobs P. How does burnout affect physician productivity? A systematic literature review. *BMC Health Serv Res*. 2014;14:325. <https://doi.org/10.1186/1472-6963-14-325>.
 21. Shanafelt TD, Mungo M, Schmitgen J, Storz KA, Reeves D, Hayes SN, Sloan JA, Swensen SJ, Buskirk SJ. Longitudinal study evaluating the association between physician burnout and changes in professional work effort. *Mayo Clin Proc*. 2016;91(4):422–31. <https://doi.org/10.1016/j.mayocp.2016.02.001>.
 22. Bakker AB, Le Blanc PM, Schaufeli WB. Burnout contagion among intensive care nurses. *J Adv Nurs*. 2005;51(3):276–87. <https://doi.org/10.1111/j.1365-2648.2005.03494.x>.
 23. Dewa CS, Jacobs P, Thanh NX, Loong D. An estimate of the cost of burnout on early retirement and reduction in clinical hours of practicing physicians in Canada. *BMC Health Serv Res*. 2014;14:254. <https://doi.org/10.1186/1472-6963-14-254>.
 24. Shanafelt TD, Balch CM, Bechamps G, Russell T, Dyrbye L, Satele D, Collicott P, Novotny PJ, Sloan J, Freischlag J. Burnout and medical errors among American surgeons. *Ann Surg*. 2010;251(6):995–1000. <https://doi.org/10.1097/SLA.0b013e3181bfdab3>.
 25. Menon NK, Shanafelt TD, Sinsky CA, Linzer M, Carlasare L, Brady KJS, Stillman MJ, Trockel MT. Association of physician burnout with suicidal ideation and medical errors. *JAMA Netw Open*. 2020;3(12):e2028780. <https://doi.org/10.1001/jamanetworkopen.2020.28780>. Erratum in: *JAMA Netw Open*. 2021 May 3;4(5):e2115436.
 26. Toker S, Shirom A, Shapira I, Berliner S, Melamed S. The association between burnout, depression, anxiety, and inflammation biomarkers: C-reactive protein and fibrinogen in men and women. *J Occup Health Psychol*. 2005;10(4):344–62. <https://doi.org/10.1037/1076-8998.10.4.344>.
 27. van der Heijden F, Dillingh G, Bakker A, Prins J. Suicidal thoughts among medical residents with burnout. *Arch Suicide Res*. 2008;12(4):344–6. <https://doi.org/10.1080/13811110802325349>.
 28. Shanafelt TD, Sloan JA, Habermann TM. The well-being of physicians. *Am J Med*. 2003;114(6):513–9. [https://doi.org/10.1016/s0002-9343\(03\)00117-7](https://doi.org/10.1016/s0002-9343(03)00117-7).
 29. Rothenberger DA. Physician burnout and well-being: a systematic review and framework for action. *Dis Colon Rectum*. 2017;60(6):567–76. <https://doi.org/10.1097/DCR.0000000000000844>.
 30. Oreskovich MR, Kaups KL, Balch CM, Hanks JB, Satele D, Sloan J, Meredith C, Buhl A, Dyrbye LN, Shanafelt TD. Prevalence of alcohol use disorders among American surgeons. *Arch Surg*. 2012;147(2):168–74. <https://doi.org/10.1001/archsurg.2011.1481>.
 31. Shanafelt TD, Balch CM, Dyrbye L, Bechamps G, Russell T, Satele D, Rummans T, Swartz K, Novotny PJ, Sloan J, Oreskovich MR. Special report: suicidal ideation among American surgeons. *Arch Surg*. 2011;146(1):54–62. <https://doi.org/10.1001/archsurg.2010.292>.
 32. Scaria D, Brandt ML, Kim E, Lindeman B. What is wellbeing? In: *Wellbeing*. Cham: Springer; 2020. p. 3–10.
 33. Heijstra TM, Rafnsdóttir GL, Jónsdóttir LS. Autonomy and well-being among Nordic male and female hospital physicians. *Work*. 2011;40(4):437–43. <https://doi.org/10.3233/WOR-2011-1255>.
 34. Raj KS. Well-being in residency: a systematic review. *J Grad Med Educ*. 2016;8(5):674–84. <https://doi.org/10.4300/JGME-D-15-00764.1>.
 35. <https://www.acgme.org/what-we-do/accreditation/common-program-requirements/>
 36. Brazeau CM, Shanafelt T, Durning SJ, Massie FS, Eacker A, Moutier C, Satele DV, Sloan JA, Dyrbye LN. Distress among matriculating medical students relative to the general population. *Acad Med*. 2014;89(11):1520–5. <https://doi.org/10.1097/ACM.0000000000000482>.
 37. Shanafelt TD, West CP, Sloan JA, Novotny PJ, Poland GA, Menaker R, Rummans TA, Dyrbye LN. Career fit and burnout among academic faculty. *Arch Intern Med*. 2009;169(10):990–5. <https://doi.org/10.1001/archinternmed.2009.70>.
 38. West CP, Dyrbye LN, Sinsky C, Trockel M, Tutty M, Nedelec L, Carlasare LE, Shanafelt TD. Resilience and burnout among physicians and the general US working population. *JAMA Netw Open*. 2020;3(7):e209385. <https://doi.org/10.1001/jamanetworkopen.2020.9385>.
 39. Kahn NB Jr, Schaeffer H. A process group approach to stress reduction and personal growth in a family practice residency program. *J Fam Pract*. 1981;12(6):1043–7.
 40. Gaetke-Udager K, Knoepp US, Maturen KE, Leschied JR, Chong S, Klein KA, Kazerooni E. A women in radiology group fosters career development for faculty and trainees. *AJR Am J Roentgenol*. 2018;211(1):W47–51. <https://doi.org/10.2214/AJR.17.18994>.
 41. Vinson AE, Randel G. Peer support in anesthesia: turning war stories into wellness. *Curr Opin Anaesthesiol*. 2018;31(3):382–7. <https://doi.org/10.1097/ACO.0000000000000591>.
 42. Shapiro J, Galowitz P. Peer support for clinicians: a programmatic approach. *Acad Med*. 2016;91(9):1200–4. <https://doi.org/10.1097/ACM.0000000000001297>.
 43. Shanafelt TD, Wang H, Leonard M, Hawn M, McKenna Q, Majzun R, Minor L, Trockel M. Assessment of the association of leadership behaviors of supervising physicians with personal-organizational values alignment

- among staff physicians. *JAMA Netw Open*. 2021;4(2):e2035622. <https://doi.org/10.1001/jamanetworkopen.2020.35622>.
44. Sabbah IM, Ibrahim TT, Khamis RH, Bakhour HA, Sabbah SM, Droubi NS, Sabbah HM. The association of leadership styles and nurses well-being: a cross-sectional study in healthcare settings. *Pan Afr Med J*. 2020;36:328. <https://doi.org/10.11604/pamj.2020.36.328.19720>.
 45. Shanafelt TD, Gorringer G, Menaker R, Storz KA, Reeves D, Buskirk SJ, Sloan JA, Swensen SJ. Impact of organizational leadership on physician burnout and satisfaction. *Mayo Clin Proc*. 2015;90(4):432–40. <https://doi.org/10.1016/j.mayocp.2015.01.012>.
 46. Palamara K, Kauffman C, Stone VE, Bazari H, Donelan K. Promoting success: a professional development coaching program for interns in medicine. *J Grad Med Educ*. 2015;7(4):630–7. <https://doi.org/10.4300/JGME-D-14-00791.1>.
 47. Kendi IX. *How to be an antiracist*. London: Random House Publishing Group; 2019.
 48. World Health Organization. *War trauma foundation and world vision international. Psychological first aid: guide for field workers*. Geneva: WHO; 2011.
 49. Ey S, Moffit M, Kinzie JM, Brunett PH. Feasibility of a comprehensive wellness and suicide prevention program: a decade of caring for physicians in training and practice. *J Grad Med Educ*. 2016;8(5):747–53. <https://doi.org/10.4300/JGME-D-16-00034.1>.
 50. Ey S, Moffit M, Kinzie JM, Choi D, Girard DE. “If you build it, they will come”: attitudes of medical residents and fellows about seeking services in a resident wellness program. *J Grad Med Educ*. 2013;5(3):486–92. <https://doi.org/10.4300/JGME-D-12-00048.1>.
 51. Neff KD. The role of self-compassion in development: a healthier way to relate to oneself. *Hum Dev*. 2009;52(4):211–4. <https://doi.org/10.1159/000215071>.
 52. Neff KD. The development and validation of a scale to measure self-compassion. *Self Identity*. 2003;2:223–50.
 53. Trockel M, Sinsky C, West CP, Dyrbye LN, Tutty M, Carlasare L, Wang H, Shanafelt T. Self-valuation challenges in the culture and practice of medicine and physician well-being. *Mayo Clin Proc*. 2021;96(8):2123–32. <https://doi.org/10.1016/j.mayocp.2020.12.032>.
 54. Watson NF, Badr MS, Belenky G, Bliwise DL, Buxton OM, Buysse D, Dinges DF, Gangwisch J, Grandner MA, Kushida C, Malhotra RK, Martin JL, Patel SR, Quan SF, Tasali E. Recommended amount of sleep for a healthy adult: a joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society. *Sleep*. 2015;38(6):843–4. <https://doi.org/10.5665/sleep.4716>.
 55. Gates M, Wingert A, Featherstone R, Samuels C, Simon C, Dyson MP. Impact of fatigue and insufficient sleep on physician and patient outcomes: a systematic review. *BMJ Open*. 2018;8(9):e021967. <https://doi.org/10.1136/bmjopen-2018-021967>.
 56. Wong LR, Flynn-Evans E, Ruskin KJ. Fatigue risk management: the impact of anesthesiology residents’ work schedules on job performance and a review of potential countermeasures. *Anesth Analg*. 2018;126(4):1340–8.
 57. O’Connor AB, Halvorsen AJ, Cmar JM, Finn KM, Fletcher KE, Kearns L, McDonald FS, Swenson SL, Wahi-Gururaj S, West CP, Willett LL. Internal medicine residency program director burnout and program director turnover: results of a national survey. *Am J Med*. 2019;132(2):252–61.
 58. Porter M, Hagan H, Klassen R, Yang Y, Seehusen D, Carek P. Burnout and resiliency among family medicine program directors. *Fam Med*. 2018;50(2):106–12.
 59. Olson K, Marchalik D, Farley H, Dean SM, Lawrence EC, Hamidi MS, Rowe S, McCool JM, O’Donovan CA, Micek MA, Stewart MT. Organizational strategies to reduce physician burnout and improve professional fulfillment. *Curr Probl Pediatr Adolesc Health Care*. 2019;49(12):100664. <https://doi.org/10.1016/j.cppeds.2019.100664>.
 60. Shanafelt TD, Noseworthy JH. Executive leadership and physician well-being: nine organizational strategies to promote engagement and reduce burnout. *Mayo Clin Proc*. 2017;92(1):129–46. <https://doi.org/10.1016/j.mayocp.2016.10.004>.
 61. Panagioti M, Panagopoulou E, Bower P, Lewith G, Kontopantelis E, Chew-Graham C, Dawson S, van Marwijk H, Geraghty K, Esmail A. Controlled interventions to reduce burnout in physicians: a systematic review and meta-analysis. *JAMA Intern Med*. 2017;177(2):195–205. <https://doi.org/10.1001/jamainternmed.2016.7674>.
 62. National Academies of Sciences, Engineering, and Medicine. *Taking action against clinician burnout: a systems approach to professional well-being*. Washington, DC: The National Academies Press; 2019. <https://doi.org/10.17226/25521>.
 63. Shanafelt TD. Physician well-being 2.0: where are we and where are we going? *Mayo Clin Proc*. 2021;96(10):2682–93. <https://doi.org/10.1016/j.mayocp.2021.06.005>.



Managing Change Within a Residency Program

22

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Introduction

Change is a constant in residency training. Changes in a program may be internally or externally driven, planned or unplanned, and the timing and pace of change variable. Multiple situations require program directors to nimbly adapt to conditions outside of their control. Much of the stress incurred in leading a residency training program is the need to react to such events. Immigration policies, decisions by state licensing boards, accreditation requirements, hospital finances, weather disasters, and global pandemics are but a few of the circumstances that can impinge upon a training program. Anticipating these events may not be possible, but there are

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steps that program directors may take that mitigate their impact. This chapter aims to provide a bird's-eye view of navigating through a disaster that befell the psychiatry residency at Hahnemann Hospital in 2019. Our perspective will be informed by a chair, a vice chair/program director, a chief resident, and a just-arrived first-year trainee. We expect that this experience will help others as they seek to navigate changes of any magnitude in a residency program.

Background and History of Our Institution

On June 26, 2019, the Designated Institutional Official (DIO) of Hahnemann Hospital convened a mandatory meeting. The institution had recently had a Clinical Learning Environment Review (CLER) visit from the Accreditation Council for Graduate Medical Education (ACGME) and the residency programs were in the process of onboarding their first-year classes and making the transition to a new class year for those residents in the program. There had been the usual number of rumblings about the dire financial situation of the hospital. Despite this, no one was prepared for the early morning announcement that the DIO had just spoken with the ACGME and withdrawn all of the training programs at the institution from accreditation, effective immediately, because of the bankruptcy of the parent company that owned

the hospital (American Academic Health System; AAHS) and the plan to close the hospital within 6 weeks. In hindsight, the shock that everyone felt about this announcement seems both incredibly naïve and totally understandable. Many of us had been associated with Hahnemann for years and the troubles of Tenet Healthcare, the previous owner, meant weathering continual discussions of financial problems [1]. Few of us, however, expected that there would be so little warning of such an event and that we would have limited ability to prepare and help our residents. Our vice chair took notes at a furious pace at the Graduate Medical Education (GME) meeting, copying quotes as quickly as possible to have the facts presented clearly, and immediately contacted the chair and the current program director.

The bankruptcy of AAHS was the culmination of events set in motion in the 1990s. At that time, two small safety-net hospitals and their respective medical schools, Hahnemann and the Medical College of Pennsylvania (MCP), were purchased by Allegheny Health System and merged into a single entity. Over a several-year period (and multiple name changes), Allegheny Health Education and Research Foundation (AHERF) attempted to enlarge its footprint in the Philadelphia area. Multiple hospitals were purchased, a new medical school facility built, and physician practices acquired at a dizzying rate. The size of the organization was daunting, and, ultimately, unsupportable. In 1998, AHERF declared bankruptcy, the largest non-profit health care organization to do so at that time. The psychiatry department leadership and then program director developed a plan to find training slots for over 60 residents should the hospitals not find a buyer and be forced to close. Intervention by the city and state brought Drexel University and Tenet Healthcare to the bargaining table and brokered an agreement for the medical school to be assumed by Drexel University and the for-profit company to purchase the hospitals and associated graduate medical education (GME) slots. Tenet's subsequent closure of the Medical College of Pennsylvania Hospital in 2004 would cause further disruption to the psychiatry training program. At that time, the "orphaning" of the MCP

residents to Hahnemann Hospital preserved the slots for the existing residents in the program, and a phased further reduction of resident numbers occurred. Between 1995 and 2004, we reduced our resident complement from 73 to 32, reconfiguring many of the clinical services.

The closure of MCP was a mixed blessing despite the disruption. It helped facilitate a move by the existing chair to seek affiliate sites outside of the Tenet system, which would provide the department both training opportunities and funding. These stable partnerships were still in place at the time of the AAHS bankruptcy in 2019. Enduring prior threats to the residency and fellowship programs gave us a working knowledge of the nuts-and-bolts of residency closure and a framework for the kind of daily communication that maintains residency cohesion and morale during such events. In fact, during the initial AHERF crisis in 1998, we only had one resident transfer from the program, and no residents left during the MCP closure. We learned that frequent, even daily meetings (recall, these early events were pre-smartphones and Zoom) made the lives of residents more manageable as they, in good faith, continued with clinical training while simultaneously shouldering the enormous burden of anxiety about their future.

Managing the Hahnemann Closure

Immediately after the DIO's announcement, we held an emergency meeting of departmental leaders and set up a mandatory face-to-face meeting with the residents and fellows to be held 2 hours after the announcement. We enlisted faculty help to cover clinical services, allowed for travel time, and used the excellent network of communication that had already been established by the chief residents and class leaders. This meeting was, as expected, highly emotional.

Strategies we found useful to navigate the uncertainty and distress in the group (including our own) included the following:

1. Providing the facts as clearly and unambiguously as possible, minimizing, if not eliminat-

- ing, our personal emotional reactions and avoiding speculation as much as possible
2. Indicating an unwavering departmental commitment to the child and adult psychiatry residents and all training programs
 3. Scheduling frequent meetings to disseminate information in real time (generally meeting in person 2–3 times per week, but as frequently as every day when necessary)
 4. Providing both verbal and written information, recognizing that anxiety would interfere with retention of any material presented, with email follow-up about the content of meetings
 5. Involving our Educational Commission for Foreign Medical Graduates (ECFMG) and ACGME partners early in the process with direct communication with the Chair and Executive Director of the ACGME Review Committee for Psychiatry.
 6. Communicating with other program directors within our institution and with psychiatry program directors nationally through the American Association of Directors of Psychiatric Residency Training (AADPRT).

A significant challenge for faculty and departmental leaders was to navigate clinical and teaching responsibilities while simultaneously attending and scheduling meetings regarding the crisis. Department leaders were in the “middle management” role, in that they were responsible for attending meetings with the Graduate Medical Education Committee (GMEC) and other institutional leaders, while also leading meetings within the department. Our academic leadership in psychiatry made a commitment to continue the training programs in both child and general psychiatry and developed a plan to reconstitute them at another hospital, continuing our affiliation with Drexel and transferring the Centers for Medicare and Medicaid Services (CMS) slots of the current residents. We were not certain this would be possible before the hospital closed but we aimed to try. A core group of the faculty and departmental educational administration committed to the new program despite the inherent uncertainty. Simultaneously, we believed our ethical respon-

sibility was to help our residents to secure alternate placements in the event that we were unsuccessful. We did not want to provide false hope as we knew that most of the residents wanted to stay together and with our faculty. Thus, we were initially less open with the residents regarding our plans as we did not know how realistic they were. We also needed to carefully calibrate our own emotions about the unfolding events so that they did not further burden the residents. Fortunately, our faculty largely kept the residents’ education and patient care as their primary priorities, and most of the residents were at sites where their patient load was not impacted by unfolding events at Hahnemann. Obviously, the attention of the residents to their education was another matter. They were under tremendous stress from the uncertainty and the implications of the closure in each of their lives. In addition to the communication between the department and the residents, there were news reports in all forms of media, speculation on social media, and national attention to the closure. Protests were routinely organized in front of the hospital, some of which included demonstrations by residents and other healthcare workers. This barrage of attention complicated our efforts to keep the spread of rumors to a minimum and decrease the residents’ stress.

All catastrophes have a differential impact. Residents who were international medical graduates (IMGs) on visas were at risk of being deported. Residents with more strained budgets or who had family members with job or school commitments had further challenges if relocation was an outcome of the closure. Some newly arrived residents had less support in the community and all of our new residents had less of a relationship with the department and, therefore, less reason to trust us. As we were in survival mode, we had little in the way of time or resources to provide extra attention to wellness. We hoped that our commitment to working on behalf of the residents helped them with their well-being, and we continued to remind them of resources available for support and care. Residents had ongoing process groups for each post-graduate class, with outside faculty leaders, which continued to meet

throughout the crisis and which allowed them an avenue to share experiences and support one another.

The ACGME visited the institution and met with residents on July 12, 2019. The ACGME was incredibly helpful in centralizing the database of available positions and worked with programs seeking to accept residents to increase their resident complements when educational resources allowed. However, the anxiety about finding positions was soon replaced by anxiety about sufficient funding. Hahnemann was over the cap for funded GME positions, and therefore residents would not be released with 100% of their GME funding. Most of the program directors were not aware of the intricacies of GME funding and were caught by surprise when this occurred. Many resident transfer offers were made contingent upon full funding. Adding to the concern about CMS funding was a concern that the hospital had the final authority to accept or reject signing off on a resident's transfer, and it was concerning to all how resident positions and funding would be handled at the bankruptcy hearing.

The following lessons learned from the perspective of the program director/vice chair for education from this crisis are likely to be helpful in responding to both similar and less catastrophic change in any residency program:

- Academic psychiatry is inherently financially unstable under our current healthcare system. Program directors should know CMS rules regarding resident financing, be attuned to the fiscal health of their institutions, and follow news regarding healthcare finance. The COVID-19 crisis has additionally exacerbated the financial vulnerability of many healthcare institutions.
- Program directors must assume that clinical sites are always vulnerable and have available potential partners in mind.
- Program directors must assemble a support team early in their tenure. This should include personal supports as well as institutional supports, including the DIO, other program directors at the same institution, and program

directors in national organizations such as AADPRT. Acquainting oneself with key personnel at the ACGME is also critical to navigating major residency changes.

The next section of this chapter will describe how the department chair and leadership may assist programs during times of significant change.

The View from the Top

As the prior section illustrates, changes are constant in the world of graduate medical education (GME). Changes may occur at different levels (institutional, departmental, program, faculty, or trainee) and originate both internally and externally. Regardless of what factors drive change in a GME program, department leadership (especially the department chair and vice chair for education, when available) and program leadership (including the program director and associate program directors) must have a proactive mindset to craft a change management plan to address the apparent and unforeseen challenges that follow unexpected change. Such a plan must be crafted with two guiding principles – addressing short-term needs and preserving the long-term vision of the department.

Role of Program and Department Leadership During Change

Effective leadership is a prerequisite for successful organizational or program changes. Change leadership research has identified three key competencies common to successful change leaders – communication, collaboration, and commitment [2]. Change of varying magnitude occurs in all residency programs. Most changes are geared towards improving the quality of the overall program or addressing specific deficiencies identified through the annual program review, annual ACGME surveys, or other evaluative mechanisms such as collective resident feedback. It is advisable that the program director and depart-

ment chair share similar goals and values when reviewing feedback and making plans for change. Any benefits must be carefully evaluated against the barriers and obstacles to proposed changes. When changes are gradual and planned, the department and program leadership should allocate a reasonable amount of time to collecting suggestions and getting buy-in from key stakeholders in the department so that the change plan is vetted by leadership, faculty, and staff. The program director and chair, in this situation, must clearly communicate to the department the rationale for the change, the objectives, and the action plan. They must demonstrate genuine interest in collaborating with all the stakeholders in the department. The program director and chair must show their commitment to the change plan as well as being willing to listen and adjust as new information arises. Many program directors and chairs attain their positions because they possess these essential leadership attributes. As outlined in the Report by the Association of American Medical Colleges (AAMC) Group on Resident Affairs (GRA) [3], agility and adaptability are key personal attributes for a high-performing GME leader.

An experience in our department illustrates a change that a department might make internally, requiring such communication, evaluation, and problem solving. Several years before the Hahnemann closure, the program director proposed a significant change to the PGY2 clinical rotations by adding an outpatient experience to the already busy PGY2 schedule. The rationale for the change was the observation that PGY3 residents had a steep learning curve adjusting to the routines and rhythm of outpatient work, even without considering the extra challenges and tasks that came with our significant concentration on psychotherapy training. Many residents felt that they were not sufficiently prepared for the shift to outpatient work despite a weeklong orientation at the beginning of the PGY3 year. They expressed a strong desire to have an exposure to outpatient work in the PGY2 year on a “smaller scale.” The program director had several meetings with the chair and the senior associate program director and then engaged with the clinic

director and outpatient staff before any change took place. The PGY2 schedule was adjusted so that each resident could carry two patients in the outpatient clinic longitudinally for 12 months. Even though this example illustrates the type of programmatic change that is driven by educational goals is well planned and has long-term benefits in mind, it had unforeseen consequences and required significant retooling to make the experience a good one. For example, we had not anticipated the degree to which coverage issues on the inpatient services would pose a barrier to faculty buy-in when night float and vacation meant that covering residents would be less available for residents going to the outpatient site. Geography posed another challenge. Our PGY2 residents train in many different hospitals, so commuting and parking meant that 2 hours plus supervision turned into a full afternoon. Such logistical challenges were less apparent when the idea was on paper.

When a crisis presents itself there is rarely time for leaders to prepare – the only option is to react to the crisis. As a result, the role of the program leadership and chair suddenly shifts from “educational facilitator and leader” to “crisis manager.” Crisis management requires additional skill sets that a program director or chair would not necessarily need in non-crisis situations, and may not have been presented or selected for as qualifications for these positions. Program closure or the threat of such an event may be the most significant crisis for a residency training program. Hospital mergers and the loss of participating institutions are another common situation which threatens programs with the loss of clinical training options and a shift of institutional culture. Gonzalez et al. [4] conducted an important study examining the types of program closures and factors contributing to program closure by surveying the program directors of 27 Family Medicine Residency programs that were either closed or had applied for closure between 2000 and 2004. The study found that 75% of closing programs were based in and approximately 70% provided care for underserved communities. This study also identified financial, political, and institutional leadership changes as

the most common reasons for the program closure. All these factors are sadly validated in the case of the Hahnemann Hospital crisis and demise, only one and a half years after the hospital was sold by Tenet Healthcare to AAHS.

Although leaders are frequently inadequately prepared or trained to deal with a crisis – whether a natural disaster (e.g., Hurricane Katrina) or a man-made calamity (e.g., the Hahnemann closure) – these events may bring out the best qualities of a person in charge. Gigliotti [5] summarized the following six key attributes for any successful crisis leader: adaptable, empathetic, prepared, resilient, transparent, and trustworthy.

A department chair or program director must not merely react to a crisis swiftly, but continually adjust and adapt based on newly available information. At the beginning of the Hahnemann crisis, there was little information available regarding the plan for hospital and program closures. Understandably, departments and program leaders were flooded with questions that communicated the anger, disgust, anxiety, and despair felt by faculty and trainees, in addition to managing their own sense of anxiety and loss. Yet as department leaders we had no time (or power) to find out how and why the decision was made to close the hospital and withdraw the training programs. We only knew that we must act quickly to ensure the best possible path forward for our residents and department, and we felt ethically bound to address the emotional reactions of our faculty and trainees. Department leadership (including program directors) must quickly assess the ensuing impact of a crisis on every member of the department – including the trainees – and determine accurately the groups that the crisis renders the most vulnerable. From the beginning of the Hahnemann crisis, it was obvious that the patients served at Hahnemann were the most vulnerable people affected by the crisis. Working with hospital leadership and Drexel University Medicine leadership, we developed plans to provide inpatient coverage and outpatient transfers to ensure the continuity of patient care. Thousands of patients who had relied on Hahnemann for their medical care for years were impacted by the closure. The psychiatry department also managed a

busy medicine–psychiatry inpatient unit, whose patients would be a challenge regarding transfer and placement. The emotional toll on patients and care providers forced to terminate long-held relationships was substantial. Given the precipitous plan for all residencies to be shut down or withdrawn within 60 days, our residents and fellows were another group of people gravely impacted by the bankruptcy. At the time of the announcement of bankruptcy, there were 32 residents and nine fellows in our psychiatry department, some who had just completed orientation, and some who were in the process of applying for fellowships. As the crisis evolved, we prioritized this plan: (1) secure quality care for our inpatients and outpatients and transfer them appropriately, (2) support the residents to secure displacement spots in other programs, preferably in the Philadelphia area and with as many of their cohort as possible, (3) support the transition plan of the department from Drexel to Tower Health by maintaining the core faculty, (4) re-envision and reconstitute the residency programs within Tower Health, and (5) reconfigure a new academic department of psychiatry in a large health-care system (Tower Health) that provided services in urban, suburban, and rural settings, but had little prior experience with psychiatry GME, and which was geographically distant from our primary sites.

As indicated in the previous section, we convened nearly daily briefings for trainees with the training program leadership led by the vice chair. Both the child and general psychiatry program directors and the vice chair for education spent countless hours working closely with each resident and fellow to support their search for displacement spots by reviewing programs and compatibility. We also shared with residents our intention to relocate the program to Tower Health at some point. We were very sensitive about the potential conflict of interest in sharing this information, and made clear to them that we could not be certain that there was any chance that this process would be completed in time for them to stay with us. We communicated that first and foremost, we wanted them to secure positions and continue their training with no interruption.

A department chair has the added responsibility to support and guide the residency program leadership through crisis or change, especially when changes are imposed externally and unexpectedly. Perceived lack of support from department chairs has been cited as one of the factors contributing to program director burnout and turnover [6]. The well-being of a program director is critical to maintain relative stability and normalcy when a training program is in crisis. This responsibility of the chair may be lessened when the program director is a seasoned educator familiar with ACGME rules and regulations. In this scenario, the chair should attend to supporting and providing necessary resources to the program director. If the program director is relatively inexperienced, the chair should consider more hands-on involvement to help with managing the crisis. In addition, there is the obvious issue of the career development of the program director. The degree of distraction produced by the threat to job stability and career disruption posed by program closure cannot be underestimated. Many program directors are still building their own academic portfolios and may be concerned about finding an alternative education-focused academic position. The program director concerned about opportunities ahead will need a chair's help to map a future professional path while they both work to maintain morale and leadership for the residents. During the Hahnemann crisis, the chair was present at most of the daily briefings hosted by the vice chair and program director, providing support and as much new information as possible.

Stabilizing the faculty during a crisis is equally important for the tripartite mission of an academic department. Young faculty members, in particular, will experience significant stress during such disruptions. Impacts to grant funding, academic productivity and advancement, clinical work, and employment will be absorbed by those tasked to manage clinical work and provide resident and student preceptoring and teaching. Thus, the department chair must balance the demands on energy and attention to the multiple missions of the department and not lose sight of the overall well-being of faculty and staff. During

the Hahnemann bankruptcy, several departments of the College of Medicine lost hospital-based practices and many faculty members resigned, which caused enormous anxiety among remaining faculty members. Faculty departures would obviously be a detriment to the educational programs, so it was critical for our department to retain the core faculty. To address anxiety and forestall attrition, we held regular faculty meetings to provide updates on the bankruptcy and the development of a transition plan into a new healthcare system. We shared with faculty the vision to maintain the status and core mission as an academic department at Tower Health, as it became clear that there was a significant likelihood that our training programs in adult and child psychiatry would be reconstituted in the new system. Doing so without the core faculty would have been far more difficult so we sought to maintain morale and a sense of departmental connection.

Regulatory Requirements During Residency Program Changes

Every department chair must be familiar with the ACGME and American Board of Psychiatry and Neurology (ABPN) requirements for the training programs under their supervision. Many situations require the chair to make changes to a residency or fellowship program such as hiring or removing program directors, building new training affiliations, or navigating the loss of funding for positions. When program closures are possible, it is even more critical for the chair to understand the regulatory landscape to successfully plan and navigate the closure. Once Hahnemann Hospital announced the closure of the GME programs, we approached the GME office and DIO to explore the possibility of transferring our adult and child training programs in their entirety to Tower Health. Transferring to Tower Health was, in our view, the most logical way to protect the best interest of the residents and fellows. They would continue in the same cohort, with basically the same clinical rotation sites and faculty. The Hahnemann GME leadership declined our

request. The ACGME Institutional Policies outline the steps and process of transfer of program or institutional sponsorship (see below) which would have allowed us to make this seamless change. Knowing these policies up front allowed us to problem-solve and plan scenarios with the speed that we needed to have more options during this emergency.

Subject 18:00 Accreditation and Recognition Actions; Pre-Accreditation

Section: 18.100 Other Actions (continued)

18.104 Change of Sponsorship

a. Transfer of institutional or program sponsorship to another ACGME-accredited Sponsoring Institution requires a letter from the designated institutional official (DIO) and senior administrative official of the original Sponsoring Institution indicating willingness to give up sponsorship, and a letter from the DIO and senior administrative official of the receiving Sponsoring Institution, indicating willingness to accept institutional or program sponsorship. In the case of a program change, the letters should be addressed to the Executive Director of the respective specialty-specific Review Committee, with a copy to the Executive Director of the Institutional Review Committee and the Senior Vice President, Field Activities. In the case of a Sponsoring Institution change, the letter should be addressed to the Executive Director of the Institutional Review Committee, with a copy to the Senior Vice President, Field Activities [7] (Accreditation Council For Graduate Medical Education, Policies and Procedures, 2020).

Both the program director and department chair must be familiar with the institutional disaster policies in place, including the policy for program closure. When a new DIO joined Hahnemann about 1 year prior to the closure, one of the first policies sent to the GMEC for approval was the disaster policy. The requirement for an Institutional Disaster Policy is a byproduct of the way in which GME programs addressed the devastating impact on medical education and hospitals when Hurricane Katrina destroyed the Gulf Coast in 2005. This calamity caused many patients to lose their home hospitals and approximately 600 residents and fellows to lose their training homes. Suddenly the US GME system faced a stress test. After Katrina, the ACGME added the requirement that every sponsoring institution must have a disaster policy, including procedures that provided for a temporary relocation of the program to ensure the best possible continuity of training for the residents and fellows affected by the disastrous situation.

Keep Collaborating Institutions and Affiliates Informed

In retrospect, our strong collaborative relationships with major affiliates served our department well during this crisis and transition. Our department leadership initiated and maintained a productive relationship over 17 years with several training affiliates, including a large not-for-profit free-standing psychiatric hospital and a free-standing community mental health center with a large adult and child patient population. When Hahnemann announced the bankruptcy, the department leadership immediately approached these and other affiliate sites to provide information regarding our plans and the hospital closure. Open and direct communication continued throughout the crisis. We assured the sites that our residents and fellows would fulfill patient care responsibilities until they were transferred. We also provided as clear a timeline of the transition as we could so that sites could prepare for coverage in the absence of residents. This was not an easy transition for many of them, as it meant securing coverage for nights and week-

ends as well as for day-to-day patient care. Our long-term and healthy relationship with our affiliate partners was especially critical as we developed and submitted the new residency program application to the ACGME. Without hesitation, nearly all our affiliates provided letters of educational support and Program Letters of Agreement and expressed a strong desire to continue our relationship even as we transitioned to another institution. With their support and the continuing commitment of our faculty, we successfully obtained ACGME initial accreditation for a new program, recruited our first group of residents, and started their training in July 2020, in the middle of the pandemic. Ironically, the experience we had in navigating the closure helped us to weather the pandemic more easily, as the communication strategies we used during the closure were very similar during times when COVID-19 surges required unit procedures to change rapidly and when residents were understandably anxious about their training and their safety.

The following lessons learned from the perspective of the chair from the Hahnemann crisis are likely to be helpful in responding to both similar and less catastrophic change in any residency program:

1. Always place the interests of patients and trainees as the top priority.
2. Preserve or develop a long-term vision for the department amidst uncertainty or crisis.
3. Communicate the facts clearly.
4. Be a role model of emotion regulation; calm and direct.
5. Support and mentor the program director and keep his or her career development in mind in times of need.

Communication Strategies and Self-Care During Major Changes: Perspectives from Both the Chair and Vice Chair

Communication Strategies During Major Changes

Whether predicted or unexpected, changes must be clearly communicated to residents and anyone

else impacted by the change. Routes of communication may vary depending on the seriousness of the circumstances. Face-to-face communication is essential during a significant change. Written materials summarizing the content of the communication are most helpful, as anxiety and distress will often keep residents (and anyone) from accurately recalling all the facts. Acknowledging the emotional impact of change and managing one's own reactions is key to communicating effectively. For example, when changes affect both you and the residents, and the residents are angry or anxious, even if such changes disrupt your personal life, you must manage your own emotional response to communicate effectively. Facts are your friends – be clear, repeat as needed, and when you are unsure about something, be honest and say so and make efforts to find the answer. Expect that rumors will emerge and preemptively indicate when and how you will be available to clarify the situation and answer questions. Have a clear conduit for official information and disseminate it at predictable intervals. Ask residents to come to you with rumors that they have heard in order to clarify these. Often they are a source of great help. For example, we were aware that our residents maintained communication both within their own group, and with the larger group of Hahnemann house staff, and they often communicated concerns that we had not considered.

We advocate an approach that embraces the department as a team whose mission is to care for patients and support each other. Reinforcing the centrality of patient care during major changes protects both the departmental mission and personal professional identity. During disruptive change, a focus on the quality of patient care is key to maintaining professionalism. When faculty model professionalism and stay calm, it provides an anchor for residents. Residents will often be at an age where major life changes (e.g., illness, losses) have not yet impinged on their work; navigating through changes in residency may provide a helpful example of what is needed to function effectively as a professional in the years to come when life changes present challenges. Changes that are imposed by a department (call frequency or unit coverage, for example) are more complicated to execute

because residents may not see themselves as being on the same side of the issue as the departmental administration. In this situation, we would advocate that to any extent possible, including residents in shared decision-making and providing the rationale underlying the decision is important. It bears remembering that residents may also not have experiences navigating work situations when decisions occur that change policies or conditions that then impact them in a negative way. A focus on shared departmental sacrifice and a fuller discussion of the lack of such experience with the resident cohort may help them see such changes as unwelcome, but not personally directed. For program directors, it may be useful to discuss how unexpected changes affected your career trajectory and how you have responded to them. Effectively modeling this skill set helps residents in their personal and professional development.

Another vital communication channel during changes in training programs is that of communicating with regulatory agencies and experts. Orient yourself to all the individuals who can help you. This may include hospital-based experts in human resources and risk management, your DIO, and your legal department. State licensing boards, ECFMG, experts in immigration, the ACGME, and the ABPN are all key parties who may play a role in creating or assisting with change in your program. Developing relationships with individuals in each of these organizations will help you when emergencies occur by allowing you to quickly assemble a support team. It may even be possible for representatives from these constituencies to meet with you and the residents if a significant calamity occurs. In addition, AADPRT plays an essential role in the lives of most psychiatry program directors, as a source of information and support, particularly during difficult times.

Self-Care During Disruptive Change

Everyone involved in a training program may need extra support during major disruptions. No program director should be an island. A solid set

of supports inside and outside of the work environment is critical. Cultivating excellent relationships with your chair and with other faculty will pay enormous dividends in challenging times. Identify a mentor at the start of your work as a program director (AADPRT will facilitate this) and be in close contact with your mentor regarding questions and concerns. An important network is a group of trusted close confidantes who advise and support you outside of work. When perspective-taking is a challenge, these individuals may help you to clarify decisions. “Put on your own oxygen mask first” is an excellent strategy during disruptive change. Prioritizing exercise, eating well, and getting sufficient rest will help you to be in the best position to regulate your own emotions and make the best decisions. During disruptive change, there may be the temptation to neglect time for reflection and self-care because of the demands on your time. Resist the impulse to put time for yourself on the back burner in the service of more effective performance.

A difficult area to prioritize for the program director during major residency change is allocating sufficient time to examine and act on personal career goals. Often so much energy is expended caring for the program and the residents that personal career development falls by the wayside. We suggest scheduling time for a thorough examination of pros and cons of potential career changes with a trusted mentor. Examining future options through the lens of what you might tell a friend in a similar situation may be a helpful strategy.

For residents, relying on peer support networks was imperative during the Hahnemann closure. Establishing a culture in which residents are encouraged to form supportive relationships within the cohort and advocate for one another is crucial for any residency program, most especially during times of disruptive change. Since program leadership may not be privy to details of how certain residents are coping, chief residents may need to take the initiative to identify any who are struggling and in need of additional supports and make certain they are provided assistance.

Resident Perspectives and the Aftermath of the Hahnemann Closure

Much in the same way that residents must lead and effectively communicate within clinical teams when caring for patients, these skills are also necessary in maintaining resident morale during times of change. An impromptu resident-led meeting was held the evening following the DIO announcement of the hospital closure. This allowed a safe space in which residents could field questions and express frustrations in the absence of the administration. Recognizing that residents had varying degrees of familiarity with working with our program leadership, the chief residents listened intently and wrote down a list of items residents from each class wanted addressed with administration. As the prior sections indicated, residents in different classes and in different circumstances had impacts beyond just the question of where they might be placed. There were vacation and engagement plans, fellowship applications, families to support, and potentially apartment leases to break – each of which were experienced individually. It was important to validate resident concerns and allow each one to feel empowered to speak up during this time of crisis. In addition, this input helped the department broaden and prioritize issues of importance to the residents. For example, obtaining verification of training after Hahnemann closed became a major concern to residents who would require such information on many occasions in the future. We had not considered this in our initial needs assessment after the closure was announced.

In the unfortunate event of future residency closures, as residents, we see a potential role for external advising. As previously indicated, residents, faculty members, and leaders are tasked with managing an unfathomable amount during a major crisis with many diverging interests to juggle. Residency leadership may be working to preserve the program they have built in addition to protecting their trainees. Despite the tremendous support and transparency we were afforded by our residency leadership, residents suffered sig-

nificant losses because of the Hahnemann closure. The role of private equity investment in healthcare is becoming more prevalent and influential. We are, therefore, concerned that future residents may also fall victim to hospital closures. An advisor or consultant from an outside institution would be capable of a singular focus on the interests of the residents. Similarly, this advisor would be insulated from the closure and not burdened by the anxiety of ongoing events. Such an objective person could have a broader perspective and may help residents make sound decisions in these circumstances. ACGME or other regulatory bodies could develop a resident ombudsperson as a resource to be available during future crises. Such an individual might also provide support to the departmental leadership by decreasing the burden for support that they carry.

As a medical student, there is a great deal to consider when researching potential residency programs. The well-prepared residency applicant might peruse the American Medical Association (AMA) website for “common questions to ask” when on the interview trail. Questions to program directors and faculty members might pertain to location and type of training sites, philosophy of training, patient population, accessibility of faculty, call schedule, and employee benefits. Most important to many applicants is spending time with current residents asking about resident cohesiveness, their experiences on call and the call schedule, outside activities, and how supported they have felt by the faculty. These are all worthwhile considerations, but do not include questions about the financial stability of the program and the hospital systems that hold the resident slots. An unfortunate realization in the aftermath of our experiences was that the financial stability of the residency program and host institution is something that warrants investigation by applicants in our monetized healthcare system.

While the closure of Hahnemann was both unfortunate and surprising, an outcome of this catastrophe was an increase in resident cohesion. Residency training is naturally structured so that generally trainees at each post-graduate level

have different goals. For example, first-year interns focus on the foundational skills of psychiatric assessment and treatment and developing a support system in a new community, while more senior residents are honing particular skills of interest and exploring career opportunities. During the Hahnemann closure, residents were united by common goals – to survive this crisis and find a way to continue training.

The tragedy of the Hahnemann closure highlighted the importance of relying on one another during times of disruptive change. July 29, 2019 – a little over a month following the DIO announcement of the hospital closure – marked the last day in which the residents, faculty, and program leadership met before the residents would transfer to their new residency programs. Ironically, it was a requirement that all the residents be present at Hahnemann for the day of the closure in order to be released with CMS funding. A day of didactics and final goodbyes ensued. This meeting, emotion filled for both the residents and the faculty, was the culmination of weeks during which many residents struggled with feelings of helplessness, anxiety, and frustration. Residents were relieved to have secured new residency spots among programs in and around the Philadelphia area, obviating the expense of relocation. Our relief was coupled with sadness at the idea we were leaving our Drexel community – our family – on whom many had relied and which we had hoped would remain our academic home. Hahnemann residents took group pictures on the roof of the hospital department by department, saying goodbye to the institution and to one another. While our residents and faculty have been unable to finish the training relationships we started due to these unfortunate events, we remain attached by a bond that has endured. We believe our continued attachment to one another is in part due to the successful navigation of change by the residents and the department.

The following lessons learned from the perspective of residents from this crisis are likely to be helpful in responding to both similar and less catastrophic change in any residency program:

1. Resident cohesion and leadership were important in maintaining resident morale during this time of disruptive change.
2. External advising or consulting could be beneficial for residents in the event of future hospital closings.
3. Residents should consider finances of health care systems in the pros and cons of ranking a particular program for training.

Summary

Although the events that befell our psychiatry residency program were of a size and scope that are unusual, many of the strategies that were implemented helped us move forward and fulfill the needs of patients, faculty, and residents. One lesson we learned was to remember that change will impact members of a department differently. Leadership must determine the most adversely affected and plan accordingly. Our experiences with planned changes in our residency, most effectively implemented when deliberate steps were taken to engage and address the concerns of key stakeholders, helped us to keep communication at the forefront during this emergency. Departmental leadership must have the ability to preserve a vision for the educational, research, and clinical mission of a department during significant changes. When major events occur that are threats to the education of residents or disrupt the culture of a system, a value system that fosters faculty and resident well-being is imperative.

Finally, program directors and residents should know CMS rules regarding resident financing, be attuned to the fiscal health of their institutions, and follow news regarding healthcare finance. Given the precarious nature of healthcare financing, medical students and residency applicants should investigate the financial health of the institutions to which they apply and consider that as a factor in their ranking of programs. Leaders of academic programs must be prepared to navigate during unexpected calamities and anticipate that change will occur during their tenure.

References

1. Brubaker H. Hahnemann University Hospital announces 175 layoffs. CEO describes shaky financial condition. philly.com <https://www.inquirer.com/business/hahnemann-hospital-layoffs-freedman-paladin-20190403.html>. Retrieved 9/19/2021.
2. Bendixen SM, Campbell M, Criswell C, Smith R. Chance-capable leadership – the real power propelling successful change. Center for Creative Leadership. 2017. Retrieved from <https://cclinnovation.org/wp-content/uploads/2016/04/change-capable-leadership.pdf?webSyncID=c0c868b6-341c-06a2-6d43-deaa768121a9&sessionGUID=a4e0739c-bd91-4828-0616-27bb030ecba5>.
3. Groups on Resident Affairs. Institutional GME leadership competencies. 2015. Retrieved from Association of American Medical Colleges: <https://www.aamc.org/media/23726/download>.
4. Gonzalez EH, Phillips RL, Pugno PA. A study of closure of family practice residency programs. *Fam Med*. 2003;35(10):706–10.
5. Gigliotti R. 6 critical components of effective crisis leadership. 2017. Retrieved from ICMA: <https://icma.org/articles/article/6-critical-components-effective-crisis-leadership>.
6. O'Connor AB, Halvorsen AJ, Cmar JM, Finn KM, Fletcher KE, Kearns L, et al. Internal Medicine Residency Program Director Burnout and Program Director Turnover: results of a national survey. *Am J Med*. 2019;132(2):252–61.
7. Accreditation Council For Graduate Medical Education, Policies and Procedures. 2020. Retrieved from ACGME: [https://www.acgme.org/portals/0/pdfs/ab_acgmepoliciesproceduSubject%2018:00%20Accreditation%20and%20Recognition%20Actions;%20Pre-Accreditation%20Section:%2018.100%20Other%20Actions%20\(continued\)res.pdf](https://www.acgme.org/portals/0/pdfs/ab_acgmepoliciesproceduSubject%2018:00%20Accreditation%20and%20Recognition%20Actions;%20Pre-Accreditation%20Section:%2018.100%20Other%20Actions%20(continued)res.pdf).



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Introduction

A skilled, knowledgeable, and enthusiastic faculty is crucial to the success of a graduate medical education (GME) program. Faculty members provide day-to-day clinical supervision, didactic teaching, and mentoring for trainees. They model how psychiatrists work in practice, care and advocate for patients, interact with colleagues, staff, and teams, pursue lifelong learning and scholarship, attend to their own and team members' well-being, and balance work and personal life. Faculty members substantially affect the safety, inclusiveness, and intellectual stimulation of a trainee's learning environment. They can observe trainees in their everyday work and provide the specific, direct feedback that a resident needs to become the best possible psychiatrist. For program directors, chairs, and other education program leaders, investing in ongoing professional development of the faculty, or faculty development, is key to establishing and maintaining a high-quality program. The Accreditation Council for Graduate Medical Education (ACGME) recognizes the importance of and provides requirements for faculty development in its Common Program Requirements [1].

Faculty development has been defined as “all activities health professionals pursue to improve their knowledge, skills, and behaviors as teachers and educators, leaders and managers, and researchers and scholars, in both individual and group settings” [2]. This chapter will focus on professional development for faculty participating in graduate medical education (GME) programs. The ACGME describes faculty development as “structured programming developed for the purpose of enhancing transference of knowledge, skill, and behavior from the educator to the learner” and further stipulates that faculty development can occur in a variety of formats, use internal or external resources, is usually needs-based, and can be specific to the program and institution [1].

Through faculty development programming, program directors and leadership can inform and update the teaching faculty about the program's mission, goals, requirements, and expectations. This process helps faculty members to represent the program accurately to applicants, use effective teaching and supervision methods, foster a positive learning environment, provide meaningful verbal and written feedback to trainees to further their professional growth, and follow program policies correctly. Faculty development events are also opportunities to discuss any upcoming changes in the program.

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Faculty development is not just vital for knowledge transfer and skill-building. Group faculty development activities can build community, foster faculty well-being, and enhance satisfaction with and investment in the role of an educator and role model for the next generation of psychiatrists. By paying attention to the group and individual professional development needs of faculty, the program and department can demonstrate their appreciation of faculty members and investment in their success and well-being.

This chapter addresses several areas important in designing or refining a faculty development program for psychiatry GME teaching faculty. These include content areas for faculty development (both those mandated by the ACGME and other important topics) and strategies for delivering and assessing faculty development programming. We provide a model for using a continuous quality improvement approach to guide faculty development efforts. We present two case examples of faculty development challenges and strategies in a new, smaller program and in a larger and more established program. Finally, we discuss local and national resources for faculty development.

Content Areas for Faculty Development

ACGME Requirements

The ACGME Common Program Requirements (CPRs) outline the responsibilities of the program director for faculty (see Box 23.1 for a summary) [1]. These responsibilities fall into two broad categories: ensuring a strong cohort of faculty to lead resident training and overseeing annual faculty development opportunities across core required domains. A high-quality educational environment starts with a strong faculty. The program director not only has the authority to approve faculty for and remove faculty from participation in the training program (per ACGME requirements) but ideally will be involved in hiring and orienting faculty to their educational roles. As part of regular evaluation

Box 23.1: Summary of ACGME Common Core Requirements Related to Faculty [1]

The program director must:

- Evaluate candidates to participate in the residency program and annually after appointment
- Approve the supervising faculty, remove faculty from supervisory roles, and have authority to remove residents in cases without acceptable learning environment for all sites

Faculty members must:

- Demonstrate professionalism
- Commit to high standards of safe, quality, cost-effective, patient-centered care
- Demonstrate a strong interest in the education of residents
- Dedicate sufficient time to their educational role and maintain a high-quality learning environment
- Participate in professional development and continuing education
- Engage in faculty development annually in four core areas:
 - Role as an educator
 - Quality improvement and patient safety
 - Fostering well-being (both their own and residents')
 - Patient care delivery informed by practice-based learning and improvement efforts

efforts, the program director is responsible for determining which faculty teach/supervise residents and for monitoring and providing feedback about faculty performance.

These responsibilities require the program director to be broadly invested in the professional development of faculty. Practically, this also means the program director needs to advocate effectively for regular faculty development, including the time for faculty to participate in

faculty development, at least annually. Often the program director is supported in these efforts by a range of other faculty leaders, including the department chair and vice-chair for education [3]. There are four topic areas of faculty development required by the ACGME: developing faculty as educators, implementing quality improvement and patient safety efforts, delivering high-quality patient care, and fostering well-being.

In addition to these content areas, there must also be a focus more broadly on the Clinical Learning Environment Review (CLER) [4] (see Box 23.2 for details of required areas to consider) and the faculty development needed to promote a high-quality educational environment.

Developing Faculty as Educators

Developing faculty starts with an orientation to the role of a faculty member as an educator. Tasks of the faculty medical educator include modeling professionalism, demonstrating investment in the education of residents, demonstrating commitment to the delivery of safe, high-quality, cost-effective, patient-centered care, and participating in organized clinical discussions, rounds, journal clubs, and conferences regularly. In order to

devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities, it is also important that faculty understand how to integrate their clinical and teaching responsibilities [1].

Because most clinicians have had limited exposure to formal training in educational strategies and pedagogy, addressing best practices in adult learning may be especially important for faculty to thrive as educators [5]. Common topics of faculty development efforts to enhance teaching abilities include teaching in both didactic and clinical settings, theoretical frameworks and learning approaches, the acquisition of specific teaching skills and strategies, giving feedback, learner assessment and evaluation, and instructional design and curriculum development [6].

Implementing Quality Improvement and Patient Safety Efforts

With the ACGME's increasing focus on resident engagement in quality improvement and patient safety, there is a growing need for faculty development about both the execution of quality improvement and patient safety projects and the mentorship of trainees in developing these skills [7]. Fortunately, several models support this vital faculty development goal, ranging from weekly emails to enhance patient safety teaching on rounds [8] to more formal system-wide faculty development efforts [9]. In addition, the ACGME Psychiatry Milestones can be a source of core training topics. Common topics of faculty development efforts to enhance quality improvement and patient safety include systemic factors that lead to patient safety events, best practices for reporting patient safety events and error disclosure, analysis of patient safety events, participating in and leading local quality improvement initiatives, and the ability to lead teams to improve systems to prevent patient safety events [10].

Delivering High-Quality Patient Care

Faculty members must model the delivery of up-to-date, evidence-based patient care across both

Box 23.2: Summary of Components of Clinical Learning Environment Review (CLER) [4]

1. Address patient safety and implementation sustainable, systems-based improvements
2. Deliver healthcare quality aligned with the goals of the clinical site.
3. Support high-performance teaming.
4. Provide all members of the clinical care team and patients with mechanisms to raise supervision concerns.
5. Engage in systematic and institutional strategies to sustain well-being.
6. Recognize impact of attitudes, beliefs, and skills related to professionalism on quality and safety of patient care.

general psychiatry and a range of required psychiatric subspecialty areas. Program directors are responsible for ensuring that faculty members have sufficient expertise to train residents in a broad range of psychiatric clinical rotations, including inpatient, outpatient, geriatric, addiction, community, consultation liaison, forensic, and emergency psychiatry. Additionally, child and adolescent psychiatry experiences require a Board-certified faculty supervisor. Faculty expertise must be available across several treatment modalities, including supportive psychotherapy, psychodynamic psychotherapy, cognitive-behavioral therapy, psychopharmacology, electroconvulsive therapy, and other emerging somatic treatments [11]. Lastly, faculty experts will be needed to deliver a didactic curriculum across all these topic areas and others. Strategic recruiting of expert clinicians or faculty with subspecialty training may be necessary to address these needs.

Fostering Well-Being

It is especially important to consider the role of the program director in promoting the personal and professional well-being of the faculty. An environment of well-being will enhance faculty job satisfaction and retention. Faculty can also model this important professional activity and be a source of support for resident well-being. There has been increasing recognition that this requires a focus on supporting both systems change in the clinical and learning environment and individual strategies for well-being [12]. Fostering opportunities to create community and promote personal well-being can be incorporated into pre-existing faculty development efforts. For example, faculty development about leading quality improvement projects can include provider satisfaction as an important quality improvement outcome. A program to develop faculty as leaders able to shape the clinical learning environment may also help accomplish the goal of systems that support well-being. To support faculty well-being, the program director and educational leaders may also need to help advocate for appropriate credit for teaching activities [13] or the implementation of innovative programs to promote faculty wellness [14].

Other Potential Topics for Faculty Development

Clinical Supervision

Although developing faculty as educators includes clinical supervision, this topic warrants particular emphasis. The bulk of resident education occurs through clinical supervision, so faculty should be familiar with the principles of adult learning theory and how they apply to supervising residents in clinical settings. Attendings need to be able to assess and activate a resident's prior knowledge, set collaborative goals, and continuously monitor learning. Supervisors with these skills increase learners' intrinsic motivation and reflective practice, key elements of the Practice-Based Learning and Improvement (PBLI) Milestones [15].

Each clinical setting has unique opportunities and constraints that lend themselves to distinct teaching strategies and different faculty development needs. For example, skills needed for brief bedside teaching during inpatient rounds differ from those required for hour-long indirect supervision of a resident doing psychotherapy. Therefore, faculty development programs must recognize and address the unique needs of faculty working in different clinical settings.

In acute care settings, attendings most often work with early learners and have more direct observation of patient interviews with immediate feedback. Some specific tasks for educators in this setting include teaching residents to assess patient safety, maintain their safety working with acute patients, and work collaboratively with multidisciplinary teams [16, 17]. In addition, acute care settings lend themselves to brief bedside teaching. Educators can develop a repertoire of "teaching scripts" for common clinical scenarios in advance. Having prepared "teaching scripts" also can reduce cognitive load to enhance focus on the patient while providing teaching and supervision [18].

In the outpatient setting, attendings generally work with more advanced learners, and there are opportunities for both direct and indirect supervision [19]. Faculty have different teaching opportunities when they join the end of outpa-

tient visits to “staff” cases versus when they provide dedicated indirect group supervision of residents. Indirect supervision (i.e., supervision without personally evaluating the patient) requires different skills to assess and direct learners and may evoke anxiety for faculty new to this model. Specific outpatient supervision skills for faculty include teaching residents safety assessments in the outpatient setting, instructing residents to obtain detailed informed consent for medications, guiding residents in patient panel management, and helping residents refer patients to appropriate community resources [16].

Psychotherapy supervision brings with it another set of skills for faculty development. Attendings need to help residents establish a therapeutic alliance, select a suitable psychotherapy modality, set and maintain boundaries, and complete successful terminations of therapy. There are a host of different strategies that supervisors might use, including observation of video recordings, review of transcripts, role-playing, live observation through a one-way mirror, and co-therapy. Skills that help supervisors form successful supervisory relationships include writing supervision contracts, forming a supervisory alliance, establishing an agenda in supervision, and maintaining appropriate supervision boundaries. Supervisors may also need instruction on using validated empirical scales within their modality to assess resident competency and provide feedback [16].

In all clinical settings, faculty need to be well versed in accurately evaluating residents and providing actionable, specific feedback. Feedback is crucial to learner development, but often faculty receive little training in this area [20]. Faculty development should target using evidence-based solutions and approaches to the most common barriers to feedback, including lack of dedicated time, faculty discomfort and fear of damaging rapport with residents, and discomfort on the part of trainees [21].

Didactic Teaching

In addition to clinical supervision, faculty teach formal didactics, which requires a distinct set of

skills. Professional development in this area should include instruction in adult learning theory, specifically in the application of the science of learning to medical education [22, 23]. Engaging adult learners involves tapping into their sources of motivation and making topics relevant to their practice, assessing and building upon prior knowledge, using effortful learning to increase knowledge retention, applying knowledge in varied contexts, and paying attention to the social context of learning. Active learning strategies, such as flipped classroom techniques, problem-based learning, and small group facilitation, can help to increase comprehension, transfer, and retention. Importantly, learning objectives should be explicit and tied to formal assessment tools.

Some examples of successful applications of adult learning theory to medical education include using standardized patients to improve communication skills, using online quizzes to assess knowledge and tailor learning, pairing video clips with skill practice, and using discussion-based vignettes and learner-directed online learning [24]. Another example is team-based learning to improve didactic teaching of psychodynamic psychotherapy within psychiatry residency didactics [25].

Faculty can also learn to develop curricula, for example, by following Kern’s six-step model of problem identification and needs assessment, goals and objectives, educational strategies, implementation, evaluation, and feedback [26]. This model can be successfully applied to developing a didactic series in a specific content area [27, 28].

Diversity, Equity, and Inclusion

Faculty development should include training faculty to foster an inclusive learning environment, evaluate residents equitably and fairly, and educate residents to meet the needs of diverse patient populations.

Program directors are responsible for maintaining an inclusive learning environment for all trainees, including training faculty to be aware of their biases and employ equity mindsets.

There are courses available such as “Becoming a More Equitable Educator” from the Massachusetts Institute of Technology (MITx) [29], and a course specifically designed for graduate medical education is under development. Faculty should be aware that their assessment of residents is prone to implicit bias, which they should consider when completing evaluations and writing letters of recommendation. Implicit bias training is essential for faculty members who rank applicants and select residents for honors, awards, and leadership positions, such as chief residents. In clinical settings, faculty should be trained to support residents who are subject to patient bias. Discriminatory behavior by patients toward trainees is common and takes an emotional toll [30]. There are a variety of frameworks that faculty can use to support trainees and interrupt instances of biased behavior ranging from microaggressions to explicit discrimination [31–33].

Faculty should also be trained to provide equitable care to diverse populations and to be able to teach residents to do the same. Concepts of health equity, cultural humility, structural competency, and advocacy should be practiced and taught. Faculty may need specific support to include this content in didactic curricula and avoid bias in all didactics. One institution formed a committee of faculty and residents that led to introducing a 4-year curriculum in cultural psychiatry and religion and spirituality in the residency [34].

Faculty development should also include mentorship of underrepresented minorities in medicine (URM) faculty. Minority faculty development programs increase retention, promotion, and productivity among this cohort [35]. In addition, incorporating development efforts earlier in the pipeline (e.g., for medical students and residents), including mentoring and development of research, teaching, and scientific writing skills, can help retain minority faculty and create an environment conducive to their professional growth [36]. Increased recent comfort with teleconferencing opens up new opportunities for recruiting mentors from remote sites to fill in gaps at a home institution.

Scholarship

The program director is also responsible for supporting the development of a culture of scholarship as outlined by the ACGME requirements:

Medicine is both an art and a science. The physician is a humanistic scientist who cares for patients. This requires the ability to think critically, evaluate the literature, appropriately assimilate new knowledge, and practice lifelong learning. The program and faculty must create an environment that fosters the acquisition of such skills through resident participation in scholarly activities. Scholarly activities may include discovery, integration, application, and teaching [11].

Topics for faculty development efforts include both skills in scholarship and mentoring of trainee scholarship. These activities require various skills, including researching and reading literature, writing and publishing, and presenting scholarship efforts [37].

Developing skills to mentor scholarship is a particular focus, and there are published curricula on developing mentors for scholars, including core topics such as defining mentoring, rewards and challenges of mentoring, communicating effectively with mentees, achieving work–personal life balance, understanding diversity, benefits of informal mentoring relationships, and leadership skills and opportunities [38]. Finally, it is important to note that scholarship is defined by the ACGME much more broadly than just publishing original research. For example, scholarship can include review articles, book chapters, case reports, innovations in education, development of curricula or evaluation tools, quality improvement projects, and contributions to professional organizations or editorial boards. For a detailed discussion of research and scholarship in graduate medical education, see Chap. 26. Many of the faculty development efforts outlined in this chapter, like developing skills in teaching and evaluation, are the foundation of a culture of scholarship.

Leadership

Although not formally an ACGME requirement, developing faculty leadership skills, especially in faculty who serve primarily as clinician-

educators, is critical to support a strong program. The program director is often in the position to support the development of leaders in a variety of contexts, from the clinical services in which residents train, to associate program directors, who form a residency leadership team. As with skills in scholarship, most clinicians have not been formally exposed to training in leadership and management. A review of faculty development efforts to promote leadership reports topics such as leadership concepts, principles, and strategies (e.g., leadership styles and strategic planning), leadership skills (e.g., personal effectiveness and conflict resolution), and increased awareness of leadership roles in the academic setting [39]. This review also notes that common areas of change after faculty development include both changes in awareness of one's role as a leader and participants taking on new leadership roles. Suggestions for faculty development include grounding efforts in a theoretical framework, articulating the definition of leadership, delivering faculty development in the form of extended rather than one-time programs, and promoting the use of narrative approaches, peer coaching, and team development. It is important to note that many leadership development efforts have focused on higher level leadership roles such as department chairs and executives. A recent paper by Survey and colleagues describes a successful leadership curriculum designed for program and clerkship directors [40]. This curriculum was a week-long course that covered both educational topics (assessment and curriculum design, mentoring, and program evaluation) and leadership topics (change management, communication, negotiation, conflict management, emotional intelligence, leadership style, management, mission and vision, and team building). Innovative approaches described by this group include inviting specific faculty to participate in the course based on their leadership role and using responses from a series of prework reflection assignments to anchor course content. These examples may be helpful to guide program director decisions as they develop local efforts to support faculty development for leadership.

Strategies for Faculty Development

The content of faculty development described above can be delivered in a variety of different ways. Traditionally, faculty development has involved one-time structured group lectures or workshops sponsored by a department or institution. However, the literature now describes a broader range of faculty development strategies. Steinert [41] has divided these into group versus individual approaches that are either formal or informal. Faculty development activities can also be divided into one-time events such as a single workshop versus longitudinal interventions such as courses, teaching scholars programs, or communities of practice that meet over weeks to years.

Several studies have examined factors contributing to the effectiveness of faculty development programs in terms of participant satisfaction, learning, and behavior change, as well as (rarely) student and organizational change. A common thread in these studies is the crucial importance of adding experiential learning to grounding didactics. Experiential learning includes practicing and applying knowledge and skills, both as part of the faculty development program and within the participant's workplace. Other important factors identified in reviews of faculty development interventions to enhance teaching effectiveness and leadership skills [6, 39] include the use of an evidence-informed educational design, the use of multiple instructional methods within a single intervention to enhance learning, content relevant to participants' work, opportunities for feedback and reflection, a longitudinal design rather than one-time events, individual and group projects, peer support, intentional community building, and institutional support in the form of funding and release time for participants. A review of studies addressing faculty development for competency-based education [42] identified key features of a shared mental model regarding learner (e.g., resident or fellow) competencies, feedback for participating faculty members regarding their teaching and assessment skills, and longitudinal faculty development programming.

Below, the different faculty development strategies are reviewed in more detail, organized according to Steinert's [41] model of group versus individual and formal versus informal approaches. Programs will likely wish to use multiple strategies depending on the purpose and topic of faculty development, available resources, and the needs and preferences of their faculty members. Faculty members at various stages of career development are also likely to have different faculty development needs [43].

Group Faculty Development

Formal Activities

Formal, structured group activities are the most frequently implemented faculty development strategies in medicine [6]. One-time lectures or workshops are a low barrier strategy to reach many faculty members. Workshops offer an opportunity to learn and practice educational skills through active instructional methods such as structured reflection, small group discussions, and role-plays or simulations. One-time faculty development events receive very high satisfaction ratings from faculty. Some studies have found that they increase self-reported knowledge, skills, and confidence and change participant behavior. For example, a half-day faculty workshop on mentoring improved measured mentoring competency and self-reported skills and confidence [44].

Longitudinal experiences require more development, time, and resources but tend to be more sustainable and produce higher level behavioral changes (e.g., enhanced educational leadership and scholarship) [6]. Longitudinal experiences may include short courses or seminars or longer (e.g., year-long) programs. In addition, novel longitudinal programs for junior faculty have been created at various institutions, with components of teaching education skills, mentoring and setting career goals, assisting with the completion of participants' projects, and providing a community of peer support [45–47].

Education Grand Rounds are a common way to incorporate teaching topics into a longitudinal format. One academic center found this

method to be a sustainable form of faculty development across two campuses, with prioritized themes including didactic and clinical teaching, education research, assessment and evaluation, education administration, and instructional technology [48]. While faculty development events are usually just for faculty members, Education Grand Rounds can also provide an opportunity for other learners, such as residents, fellows, and students, to learn about important topics in education.

Many universities offer teaching scholars programs within their departments or health sciences [49]. These programs involve instruction in teaching methods, educational research and scholarship, curriculum development, assessment skills, advising and mentoring skills, and leadership skills. Outcomes of these programs include increased enthusiasm for teaching and increased productivity in educational research, including publication and presentation at professional meetings. Some academic centers have formal master's degrees or fellowships in medical education, generally within the school of medicine or health sciences [50].

In psychiatry, like the rest of medicine, most faculty development remains structured group one-time events rather than longitudinal programs. For example, in a 2016 survey of members of the American Association of Directors of Psychiatric Residency Training (AADPRT), only 16% of respondents identified any longitudinal faculty development at the department level. In addition, only 11% reported longitudinal programs within their institution [3].

Informal Activities

Less formal group strategies foster workplace-based learning and local "communities of practice" [51], where clinician-educators can be more vulnerable, strengthen their social network, hone each other's teaching skills, and work together on projects. Informal strategies can be added or built into pre-existing clinical and service-related activities. For example, department or site faculty meetings can devote a portion of time or a periodic meeting to a faculty development topic. Journal clubs are another opportunity for select-

ing articles on education-related topics. Clinical service meetings and clinical consultation groups can also be used as a potential forum to discuss teaching topics, coordinate feedback for learners, and brainstorm solutions to challenging scenarios as they arise. Small groups of faculty members on an acute service or within a clinic can meet at regular intervals, for example, before learner evaluations are due, to support each other in developing and delivering constructive, targeted feedback.

Faculty peer groups can support each other in developing clinical skills, career development, and leadership. For example, one institution successfully formed a monthly peer group using a case-based model to discuss challenging scenarios, such as assisting medical students in coping with patient death, supporting students who were victims of sexual harassment, managing medical students with their own mental illnesses, and personal self-disclosure in clinical encounters [52]. Another peer group of junior clinician-educator faculty met 30 times over 5 years with a senior faculty advisor. They used a model of having each junior faculty member report on their career-related progress and concerns, receive feedback from the group, and form an action plan of steps to accomplish before the next meeting. Goals were mutual support, providing collective mentoring, fostering accountability, maintaining momentum on projects, and helping junior faculty meet requirements for promotion [53]. Outcomes included increased workplace satisfaction and scholarly productivity.

Small peer reflective-practice groups can help faculty gain alternative perspectives and novel solutions to common issues of clinical practice and leadership. For example, one small group used an iterative strategy of alternating between structured individual reflective writing and group discussion to develop new approaches to manage disruptive physician behavior [54].

Workplace-based groups of faculty members can work together on group projects addressing specific goals. For example, in one program, a working group of six faculty leaders of core modules in the psychiatry residency didactics successfully revised the curriculum of their modules,

with the specific goals of updating and coordinating content (e.g., eliminating gaps and redundancies) and incorporating more active teaching strategies [55]. The group met for 90 min every 2 months and achieved this revision without additional compensation or dedicated time. These junior faculty, led by the program director, simultaneously developed their instructional competence and enhanced their curriculum development and leadership skills. Another working group at the same institution convened to develop a novel curriculum for the new integrated care fellowship within 6 months of its starting date. The group was successful with the support of two staff with education expertise working at 1.0 full-time equivalents (FTE) total and with dedicated FTE provided to involve faculty [27]. Within the same fellowship, another working group of four faculty produced a novel 12-h telepsychiatry curriculum [28]. Group projects, supported by peers or by teleconferenced distance mentoring at a national level, are also a low-cost and effective way to foster scholarship among clinician educators [56].

Individual Faculty Development

Formal Activities

A faculty member's areas of interest and career goals should guide their individualized faculty development. Departments can provide resources or time for faculty to complete online training or continuing medical education (CME) activities, attend national conferences, and purchase books and other resources.

Opportunities for individual professional development exist in clinical settings in the form of evaluations from learners. Faculty may receive formal evaluations of their didactics from learners as well as evaluations in their capacity as supervising attendings for rotations. These evaluations provide feedback about the faculty member's teaching skills and have the added benefit of documenting teaching activities for promotion and tenure. Peer evaluations of teaching and clinical activities provide another unique perspective for further development. One institution provided

faculty with aggregated peer evaluations assessing domains related to clinical practice, teaching, departmental citizenship, and research/productivity [57].

More targeted and direct feedback can be delivered through direct observation. For example, faculty can observe a peer's didactic session and complete a structured peer teaching evaluation. One such instrument was created with faculty input to evaluate medical lecturing. With peer rater training, internal consistency was high, and this method served as a reliable peer assessment for the promotion process [58]. Peer faculty can also directly observe others doing group or individual supervision or informal teaching in a clinical setting, with structured prompts for feedback. "Peer coaching" has been used to identify specific goals for improving teaching skills in the clinical setting in a longitudinal model, resulting in increased self-awareness, improvement of specific skills, and fostering collegiality [59]. In a study of internal medicine faculty attendings on 2-week inpatient teaching blocks, direct observation by peers using a structured tool was positively received by both evaluators and those observed [60]. Being observed led to the awareness of unrecognized habits and personalized teaching tips. Evaluators reported learning new and useful teaching techniques from their peers. In another study, peer collaborative relationships in which faculty work together to plan educational activities and monitor implementation led to faculty members' implementing new teaching strategies, appropriately choosing new teaching strategies, and retaining these strategies in the long term [61].

Formal faculty development at the individual level can also include completion of online modules required by the program or institution, focusing on topics such as assessing learners using direct observation, giving feedback, or fostering an inclusive and positive learning environment. Some national online modules or courses are listed in Table 23.1, with topics including learner assessment, becoming an equitable educator, and Psychiatry Milestones. Online modules help deliver core information deemed important for every faculty member to know. In addition, online

modules and in-person faculty development events can benefit from the principles underlying faculty development "snippets" [62]. "Snippets" aim to reduce cognitive load by focusing on a single objective, covered in about 10 slides, lasting 15–20 min, and can be delivered by themselves or paired with a well-aligned learning activity as part of a longer faculty development session or program. As discussed above, the ability to apply knowledge, practice skills, and receive feedback is important in consolidating learning from online modules or didactic "snippets."

Mentorship is vital to individual faculty development. One faculty survey indicated that having a high-quality mentor increased job satisfaction and decreased the chances of being stalled in rank [63]. Formal mentoring programs exist in many departments and institutions, commonly involving mentor–mentee dyads, often with written agreements and expectations. Thus, mentorship is discussed here as a formal faculty development strategy at the individual level. However, mentoring can occur informally, with successful faculty members often finding multiple mentors and sponsors, and can also occur in group settings with one or more senior mentors, peer mentoring groups, or speed mentoring [64]. One formal program assigned mentors to new faculty members, provided mentors with an orientation, and gave a list of six topics to the pairs to discuss in regular mentoring sessions (orientation to the department, clinical and administrative duties, research and academic interests, teaching and supervision assignments, personal and family well-being, and promotion and tenure) [65]. In a systematic review of studies of mentoring programs for URM physicians in academic settings, strategies included peer, senior faculty, onsite, and distance mentoring either individually or in groups [66]. Key themes included the importance of institutional support and mentor training.

Informal Activities

While harder to identify, a significant component of faculty development is experiential learning through job-related activities. One framework to understand experiential learning is described by

Table 23.1 National faculty development resources

| Resource | Description |
|---|--|
| American Association of Directors of Psychiatric Residency Training (AADPRT) Virtual Training Office https://portal.aadprt.org/user/vto/category/search?keyword=faculty+development&pid=0&Tag= | List of faculty development articles, books, and resources; materials from faculty development presentations given at annual meetings |
| Association of American Medical Colleges (AAMC) Leadership Development programs https://www.aamc.org/members/leadership/ | AAMC leadership programs (virtual and in-person) and toolkits for different career stages and leadership roles, including seminars for minority and women faculty |
| AAMC Medical Education Research Certificate program (MERC) https://www.aamc.org/what-we-do/mission-areas/medical-education/meded-research-certificate-program | Workshops and certificate program in medical education research |
| Association for Academic Psychiatry (AAP) Master Educator Series https://www.academicpsychiatry.org/career-development/ | 3-year curriculum offered at annual AAP meeting and again virtually in the spring. Topics include curriculum development, assessment, program evaluation, educational scholarship, leadership |
| Accreditation Council for Graduate Medical Education (ACGME) Faculty Development in Assessment https://www.acgme.org/Meetings-and-Educational-Activities/Other-Educational-Activities/Courses-and-Workshops/Developing-Faculty-Competencies-in-Assessment/ | National and regional faculty development courses, assessment tools for direct observation and multisource feedback; Milestones assessment resources |
| Association of Directors of Medical Student Education in Psychiatry (ADMSEP) Education Scholars program https://www.admsep.org/resources.php?c=education-scholars | 2-year program developing skills in educational scholarship, including sessions at ADMSEP meetings and several phone meetings during the year |
| Alliance for Academic Internal Medicine faculty development resources https://www.im.org/resources/ume-gme-program-resources/faculty-development-resources | Useful curricula for faculty development programs on specific topics, such as writing evaluations, assessing clinical reasoning, etc. |
| Executive Leadership in Academic Medicine (ELAM) https://drexel.edu/medicine/academics/womens-health-and-leadership/elam/about-elam/ | One-year, nationally competitive leadership training fellowship designed to expand the national pool of women candidates for leadership positions in academic medicine, dentistry, public health, and pharmacy |
| Harvard Macy Institute https://www.harvardmacy.org/index.php | Institute focusing on international, interprofessional innovation in healthcare education. Offers courses and collaborates with Harvard to offer a master's program. |
| Institute for Healthcare Improvement (IHI) http://www.ihl.org/education/IHIOpenSchool/Courses/Pages/OpenSchoolCertificates.aspx | Online courses, continuing education credit, and certificate program in quality improvement and patient safety |
| Massachusetts Institute of Technology (MITx) course: Becoming a More Equitable Educator https://www.edx.org/course/becoming-a-more-equitable-educator-mindsets-and-practices | Free, online, 10-week, self-paced course focused on equity mindsets and teaching practices |
| National Neuroscience Curriculum Initiative (NNCI): https://www.nncionline.org/ | Example of a national curriculum through which faculty can improve their knowledge and access state-of-the-art pedagogy and modules to use in their own teaching |
| Stanford Faculty Development Center for Medical Teachers http://sfdc.stanford.edu/ | Example of a well-developed institutional faculty development program in academic medicine |

(continued)

Table 23.1 (continued)

| Resource | Description |
|--|--|
| Society of Teachers of Family Medicine faculty development program: https://www.stfm.org/facultydevelopment/certificateprograms/residencyfacultyfundamentals/overview/ | Example of national faculty development program and topics |
| Univ of Minnesota online mentor training https://www.ctsi.umn.edu/education-and-training/mentoring/mentor-training | Online 90–120-min training in how to be a mentor |
| USC Master of Academic Medicine program https://keck.usc.edu/academic-medicine-program/ | Online degree program for academic medical educators, 9–10 semesters part-time, with 5–7 days on campus annually |

Steinert as learning by doing, observing, and reflecting [51]. Faculty members can be encouraged to enhance their skills by setting goals for themselves, keeping a log of their teaching experiences, or by reflecting on their teaching through a series of structured prompts.

Within academic settings, many clinicians practice in teams and can observe others' styles and approaches, including those of peers and learners. Informal peer interactions allow for faculty to compare experiences, reflect on shared patients, and provide each other with informal feedback. Faculty may also find multiple informal mentors within their social networks.

Using a Continuous Quality Improvement Approach to Guide Faculty Development

Usually, a combination of the above strategies will be required to meet the needs of each individual program and its faculty. A continuous quality improvement approach offers the opportunity to identify gaps, opportunities, and barriers and iteratively assess effectiveness, thus allowing for revision of strategies. See Fig. 23.1 for a visual representation of this process.

Needs Assessment

When doing a needs assessment, programs should consider their existing structures for fac-

ulty development, with strengths and weaknesses. For example, surveys or focus groups of junior faculty can elicit areas of anxiety or discomfort, familiarity with adult learning theory, degree of connectedness to peers, level of understanding of department culture, and familiarity with requirements for promotion. Feedback from senior faculty can indicate which faculty development strategies and content areas were important for their success and which they wish they had known earlier. Input from residents or fellows can give a sense of how faculty are currently performing as educators and whether residents are receiving effective and helpful feedback. Focus groups, surveys, and larger anonymous program evaluations are ways of eliciting resident and fellow input.

Topic Selection

Results of the needs assessment should guide the selection of topics to fill in areas of deficiency. Particular attention should be given to making sure faculty development efforts meet ACGME requirements and satisfy components of CLER. Once these requirements are met, attention can be given to further developing topics pertinent to specific areas of faculty expertise, clinical supervision in different clinical settings, didactic teaching, and developing faculty as scholars and leaders. Throughout all faculty development efforts, attention should be given to developing faculty as equitable educators who create an inclusive learning environment for all.

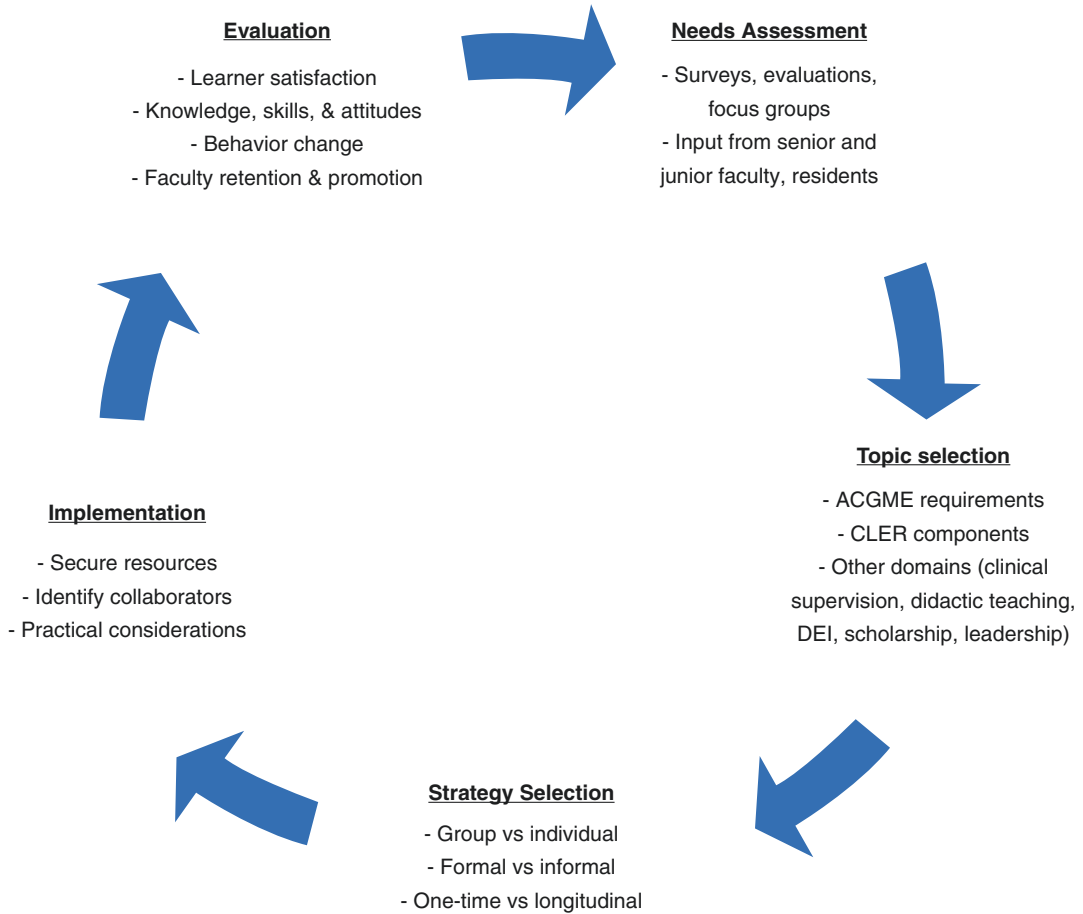


Fig. 23.1 Using a continuous quality improvement approach to guide faculty development

Strategy Selection

Certain strategies may align better with given content areas. For example, developing faculty expertise within specific treatment modalities and subspecialty areas may need to be more individualized and include activities such as support to attend specialty meetings or for mentorship with expert clinicians. Often a variety of approaches may be necessary to target a given content area. For example, different strategies can be used to develop scholarship skills for faculty. Such strategies range from local individual mentorship of specific scholarly projects to formal, comprehensive educational scholarship programs. At a national level, these include the Association of American Medical Colleges

(AAMC) Medical Education Research Certificate (MERC), the Association for Academic Psychiatry (AAP) Master Educator program, and others listed in Table 23.1, which present formal curricula to develop educational scholarship skills. Some institutions have also developed local formal programs. For example, the Medical Education Scholars Program at the University of Michigan delivers a year-long project-based program to develop a small group of faculty members from basic and clinical science departments throughout the medical school [37]. This program has been shown to increase the number of new educational programs and grants led by participating faculty. However, access to these formal programs can be limited by a small number of participants or the cost to participate, so alter-

native low resource approaches are another important approach to developing scholarship. Yager and colleagues outline a pragmatic approach that starts with assessing motivation and then provides practical solutions to identify opportunities for and engage in scholarship [67].

Implementation

Once high-yield topic areas have been identified, a program should determine how they are best taught in their unique settings. Next, program directors can consider whether departmental, institutional, or national resources can be leveraged. Program directors may wish to identify collaborators, such as the vice-chair for education, medical directors, associate program directors, and content area experts. For larger efforts aimed at reaching all faculty or the implementation of sustainable, longitudinal programs, program directors should collaborate with the department chair, service chiefs, and other leaders to secure funding and other needed resources. Results from the needs assessment may make a case for resources more compelling, especially if there are data on effects on faculty satisfaction and retention. The most common barriers to faculty development include lack of funding and faculty time [3].

Practical considerations include the size of the program and number of diverse sites, whether efforts will be in-person or virtual, whether activities can occur during business hours, how faculty will be released from clinical duties, whether there are resources to provide “perks” such as food, and whether activities can provide faculty with formal continuing medical education (CME) credit. There may be times when faculty members already come together as small or large groups (e.g., faculty meetings, Grand Rounds) where professional development activities can be folded in.

Evaluation

Once a set of strategies has been implemented, ongoing assessment is needed to refine efforts

and direct resources appropriately. Faculty satisfaction with professional development activities can be assessed directly after trainings or workshops and globally at periodic intervals. Formal group activities targeting specific skills lend themselves to assessing changes in knowledge, skills, and attitudes before and after training. For example, the objective structured teaching exercise (OSTE) [68] uses standardized students and teaching scenarios to assess faculty teaching and interpersonal communication skills. When used pre- and post-training, it is an effective way to evaluate the benefits of faculty development programs. Higher order assessments are more challenging but measure desired outcomes such as faculty behavior change and effects of faculty development on learners and at an organizational level. For example, changes in individual faculty behavior (i.e., use of new skills in their clinical and didactic teaching) can be assessed through changes in their formal peer and learner evaluations or observation by peers. Over time, broader effects of faculty development can be assessed through faculty retention, promotion, and scholarly products.

Case Examples

Program A is a new, small, community program with 12 core faculty members and a planned cohort of 12 residents working in one medical system with a robust psychiatric service. This program is affiliated with a larger established program (program B) that provided mentorship to program A's founding program director. As program A is new, most faculty are new to a teaching role, and several are recent residency graduates. There are opportunities to participate in program B's annual faculty development program remotely. The program director has one year to prepare the faculty to welcome their first class.

The program director is concerned because several faculty members have expressed anxiety over their new teaching responsibilities, especially the time necessary to engage in faculty development and supervision once the residents start, as most faculty already feel busy with their current clinical duties. There is general support from the medical system as there has been a successful family medicine program within the system for the last five years. The program director decides to start with

three main topic areas: foundational clinical teaching skills for inpatient settings, core psychiatry teaching areas for junior residents to deliver clinical care, and conducting clinical skills exams to meet accreditation and Board requirements. Since there is limited local expertise, the program director decides to approach faculty development by creating a six-session faculty development series held by expanding the length of the regularly scheduled faculty meeting, which all faculty attend, and engaging support from faculty mentors from the local family medicine faculty for general teaching skills (e.g., integrating clinical supervision into inpatient services), utilizing AADPRT Virtual Training Office materials on core topics (e.g., clinical skills exam) and inviting faculty from program B to present additional psychiatry specific topics (e.g., teaching psychiatry differential diagnosis). This faculty development plan is fully supported, including an extra hour for the faculty meeting, by the CEO of the medical system after advocacy by the program director.

A new program often benefits from leveraging excitement and positive energy about the new program to engage faculty in faculty development. This can be helpful to activate faculty learners as they will soon have to be engaged in teaching. Program A also benefits from a current residency program in their clinic system and mentorship from an established psychiatry residency program (program B). However, a new program often has the challenge of limited local expertise to draw on to lead faculty development efforts. There is an additional challenge of establishing a faculty development program with a group of busy clinicians who have limited time to meet as a group. Finally, it can be challenging to develop teaching skills before there are residents to teach.

As there are many potential faculty development targets and limited time, it will be important for the program director to complete a needs assessment that prioritizes topic areas needed for resident instruction for first-year residents. The program director will want to prioritize the four key areas identified by the ACGME for annual faculty development (developing faculty as educators, implementing quality improvement and patient safety efforts, delivering high-quality patient care, and fostering well-being) as well as core instructional activities (e.g., direct clinical

supervision, assessing Milestone progress, and administering clinical skills exams). Another important consideration will be asking the faculty which areas of faculty development they think are most important for them to feel prepared for the new residents. Next, the program director needs to pick strategies that are realistic for the context of the program. Finding a regular time to engage in faculty development (e.g., monthly faculty meetings) will be important so that all faculty develop the skills necessary to supervise and teach residents. Utilizing available resources, such as local experts, national resources, and invited speakers can be an effective strategy to augment the limited expertise of a new faculty group.

This example also illustrates how important the program director's advocacy role is to implement faculty development and teaching support. Understanding that there are faculty concerns about time to teach requires discussion with the clinical leadership to make sure that clinical schedules are adjusted to allow enough time for supervision of residents. It is also important that faculty have protected time, like extended faculty meeting time, to participate in faculty development without added burden on faculty. Lastly, the program director will want to monitor the impact of this faculty development effort on faculty engagement and skills, resident satisfaction with teaching, and progress in the development of residents' clinical skills. This evaluation will be important as part of the needs assessment for the next round of faculty development the program director will plan.

Program C is a large, urban, multisite, university-based residency with 64 general psychiatry residents, over 200 faculty members, and 4 main clinical sites. There are also about 150 community volunteer faculty who provide psychotherapy supervision. The program hosts an annual faculty development half-day (faculty teaching retreat), which has been in-person in the past and virtual for the past two years. The retreat uses interactive workshops to teach skills as an educator (e.g., teaching skills, curriculum development, assessment, giving effective feedback, and Milestones), faculty and resident well-being, quality improvement and patient safety, and diversity, equity, and inclusion (e.g., racism, microaggressions, foster-

ing an inclusive learning environment). The program director is concerned because only 35–40 faculty members attend the teaching retreat each year. Despite repeated teaching retreat sessions about giving feedback, residents continue to request more specific and useful feedback on clinical rotations. The Clinical Competency Committee (CCC) continues to be concerned about the wide range and “grade inflation” of faculty Milestone ratings of residents. The program director surveys faculty and discovers that they have difficulty finding time or clinical coverage to attend the teaching retreat. In addition, they have trouble knowing how to fit feedback into their busy clinical day. With the support of the department chair, the program director makes a plan with each clinical site director to provide clinical coverage so that most faculty can attend the retreat and works with site directors and associate program directors to incorporate 20-min faculty development sessions into the site’s faculty meeting on a quarterly basis. The program also convenes a group to work on a quality improvement project focusing on feedback. This group develops a templated, structured feedback app designed to help supervisors give brief, focused feedback based on direct observation and provides practice and feedback in using the app during site-based faculty development sessions.

Large and university-based programs like program C have several strengths to draw upon in planning faculty development. First, many faculty members are potential faculty development teachers and mentors in a variety of topic areas. Second, program C’s department may have a variety of other educational programs, such as psychiatric subspecialty fellowships and programs for learners in other mental health professions. This creates the possibility of interprofessional faculty development and projects. Finally, it is also likely that there are rich institutional resources available, such as institutional faculty development events, teaching scholars programs, teaching academies, and medical education departments with expertise in curriculum development, instructional design, and the use of technology in education.

However, program C has several challenges in delivering faculty development. Having a large faculty distributed across sites makes it difficult to foster a sense of cohesion and build a learning community. Faculty members may not know or may not even have met colleagues at other sites and may feel less motivated to get together for

faculty development events. Fundamental logistical issues, such as finding a time for faculty development sessions, can be complex, given the differing schedules of the considerable number of people involved. In addition, routine occasions when faculty might come together, such as faculty meetings or case conferences, may be at different times at each site. Given these challenges, the low attendance at program C’s teaching retreat is not surprising.

As in a program of any size, needs assessment is important for program C to identify core faculty development content the program wishes to deliver and the professional development needs of faculty. In this example of a program with an existing faculty development program, past participant evaluations and the program director’s concerns inform the needs assessment, which includes a faculty survey to identify barriers to attending the teaching retreat, obstacles to providing helpful Milestones assessment and feedback, and faculty preferences about alternative ways to deliver faculty development content.

In general, there are key topics that a particular program’s leadership wants to ensure that all teaching faculty members learn about in any given academic year. These might include national changes in psychiatry graduate medical education (e.g., new Milestones) or local issues. In program C’s case, high-priority program-wide topics are feedback and Milestones assessments. The challenge in a large program is to find strategies that maximize all faculty members’ involvement. Perceived professional development needs of the faculty may or may not overlap with program priorities and may vary at different clinical sites or in subgroups of faculty based on factors such as work setting and role (e.g., inpatient, consultation-liaison, outpatient, psychotherapy supervision) or developmental career stage. Especially in a large program, one approach is to do needs assessment and faculty development programming at the level of these smaller faculty groups. This maximizes the chance that faculty development will be relevant and lends itself to community building, peer mentoring, communities of practice, and group projects within and across sites.

Institutional support is crucial in ensuring that all faculty members can participate in faculty development. Faculty may need financial support, release time, and clinical coverage to attend faculty development events. Again, the example of program C points out the importance of the program director's advocacy role. Enlisting the aid of the chair and the clinical service directors facilitated faculty attendance at program-wide and site-based faculty development events. The department chair and clinical site directors must attend faculty development events themselves and emphasize their importance to their faculty members.

The program can also teach about high-priority topics using multiple strategies at the same time. For example, in thinking about strategies for faculty development, program C could choose to cover topics such as feedback and Milestones assessments in different venues, e.g., as part of the teaching retreat, at the new site-based meetings, and using online modules. The program and department could require that each faculty member attend or complete at least one of these activities each year.

Some issues are longstanding and require culture change. For example, program C has recurrent problems with feedback and Milestone assessments. In addition to ensuring that all faculty participate in one-time events addressing these issues, the program can decide that these areas require more sustained quality improvement. One approach is to form faculty communities of practice to work together over time to address such problems through cycles of problem identification, planning, acting, observation of results, and reflection. In this case example, program C decided to form such a group focused on feedback. Twelve specific tips for creating effective communities of practice have been outlined by de Carvalho-Filho et al. [65]. Ideally, they include support (e.g., a budget, space, technical and staff support, protected time), communication of successes of the group to the broader department and institution, and recognition of contributions of individual members (e.g., in the promotions process and through the publication of the process and results). In addition, members of communities of practice, or other peer champi-

ons and guides, can help educator faculty to accomplish needed behavioral changes (e.g., using the new feedback app) by honoring colleagues' current contributions, demonstrating how new behaviors build on existing skillsets, and providing information and support on an individual basis or through faculty development events focused on skill acquisition, practice, and feedback [69].

Program C will want to evaluate the effectiveness of its newly implemented faculty development strategies through feedback from faculty, residents, and the CCC and use evaluation results to modify the faculty development program further.

Resources

Programs do not need to start from scratch in designing faculty development programming; they can instead take advantage of a wealth of local and national resources. In this section, we discuss a general strategy for identifying such resources. In addition, faculty development resources for specific topics (e.g., assessment, professionalism) are discussed in detail in other chapters in this book.

After performing a needs assessment and identifying topics, program directors and other faculty development planners will want to choose educational strategies and then design, implement, and evaluate the program (see Fig. 23.1). In doing this, they can first look for collaborators and existing faculty development programs in their own department and institution. Consultation with educator faculty members within the department, other departments, and the institution can help in choosing educational strategies, designing faculty development curricula, implementing specific teaching methodologies, and identifying content experts and instructors. Other departments may have experience delivering faculty development about particular topics, especially those mandated by the ACGME, have advice about what has worked well, and provide specific curricular materials or recommendations for speakers. Many institutions host faculty develop-

ment sessions for faculty across specialties focused on promotion, leadership, quality improvement and patient safety, educator skills, and scholarship. Programs can alert their faculty to these opportunities and assess whether they need or want to duplicate this content within the department. Faculty or staff within the department or institution with expertise in instructional design, interactive teaching methods, and technology in education can be excellent resources in building curricula and designing individual sessions.

Programs can also collaborate with nearby GME programs, other educational programs within their own or nearby psychiatry departments (e.g., subspecialty psychiatry fellowships, psychology, and social work training programs), and nonmedical school university departments (e.g., psychology, sociology, public health) around specific faculty development topics (e.g., diversity, equity, and inclusion, interprofessional teamwork, well-being, didactic and classroom teaching methods). Remote collaborations are also possible. For example, in the first case example above, faculty at program A were able to participate virtually in the annual teaching retreat at program B, which had an established faculty development program.

Usually, programs do not need to design *de novo* faculty development programming in patient care. Instead, individual faculty members conduct practice-based learning activities as part of Maintenance of Certification, and departments usually sponsor Grand Rounds and clinical case conferences. Faculty members can also increase their clinical expertise through local and national clinical training, workshops, conferences, and mentorship. Programs will probably want to design specific faculty development in quality improvement and patient safety; however, departments and institutions have ongoing quality improvement and patient safety initiatives that faculty members may participate in for hands-on experience in this area.

In some areas of faculty development (e.g., diversity, equity, and inclusion), local content expertise may be hard to find. Engaging faculty development teachers from across the institution

and nationally is especially important in these cases, as is the consideration of hiring or developing psychiatry faculty experts. Sotto-Santiago et al. [70] provide a framework for antiracism education for faculty development and give examples of specific interventions in the authors' institutions. In addition, the ACGME is developing and curating educational resources about diversity, equity, inclusion, and antiracism through its ACGME Equity Matters™ initiative [71]. These resources promise to be helpful for GME programs in designing faculty development in this area.

Table 23.1 lists some examples of national faculty development resources. National psychiatric education organizations such as AADPRT, AAP, and the Association of Directors of Medical Student Education in Psychiatry (ADMSEP) provide annual meeting presentations, programs, and resources in faculty development, educator skills, and educational scholarship. Importantly, these organizations offer national networking, community, and mentorship for psychiatric educators and opportunities to present scholarly work. National curricula, such as the National Neuroscience Curriculum Initiative (NNCI), can be a valuable source of both increased knowledge and state-of-the-art pedagogy. Table 23.1 also includes national in-person and online faculty development programs in leadership, scholarship, educator skills and innovation, quality improvement and patient safety, learner assessment, and diversity, equity, and inclusion. Departments can foster the professional development of their teaching faculty by informing them of such programs, nominating them, and providing financial support and time for them to attend.

Summary and Key Points

Developing faculty as successful educators, supervisors, leaders, scholars, mentors, and role models for residents/fellows is essential to the success of a graduate medical education program. Faculty development is vital to ensuring a safe and inclusive learning environment for all trainees.

Areas for faculty development include domains within the ACGME requirements (developing faculty as educators, implementing quality improvement and patient safety efforts, delivering high-quality patient care, and fostering well-being), CLER components, and other areas (e.g., clinical supervision, didactic teaching, diversity, equity and inclusion, scholarship, and leadership). Strategies for faculty development can include group versus individual programs, formal versus informal activities, and one-time events versus longitudinal programs. Program size and resources are important considerations as a program director plans for faculty development. There are many national resources to draw on as well as potential local resources for these efforts.

Program directors can use a continuous quality improvement approach to conduct a needs assessment, choose content areas, select appropriate strategies, implement changes, and use iterative assessments to evaluate and refine faculty development efforts. The main barriers to faculty development efforts are a lack of funding and time. Program directors should collaborate with their department chair, service chiefs, and other leaders to secure funding, release time for faculty, and other needed resources. In addition, they can use the results from their needs assessment to help their advocacy efforts, especially if there are data on effects on faculty satisfaction and retention.

References

1. Accreditation Council for Graduate Medical Education. Common program requirements [Internet]. [cited 2021 Sep 14]. Available from: <https://www.acgme.org/what-we-do/accreditation/common-program-requirements/>
2. Steinert Y, editor. Faculty development in the health professions – a focus on research and practice. Springer; 2014.
3. De Golia SG, Cagande CC, Ahn MS, Cullins LM, Walaszek A, Cowley DS. Faculty development for teaching faculty in psychiatry: where we are and what we need. *Acad Psychiatry*. 2019;43(2):184–90.
4. Clinical Learning Environment Review (CLER) [Internet]. [cited 2021 Sep 7]. Available from: <https://www.acgme.org/What-We-Do/Initiatives/Clinical-Learning-Environment-Review-CLER/>
5. Ramani S, Orlander JD, Strunin L, Barber TW. Whither bedside teaching? A focus-group study of clinical teachers. *Acad Med*. 2003;78(4):384–90.
6. Steinert Y, Mann K, Anderson B, Barnett BM, Centeno A, Naismith L, et al. A systematic review of faculty development initiatives designed to enhance teaching effectiveness: a 10-year update: BEME Guide No. 40. *Med Teach*. 2016;38(8):769–86.
7. Baron RB, Davis NL, Davis DA, Headrick LA. Teaching for quality: where do we go from here? *Am J Med Qual*. 2014;29(3):256–8.
8. Roy MH, Pontiff K, Vath RJ, Bolton M, Dunbar AE. QI-on-the-fly: continuous faculty development to enhance patient safety teaching and reporting. *J Grad Med Educ*. 2016;8(3):461–2.
9. van Schaik SM, Chang A, Fogh S, Haehn M, Lyndon A, O'Brien B, et al. Jump-starting faculty development in quality improvement and patient safety education: a team-based approach. *Acad Med*. 2019;94(11):1728–32.
10. Accreditation Council for Graduate Medical Education. Psychiatry Milestones 2.0 [Internet]. [cited 2021 Sept 14]. Available from: <https://www.acgme.org/Specialties/Milestones/pfcatid/21/Psychiatry/>
11. Accreditation Council for Graduate Medical Education. Program requirements for graduate medical education in psychiatry [Internet]. [cited 2021 Sep 14]. Available from: <https://www.acgme.org/specialties/program-requirements-and-faqs-and-applications/pfcatid/21/psychiatry/>
12. Houston LJ, DeJong S, Brenner AM, Macaluso M, Kinzie JM, Arbuckle MR, et al. Challenges of assessing resident competency in well-being: development of the psychiatry milestones 2.0 well-being subcompetency. *Acad Med*. 2021;97(3):351–6.
13. Regan L, Jung J, Kelen GD. Educational value units: a mission-based approach to assigning and monitoring faculty teaching activities in an academic medical department. *Acad Med*. 2016;91(12):1642–6.
14. Fassiotto M, Simard C, Sandborg C, Valentine H, Raymond J. An integrated career coaching and time-banking system promoting flexibility, wellness, and success: a pilot program at Stanford University School of Medicine. *Acad Med*. 2018;93(6):881–7.
15. Goldman S. Enhancing adult learning in clinical supervision. *Acad Psychiatry*. 2011;35(5):302–6.
16. De Golia SG, Corcoran KM. Supervision in psychiatric practice: practical approaches across venues and providers. *American Psychiatric Pub*; 2019. p. 460.
17. Greenberg WE, Borus JF. Focused opportunities for resident education on Today's inpatient psychiatric units. *Harv Rev Psychiatry*. 2014;22(3):201–4.
18. Cawkwell PB, Jaffee EG, Frederick D, Gerken AT, Vestal HS, Stoklosa J. Empowering clinician-educators with chalk talk teaching scripts. *Acad Psychiatry*. 2019;43(4):447–50.
19. Reardon C, May M, Williams K. Psychiatry resident outpatient clinic supervision: how training directors

- are balancing patient care, education, and reimbursement. *Acad Psychiatry*. 2014;38(4):476–80.
20. Anderson PAM. Giving feedback on clinical skills: are we starving our young? *J Grad Med Educ*. 2012;4(2):154–8.
 21. McCutcheon S, Duchemin A-M. Overcoming barriers to effective feedback: a solution-focused faculty development approach. *Int J Med Educ*. 2020;11:230–2.
 22. Gooding HC, Mann K, Armstrong E. Twelve tips for applying the science of learning to health professions education. *Med Teach*. 2017;39(1):26–31.
 23. Kaufman DM. Applying educational theory in practice. *BMJ*. 2003;326(7382):213–6.
 24. Reed S, Shell R, Kassis K, Tartaglia K, Wallihan R, Smith K, et al. Applying adult learning practices in medical education. *Curr Probl Pediatr Adolesc Health Care*. 2014;44(6):170–81.
 25. Touchet BK. A pilot use of team-based learning in psychiatry resident psychodynamic psychotherapy education. *Acad Psychiatry*. 2005;29(3):293–6.
 26. Thomas PA, Kern DE, Hughes MT, Chen BY. Curriculum development for medical education: a six-step approach. JHU Press; 2016. p. 313.
 27. Toor R, Cerimele JM, Farnum M, Ratzliff A. Longitudinal faculty development in curriculum design: our experience in the integrated care training program. *Acad Psychiatry*. 2020;44(6):761–5.
 28. McCann RA, Erickson JM, Palm-Cruz KJ. The development, implementation, and evaluation of a novel Telepsychiatry curriculum for integrated care psychiatry fellows. *Acad Psychiatry*. 2020;44(4):451–4.
 29. *Becoming a More Equitable Educator: Mindsets and Practices* [Internet]. edX. [cited 2021 Sep 14]. Available from: <https://www.edx.org/course/becoming-a-more-equitable-educator-mindsets-and-practices>
 30. Wheeler M, de Bourmont S, Paul-Emile K, Pfeffinger A, McMullen A, Critchfield JM, et al. Physician and trainee experiences with patient bias. *JAMA Intern Med*. 2019;179(12):1678–85.
 31. Goldenberg MN, Cyrus KD, Wilkins KM. ERASE: a new framework for faculty to manage patient mistreatment of trainees. *Acad Psychiatry*. 2019;43(4):396–9.
 32. Shankar M, Albert T, Yee N, Overland M. Approaches for residents to address problematic patient behavior: before, during, and after the clinical encounter. *J Grad Med Educ*. 2019;11(4):371–4.
 33. Wheeler DJ, Zapata J, Davis D, Chou C. Twelve tips for responding to microaggressions and overt discrimination: when the patient offends the learner. *Med Teach*. 2019;41(10):1112–7.
 34. Lim RF, Luo JS, Suo S, Hales RE. Diversity initiatives in academic psychiatry: applying cultural competence. *Acad Psychiatry*. 2008;32(4):283–90.
 35. Rodriguez JE, Campbell KM, Fogarty JP, Williams RL. Underrepresented minority faculty in academic medicine: a systematic review of URM faculty development. *Fam Med*. 2014;46(2):100–4.
 36. Johnson JC, Jayadevappa R, Taylor L, Askew A, Williams B, Johnson B. Extending the pipeline for minority physicians: a comprehensive program for minority faculty development. *Acad Med*. 1998;73(3):237–44.
 37. Gruppen LD, Frohna AZ, Anderson RM, Lowe KD. Faculty development for educational leadership and scholarship. *Acad Med*. 2003;78(2):137–41.
 38. Sood A, Qualls C, Tigges B, Wilson B, Helitzer D. Effectiveness of a faculty mentor development program for scholarship at an academic health center. *J Contin Educ Heal Prof*. 2020;40(1):58–65.
 39. Steinert Y, Naismith L, Mann K. Faculty development initiatives designed to promote leadership in medical education. A BEME systematic review: BEME Guide No. 19. *Med Teach*. 2012;34(6):483–503.
 40. Servey JT, Hartzell JD, McFate T. A faculty development model for academic leadership education across a health care organization. *J Med Educ Curric Dev*. 2020;7:2382120520948878.
 41. Steinert Y. Becoming a better teacher: from intuition to intent. In: *Theory and practice of teaching medicine*. American College of Physicians; 2010. p. 73–93.
 42. Sirianni G, Glover Takahashi S, Myers J. Taking stock of what is known about faculty development in competency-based medical education: a scoping review paper. *Med Teach*. 2020;42(8):909–15.
 43. Teshima J, McKean AJS, Myint MT, Aminololama-Shakeri S, Joshi SV, Seritan AL, et al. Developmental approaches to faculty development. *Psychiatr Clin North Am*. 2019;42(3):375–87.
 44. Lau C, Ford J, Van Lieshout RJ, Saperson K, McConnell M, McCabe R. Developing mentoring competency: does a one session training workshop have impact? *Acad Psychiatry*. 2016;40(3):429–33.
 45. Fertig AM, Tew JD, Douaihy AB, Nash KC, Solai LK, Travis MJ, et al. Developing a clinician educator faculty development program: lessons learned. *Acad Psychiatry*. 2017;41(3):417–22.
 46. Gould NF, Walsh AL, Marano C, Roy D, Chisolm MS. The psychiatry academy of clinician educators: a novel faculty development program. *Acad Psychiatry*. 2020;44(6):814–5.
 47. Tong L, Hung E. A novel department-based faculty fellowship to promote scholarship in medical education. *Acad Psychiatry*. 2018;42(3):402–5.
 48. Medina M, Williams V, Fentem L. The development of an education grand rounds program at an academic health center. *Int J Med Educ*. 2010;1:30–6.
 49. Fidler DC, Khakoo R, Miller LA. Teaching scholars programs: faculty development for educators in the health professions. *Acad Psychiatry*. 2007;31(6):472–8.
 50. Cohen R, Murnaghan L, Collins J, Pratt D. An update on master's degrees in medical education. *Med Teach*. 2005;27(8):686–92.
 51. Steinert Y. Faculty development: from workshops to communities of practice. *Med Teach*. 2010;32(5):425–8.

52. Joy JA, Garbely JM, Shack JG, Kurien M, Lamdan RM. Supervising the supervisors: a case-based group forum for faculty development. *Acad Psychiatry*. 2008;32(6):521–4.
53. Lord JA, Mourtzanos E, McLaren K, Murray SB, Kimmel RJ, Cowley DS. A peer mentoring group for junior clinician educators: four years' experience. *Acad Med*. 2012;87(3):378–83.
54. Murray SB, Levy M, Lord J, McLaren K. Peer-facilitated reflection: a tool for continuing professional development for faculty. *Acad Psychiatry*. 2013;37(2):125–8.
55. Sexton JM, Lord JA, Brenner CJ, Curry CE, Shyn SI, Cowley DS. Peer mentoring process for psychiatry curriculum revision: lessons learned from the “Mod Squad”. *Acad Psychiatry*. 2016;40(3):436–40.
56. Shoemaker EZ, Myint MT, Joshi SV, Hilty DM. Low-resource project-based interprofessional development with psychiatry faculty. *Psychiatr Clin North Am*. 2019;42(3):413–23.
57. Rosenbaum M, Ferguson K, Kreiter C, Johnson C. Using a peer evaluation system to assess faculty performance and competence. *Fam Med*. 2005;37:429–33.
58. Newman LR, Lown BA, Jones RN, Johansson A, Schwartzstein RM. Developing a peer assessment of lecturing instrument: lessons learned. *Acad Med*. 2009;84(8):1104–10.
59. Flynn SP, Bedinghaus J, Snyder C, Hekelman F. Peer coaching in clinical teaching: a case report. *Fam Med*. 1994;26(9):569–70.
60. Carlson K, Ashford A, Hegagi M, Vokoun C. Peer coaching as a faculty development tool: a mixed methods evaluation. *J Grad Med Educ*. 2020;12(2):168–75.
61. Showers B, Joyce B. The evolution of peer coaching. *Educational leadership*, 53, 12-16. – References – Scientific research publishing [Internet]. [cited 2021 Sep 14]. 1996. Available from: [https://www.scirp.org/\(S\(1z5mqp453edsnp55rrgjt55.\)\)/reference/referenc-espapers.aspx?referenceid=2133206](https://www.scirp.org/(S(1z5mqp453edsnp55rrgjt55.))/reference/referenc-espapers.aspx?referenceid=2133206)
62. Bowler C, Foshee C, Hagggar F, Simpson D, Schroedel C, Billings H. Got 15? Try faculty development on the fly: a snippets workshop for microlearning. *MedEdPORTAL*. 2021;17:11161.
63. Walensky RP, Kim Y, Chang Y, Porneala BC, Bristol MN, Armstrong K, et al. The impact of active mentorship: results from a survey of faculty in the Department of Medicine at Massachusetts General Hospital. *BMC Med Educ*. 2018;18(1):108.
64. Kashiwagi DT, Varkey P, Cook DA. Mentoring programs for physicians in academic medicine: a systematic review. *Acad Med*. 2013;88(7):1029–37.
65. Fox EC, Waldron JA, Bohnert P, Hishinuma ES, Nordquist CR. Mentoring new faculty in a department of psychiatry. *Acad Psychiatry*. 1998;22(2):98–106.
66. Bonifacino E, Ufomata EO, Farkas AH, Turner R, Corbelli JA. Mentorship of underrepresented physicians and trainees in academic medicine: a systematic review. *J Gen Intern Med*. 2021;36(4):1023–34.
67. Yager J, Ritvo A, Wolfe JH, Feinstein RE. A survival guide to low-resource peer-reviewed creative scholarship for aspiring clinician-educators. *Acad Psychiatry*. 2018;42(6):841–6.
68. Sturpe DA, Schaivone KA. A primer for objective structured teaching exercises. *Am J Pharm Educ*. 2014;78(5):104.
69. Simpson D, Marcante K, Souza KH. The power of peers: faculty development for medical educators of the future. *J Grad Med Educ*. 2019;11(5):509–12.
70. Sotto-Santiago S, Poll-Hunter N, Trice T, Buenconsejo-Lum L, Golden S, Howell J, et al. A framework for developing antiracist medical educators and practitioner-scholars. *Acad Med*. 2021;97(1):41–7.
71. Accreditation Council for Graduate Medical Education. ACGME equity matters™ [Internet]. [cited 2021 Sept 14] Available from: <https://www.acgme.org/What-We-Do/Diversity-Equity-and-Inclusion/ACGME-Equity-Matters/>



Residents as Teachers and Educators

24

Karen Broquet and Arindam Chakrabarty

Introduction

Preparing residents for their role as teachers and educators is a vital part of graduate medical education. Residents may teach patients and families, medical or other health profession students, junior residents, other interprofessional team members, and even attending physicians. Nearly 96% of residents report working with medical students [1], and they may spend up to 20% of their time teaching [2, 3]. Some surveys attribute as much as one-third of medical students' knowledge to resident teachers [4, 5]. Since residents are functioning as teachers, we have a responsibility to equip them with the knowledge and skills to do so effectively. Residents also need to be able to provide good feedback to faculty and the program. A total of 20–74% of residents report having received formal training in how to teach [1, 6]. Sixty two to seventy three percent of psychiatry programs provide residents with formal residents as teachers (RATs) instruction [2, 7]. Resident as teacher education can range from focused training on a skill such as feedback to more comprehensive clinician-educator preparation.

Preparing residents for their role as teachers is an accreditation expectation. For programs in which residents teach medical students, standards set by the Liaison Committee on Medical Education (LCME) [8] require that:

- Learning objectives for each required learning experience are made known to residents and others with teaching and assessment responsibilities in those required experiences.
- Residents who supervise or teach medical students are familiar with the learning objectives of the course or clerkship and are prepared for their roles in teaching and assessment. The medical school provides resources to enhance residents' teaching and assessment skills and provides central monitoring of their participation in those opportunities.

The Accreditation Council for Graduate Medical Education (ACGME) also emphasizes the importance of residents as educators in clinical settings and the community. “Educating patients, families, students, residents, and other health professionals” is a core competency requirement [9]. The ACGME Psychiatry Milestones also highlight the educator role. The initial Milestones in Psychiatry included a specific sub-competency of teaching. In the Milestones 2.0, the educator role is embedded throughout multiple subcompetencies, as outlined in Table 24.1 [10].

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Table 24.1 Psychiatry teaching milestones [10]

| Domain/ Subcompetency | Milestone | Level |
|--|--|-------|
| PC3: Treatment planning and management | Supervises treatment planning of other learners and multidisciplinary providers | 5 |
| PC5: Somatic therapies B: Educates patients about somatic therapies including access to accurate psychoeducational resources | Appropriately uses educational and other resources to support the patient and optimize understanding and adherence | 2 |
| | Explains mechanisms of action and the body's response to commonly prescribed drugs and other somatic treatments (including drug metabolism) to patients/families | 3 |
| | Explains less common somatic treatment choices to patients/families in terms of proposed mechanisms of action, potential risks and benefits, and the evidence base | 4 |
| | Leads the development of novel patient educational processes or materials | 5 |
| SBP3: Physician role in healthcare systems | Educates others to prepare them for transition to practice | 5 |
| PBLI2: Reflective practice and commitment to personal growth | Facilitates the design and implementation of learning plans for others | 5 |
| ICS2: Interprofessional and team communication | Communicates concerns and provides feedback to peers and learners | 3 |
| | Respectfully communicates feedback and constructive criticism to superiors | 4 |

The inclusion of residents as teachers of medical students or junior residents may be driven by limitations on faculty time or milestone achievement [11, 12]. However, residents bring attributes to the relationship that make them uniquely suited to this role. Residents often work more directly with medical students than attendings do, offering greater opportunities to find teachable moments,

directly involve students in patient care, help them interpret clinical material, and role model both clinical and active learning practices [11, 13, 14]. Near peer learning, in which the teachers are themselves continuing to learn, is recognized as an effective method in health professions education, with benefits to learners, resident teachers, and institutions [12, 15]. Effective near peer teachers do not need to be content experts or professional educators [12]. Knowledge is gained actively through social interaction in the clinical environment. Near peer teachers are usually closer in age and stage of training and, as a result, may better comprehend learners' needs. Consequently, learners may be taught at a more appropriate level by near peer teachers [12]. Near peer teachers also have the advantage of being better situated to recognize students who are struggling. Students often find resident teachers to be less intimidating than faculty, increasing their comfort level in asking questions. Perhaps most importantly, learners are more receptive to feedback when the source is closer to them in the hierarchy of the clinical and educational team [16]. Residents may actually be more attentive teachers by virtue of their developmental stage. Noel Burch described four stages of skill acquisition [17]:

- Stage 1 – Unconsciously unskilled: Lack the skill and unaware of the lack
- Stage 2 – Consciously unskilled. Aware of the skill deficit
- Stage 3 – Consciously skilled. Possess the skill but have to purposely think through the steps
- Stage 4 – Unconsciously skilled. Possess the skills without thinking about it

Because residents usually function in stage 3, they are more likely than attendings to verbally walk learners through steps of a new task or challenge.

The literature suggests that residents enjoy contributing to the education of medical students and are willing teachers, if given the proper time and support in the role [3]. Furthermore, teaching stimulates critical thinking and reflection on knowledge [18]. Residents report that teaching medical students improves their individual clinical

cal and intellectual skills [5]. Teaching others aids psychiatry residents in preparation for board exams, fosters a more empathetic approach to learners, and helps prepare them for assuming the attending role, whether or not it is in an academic practice [19, 20]. Resident as teacher education with a strong experiential component fosters scholarship and career development [20, 21]. Residents who are good teachers are perceived as more professionally competent by learners, whether or not they actually are [22]. Students who have positive experiences with residents and perceive resident teaching as high-quality report higher satisfaction with their clerkships [23]. A study in surgical training programs linked student satisfaction with resident teachers to career choices in that discipline [24]. Goldenberg et al. [25] found that a positive clerkship experience is strongly associated with students choosing to pursue psychiatry as a career. In fact, nearly 80% of students entering psychiatry residency programs did not plan for this career path when they entered medical school [25].

In this chapter, we will discuss common models for preparing psychiatry residents for their roles as educators, which can be used to teach residents the basics of how to be a teacher or prepare them for a career as academic or other teaching faculty. We hope to provide a framework to inform programs in the development, refinement, or assessment of such endeavors. For the purposes of this discussion, the term resident will refer to those participating in the RATs intervention and learner will refer to those who are subsequently taught by the residents (typically, but not limited to, medical students). Because the RATs literature is heavily weighted toward the teaching of medical students, the ensuing discussion mirrors this.

Efficacy of Residents as Teachers (RATs) Programs

The value of developing effective resident teachers is evident. There is a small but growing body of evidence that RATs programs result in a measurable improvement in residents' observed teaching skills, confidence levels, and learner ratings of the clerkship experience. In a 2009 sys-

tematic literature review, Post et al. [26] reported on 24 RATs programs across multiple specialties and their published outcomes. All but three reported improved performance on their designated assessment instruments, although they varied widely in methodology and outcomes. Of the seven randomized controlled studies reviewed, five reported a statistically significant improvement in Objective Standardized Teaching Evaluation (OSTE) [27–29] ratings of resident performance, observed videotaped evaluations of the resident, or learner evaluations of the resident. One study warrants specific mention due to its experimental and assessment rigor. Morrison, et al. [30] reported on a controlled study of the outcomes of 33 second-year primary care residents who took part in a 13-hour RATs curriculum based on the University of California Bringing Education and Service Together (BEST) model [31, 32]. Twenty-seven of the participants volunteered for the training and six were assigned. The BEST curriculum began with a three-hour session focused on teachable moments and One Minute Preceptor (OMP) skills, followed by twice monthly, hour-long sessions over the next 6 months. Content for the 1-hour sessions included role modeling, orienting learners, giving feedback, bedside teaching, teaching procedures, inpatient teaching, teaching charting, and giving didactic presentations. The format involved role playing with peers followed by feedback by peers or course faculty. One month before and 1 month after the course, the participants and matched control residents were assessed via an eight station OSTE. Trained medical students served as the standardized learners and rated resident teaching skills. On a pre- and post-test comparison, resident ratings in the intervention group improved significantly more than the control residents (28.5% vs. 2.7%). On overall improvement scores, residents in the intervention group outscored controls by a magnitude of 2.8 standard deviations overall ($p < .001$) and on each of the 8 subscores individually. On 1-year follow-up, intervention group residents demonstrated a richer understanding of teaching principles and skills, a more learner-centered approach, and a greater enthusiasm for teaching. Outcomes for residents assigned to the curriculum equaled

those who volunteered. Positive outcomes have also been reported using a modified BEST curriculum in an obstetrics and gynecology [33] and an institutional/multispecialty [34] RATs program.

In a 2021 narrative literature review, Chocholet et al. [35] described 20 studies looking specifically at psychiatry residents as educators of medical students. Two of the studies reported pre- to post-intervention improvement in medical student performance on shelf exams or interviewing skills [36, 37]. The remainder of the studies relied largely on self-assessment as well as resident and student satisfaction ratings. In general, residents who participated in a RATs experience rated it highly and reported improved self-confidence in their teaching skills. Reported post intervention learner ratings of resident teaching skills and effectiveness varied from average to high.

Program Evaluation: Starting with the End in Mind

Recognized steps in curriculum development include [1] problem identification, [2] needs assessment, [3] goals and objectives, [4] educational strategies, [5] implementation, and [6] evaluation and feedback [38]. In building a RATs (or any) curriculum, it is helpful to map out the anticipated feedback, assessment, and program evaluation system in advance. While they are all points on an educational continuum, it is important to be precise about the differences between feedback, assessment, and evaluation. *Feedback* (sometimes referred to as Formative Evaluation) is a formative process in which information about performance is used to improve performance. It helps an individual or course director identify areas for improvement and develop specific suggestions for how to achieve that improvement [38, 39]. The most effective feedback is based on direct observation and occurs relatively close in time to the observed encounter or activity. *Evaluation* (sometimes called Summative Evaluation) refers to an organized process of judgment or appraisal about the quality of performance based on predetermined standards or cri-

teria. It occurs after the fact (i.e., at the completion of the intervention). While *Assessment* is often used interchangeably with evaluation, this refers more to individual encounters, instruments, or tools. Assessment falls in between feedback and evaluation but is closer to the evaluation (i.e., judgment) end of the continuum.

The evaluation process sets out to judge the extent to which goals and objectives are being achieved and whether a program is doing what it set out to do [40]. Ramani et al. [12] have provided an example of some common basic goals for a RATs curriculum:

- Acquiring the practical skills and knowledge about teaching and learning that can be applied in their teaching roles
- Applying the evidence and principles that underlie effective approaches to teaching and learning
- Reflecting on their educational role as a resident and possible career educator
- Acquisition of educational leadership skills

In considering program evaluation of a RATs curriculum, larger program or institutional goals may be variable and multifaceted. For example, a curriculum may be started or modified to correct an identified deficiency such as an LCME or ACGME citation or poor clerkship ratings. A program may want to improve the overall learning climate, build on an identified residency program aim to train physicians who are skilled educators, demonstrate the value of the curriculum to external stakeholders in order to access resources or increase prestige, or to engage in scholarship and dissemination of outcomes. Clarifying this in advance will enable the course leadership team to choose the most appropriate assessment instruments, train raters or standardized learners as necessary, conduct pre-testing and engage the local Institutional Review Board (IRB) if needed. A diverse palette of assessment tools will provide formative feedback and summative evaluation to both individual resident learners and the program as a whole. Decisions regarding the rigor with which the impact of the curriculum will be studied should also be made in

advance. An ideal approach [26] would be a randomized controlled study utilizing OSTEs before and after the intervention as well as 6–12 months later. To achieve adequate power, an intervention group should have about 40 residents with a similar number of controls. Participants should include residents from multiple specialties and training levels. This level of outcome measurement is not accessible to most training programs. Among psychiatry residency programs that provide resident as teacher education, only 35% actually utilize formal assessment of teaching skills as an outcome measure [2].

A number of published reviews of RATs curricula and assessment tools [26, 35, 41–43] provide information about commonly used assessment tools. Learners are predominantly medical students or, less commonly, junior residents or residents from a different specialty. There is a paucity, at least in the medical education literature, of RATs curricula or outcomes designed to teach residents how to teach patients or interprofessional providers.

Direct Observation Direct observation of an encounter by a trained rater using a reliable instrument is considered the gold standard in assessing individual clinical performance or teaching skills [28, 44]. However, this can be time- and labor-intensive. A minority of RATs programs utilize evaluation of videotaped encounters (25%) or OSTE (2–20%) for program assessment [7, 26]. Evaluation of videos is most often utilized to assess didactic skills. Patterned after an Objective Structured Clinical Examination (OSCE), an OSTE is a valid and reliable instrument [27] which consists of a brief simulated teaching encounter utilizing a standardized learner and sometimes a standardized patient. Each encounter has a specific teaching objective, such as giving feedback or establishing goals and expectations with a learner. Performance is rated using a criterion-based instrument, with additional feedback provided by the standardized learner. This is followed by a short period of debriefing and reflection. A well-constructed OSTE is a highly versatile and flexible instrument in that it can provide both

formative and summative evaluation, and the built-in reflective component deepens the teacher's understanding of their performance [28, 45]. OSTEs are efficacious for residents and faculty [28, 46], so the same OSTE can be utilized for faculty development.

Learner Performance We want residents to be effective teachers in order to help learners improve their performance. Learner performance, as measured by knowledge examination or direct observation, can be a valuable outcome measure. Naji et al. [36] reported a greater pre- to post-intervention improvement in medical student clinical interviewing skills when registrars (residents) received experiential versus didactic training in how to teach this skill. A program that already uses an OSCE or other observed medical student assessment points for clerkship evaluation may be able to incorporate these into RATs program assessment. Some, but not all, studies have found an association between RATs intervention or student ratings of resident teaching and student performance on knowledge examinations [37, 47–49].

Learner Self-Assessment and Evaluations of Residents Learner evaluations are the most commonly used outcome measures across RATs curricula [26, 35, 41, 50]. Common examples include student or junior resident ratings of individual resident teaching skills, aggregate clerkship evaluations (via the Association of American Medical Colleges (AAMC) Graduation Questionnaire or internal surveys) [51], or learner self-assessments. Warren et al. [52] utilized a pre- and post-instrument to assess the efficacy of experiential RATs training in didactic presentation skills of psychiatry residents who provide lectures in management of common psychiatric presentations to internal medicine (IM) residents. This instrument contained a self-assessment of IM resident knowledge and confidence in managing depression and demoralization, alcohol and benzodiazepine withdrawal, opiate withdrawal, delirium and dementia, suicide risk assessment, and decisional capacity. Of these parameters, only self-reported comfort level with managing

depression/demoralization and decisional capacity significantly improved.

Resident Self-Assessments and RATs Course Evaluations The level of RATs course satisfaction by residents, and to a lesser extent, faculty, is a popular outcome measure [7, 26, 35]. Despite the limitations on physicians’ capacity for accurate self-assessment [53, 54], this remains a commonly (15–29%) used secondary outcome measure [7, 26, 35]. The limitations of both self-assessment and resident satisfaction instruments as outcome measures are tempered by the accessibility and ease of administration and, if well constructed, can provide valuable program feedback. Resident self-assessment, coupled with guided debriefing, offers a rich opportunity for resident reflection and can impact their perceived competence [55]. Resident self-assessment can be compared with learner evaluation to provide more complete feedback, as medical student ratings of resident teaching skills may be significantly higher than residents’ self-ratings [55].

Curricular Models

RATs curricula vary widely in content, format, and duration [7, 12, 26, 35, 41]. Course design is limited only by local resources and imagination. In designing a new RATs curriculum, there is no need to “reinvent the wheel.” A number of helpful

step-by-step guidelines [12, 41, 56, 57] and curriculum and/or assessment tools are available [31, 32, 58–61]. Web-based resources are listed in Table 24.2.

Before considering course structure, content, or specific learning objectives, it is necessary to reflect on the areas in which residents teach in the context of program and institutional culture, priorities, resources, and needs. There should be a clear understanding of all the different settings in which residents interact with learners [12]. At a minimum, input should be solicited from directors of all clinical rotations and the didactic curriculum, as well as medical student education, departmental, and institutional graduate medical education (GME) leaders. It is important to consider what specific knowledge, skills, and attitudes residents need to be effective teachers in their specific workplace environment. The importance of recognizing larger program or institutional goals was discussed previously.

Once the broad goals, settings, and basic skills needed have been established, the curricular design team can choose the most appropriate model, structure, and format. Factors to consider include:

- Will the curriculum be conducted on a program or institutional level?
- In what year(s) of training will the curriculum occur?
- What length will the curriculum be? (A single session or a longitudinal experience)

Table 24.2 Web-based residents as teacher curriculum and assessment resources [32, 58–61]

| | |
|-------------------|---|
| Peer-Reviewed | https://residentteachingskills.ucr.edu/ University of California Riverside Bringing Education & Service Together (BEST) website. Content is designed for primary care residents. Contains facilitator guides, lesson plans and slidesets for 8 BEST Modules, with teaching videos. OSTE materials are not posted on site, but are available on request |
| | https://www.mededportal.org/doi/10.15766/mep_2374-8265.10030 Resident-as-teacher curriculum and assessment tool for brief didactic teaching in pediatrics. Content is pediatric-specific but contains examples of an OSTE rating form and OSTE training videos for raters |
| | https://www.mededportal.org/doi/10.15766/mep_2374-8265.10001 Resident as teacher curriculum. Non-specialty specific set of 10 text-based modules with focus on teaching in busy clinical setting. No assessment materials included |
| | https://www.mededportal.org/doi/10.15766/mep_2374-8265.10157 An objective structured teaching exercise (OSTE) for physicians employing multisource feedback. Three emergency medicine based cases for assessing skills in giving feedback and the one minute preceptor. Includes instructors guide and tools for self-assessment and rater evaluation |
| Not peer-reviewed | https://www.uab.edu/medicine/home/residents-fellows/current/cert University of Alabama School of medicine creating effective resident teachers (CERT) webpage. This is a non-specialty specific collection of text-based RATs resources designed for self-directed learning. Includes slideshows and other resources for facilitated instruction |

- What learning modalities and formats will be utilized?
- Who will teach the curriculum?
- What content will be included?

Will the curriculum be conducted on a program or institutional level?

RATs programs for psychiatry residents occur more frequently on the program (62%) than on the institutional (35%) level [7]. However, institutional level programs are becoming more common [30, 34, 62]. Institutional RATs programs may take the form of a centrally delivered curriculum [30, 34] or a centrally prepared curriculum that is provided to programs to deliver onsite [62].

If an institutional RATs curriculum already exists, an important consideration is whether it will be mandatory for your residents, as it is for about three-fourth of institutional programs [7]. An institutional curriculum has some advantages. A centrally administered program requires fewer resources on the part of the residency program. Most have some level of small group work which requires facilitators and preceptors. This provides an excellent avenue for psychiatry faculty to participate and collaborate with educators outside of the department. A disadvantage of institutional programs is that the curriculum is scheduled externally and may not fit well with the residency program needs or calendar. Institutional programs are more likely to be a single session, as opposed to a longitudinal experience [7], which does not provide opportunities for reinforcement of curricular concepts. They are more likely to utilize large group or workshop formats, as opposed to individual supervision. While institutional curricula offer a role-playing component as often as program-based curricula, they are much less likely to include observed teaching with feedback [7]. Institutional curricula are designed, out of necessity, to focus on the basic skill sets that are common across all specialty training programs and may not correspond with the day-to-day teaching settings for psychiatry residents. Even a well-executed single-session institutional program is unlikely to meet all the RATs needs of

a psychiatry program but can function as a foundational educational experience, on which the residency program can build or embed into longitudinal clinical or other residency activities [44, 63, 64]. A longitudinal experience conducted at the program level can also provide an environment to identify and nurture residents who desire further educational career development or to participate in a formal Medical Educator Track.

In what year(s) of training will the curriculum occur?

This decision is driven by when residents are expected to assume their teaching roles. RATs programs are offered at all training levels, although they are reported more often in PGY 1 and 2 [7, 34, 44, 64]. The most common model is to offer a RATs program in the latter part of PGY 1 year, to prepare residents for their teaching roles in PGY 2 [34, 44, 64]. Longer residencies are more likely to offer RATs experiences beyond PGY 3. For example, in psychiatry, more PGY 3 (87%) and 4 (86%) residents than PGY 1 (48%) and 2 (71%) residents report receiving RATs training [2, 6, 7].

What length will the curriculum be?

Given the complexity of the knowledge and skill required to be an effective teacher, the challenge for most program directors is identifying enough curricular time, rather than devoting too much [2, 7]. The duration of reported RATs curricula runs from 1 hour to 13 weeks [11, 26, 56]. The reported mean number of contact hours is 7.6–11.5 [7, 26]. Among psychiatry programs, contact hours range from 0 to 30 [2]. Some level of positive outcome has been reported with a RATs intervention as short as 3 hours. More robust measures of RATs curriculum efficacy are reported with programs of at least 8–13 longitudinal hours [26, 30, 34, 44].

What learning modalities and formats will be utilized?

Determining the appropriate choice and mix of learning modalities is one of the most important decisions in RATs curriculum development. Although the selection of specific teaching activities and educational strategies will be refined

after the core content and learning objectives are determined, decisions about format often need to be made well in advance for the purposes of scheduling, recruitment of faculty teachers and preceptors, etc. The literature contains a wide variety of reported learning modalities and formats, as summarized in Table 24.3 [7, 11, 19, 35, 41, 63–66]. Despite the demonstrated efficacy of active and experiential learning in skill acquisition, over 60% of RATs programs utilize lectures or didactics as a primary teaching modality. It is unclear from the literature if this refers to full lectures or mini lectures that serve as a prelude to an active learning experience. Workshops are utilized 55–75% of the time. Large or small group sessions, role play, assigned readings, or use of videos are utilized in a quarter to a third of curricula. Psychiatry-based programs are more likely to utilize individual or group supervision as a learning format than nonpsychiatry programs [2, 7]. Mann et al. [56] reinforced the value of using a variety of teaching and learning modalities such as observation, reflection, small group discussions, problem-based learning, and experiential learning. Although a number of programs utilize written or virtual prework in an effort to maximize learning and conserve face-to-face time for active learning activities [2, 12], there are no published reports of RATs curricula conducted in a

flipped classroom format. Although peer-reviewed curricula or published outcomes remain sparse, online [32, 58–61] and virtual [67] formats appear to hold potential for effective RATs education.

A longitudinal experience with active learning, reinforcement of key concepts, and opportunities for observed, workplace teaching with feedback and reflection is the optimal model [12, 26, 56]. Whatever the format(s), opportunities for goal setting, reflection, and observation and practice with feedback are vital minimal elements for a successful RATs intervention.

Who will teach the curriculum?

The pool of faculty or other educators qualified and available to teach in RATs programs varies from institution to institution. Program directors commonly cite a lack of available faculty as a barrier to the development of RATs curricula [2, 7]. It is not necessary for RATs teachers to be master clinical educators [12, 68], from the same specialty as the residents or to be physicians. It is necessary for faculty teachers to master and demonstrate the knowledge, skills, and attitudes exemplified in the RATs educational objectives. It is also necessary that teachers are familiar with the various settings, learners, and context in which residents are responsible for the education of others [8, 12]. In the absence of an evidence-based understanding of teaching competencies unique to residents [13, 26, 35], the content and skills expected in a RATs curriculum generally mirror faculty teaching competencies. Professional development resources and activities available to develop faculty into excellent clinical teachers also serve to prepare them to be effective RATs faculty. In addition, faculty with strong teaching skills and corresponding enthusiasm are primed to role model good teaching, engage residents as teachers or co-teachers in teaching activities, observe them, and provide feedback.

What content will be included?

Decisions about specific content or learning objectives are informed by the clinical settings in which residents teach their learners and the learners’ educational objectives and expectations, and available

Table 24.3 Resident as teacher formats and learning modalities [7, 11, 19, 35, 41, 63–66]

| | |
|----------------|--|
| Single Session | Didactic Presentation Workshop Video/Film Large group discussion Small group discussion Role play with feedback and reflection Assigned readings Pre-work (project or materials review) Standardized learners |
| Longitudinal | Interactive seminar series Observed workplace teaching with reflection Individual or group teaching supervision Embedded in clinical rotation Portfolio with reflection Independent project Learning experience based on game theory (fantasy sports team) Mentorship |

efficacy data regarding RATs programs. Residents who work with medical students or junior residents in a clinical setting need strong skills in establishing a positive learning climate, setting expectations, feedback, clinical teaching, and a working knowledge of institutional goals and expectations for clerkship students. If residents complete evaluations for learners, they need basic assessment skills. Residents who have an active role in the program's didactic curriculum will also need a grounding in didactic and small group teaching skills and possibly curriculum design. RATs curricula have traditionally been based on faculty teaching competencies [13, 26, 35]. Three recent studies have explored the concept of what makes a great teacher from medical students' perspective [4, 13, 14]. Students place a high value on resident behaviors that would fall under the realm of learning climate and interpersonal interactions. Only one of the three studies reported knowledge base to be key to student perception of teaching excellence. Skills that are typically correlated with performance improvement such as feedback, active questioning, and setting expectations are valued, but afforded a lower level of importance. Themes and behaviors synthesized from these studies in order of perceived importance by students are included in Table 24.4.

It makes sense to consider existing models and modify them according to the program's needs, context, and limitations [56]. Ideally, content will include skills that improve learner performance and are valued by learners. Modules for the demonstrably efficacious BEST curriculum include an introduction to clinical teaching (including OMP), orienting learners, bedside teaching, giving feedback, work rounds and group teaching, teaching about procedures, teaching charting, and giving lectures [30, 32]. Few programs with reported outcomes include teaching about charting in their content (34,44). Given the complexities of documentation in the electronic health record, and the risks of residents inappropriately carrying forward information, inclusion of this content may assume greater benefit to programs over time. Many, but not all, teaching skills are common across specialties. Psychiatry residents don't often teach physical procedures but may benefit from content on teaching interview-

Table 24.4 Resident teaching themes and behaviors valued by medical students [4, 13, 14]

| |
|--|
| Role modeling |
| Organization and time management |
| Compassion, integrity, and patient advocacy |
| Admitting limitations |
| Creating a safe-learning environment |
| Showing respect for others |
| Offering opportunities for safe practice |
| Being approachable/open to questions |
| Being friendly/establishing rapport |
| Fostering teamwork |
| Focus on teaching |
| Taking time to teach/finding teachable moments |
| Tailoring to student needs |
| Illustrating and repeating key points |
| Showing enthusiasm/interest for teaching |
| Involving learners in patient care |
| Giving opportunities for patient ownership |
| Providing or asking for feedback |
| Challenging students to learn |
| Asking probing questions |
| Setting expectations: |
| Goal-setting, orienting learners (e.g., to a new rotation) |
| Aligning learners' goals with available opportunities |

ing skills or mental status examination. In a 2013 survey of psychiatry program directors [2], RATs content most commonly included feedback and evaluation, didactic skills, small group teaching, learning theory, and problem-based learning. Less ubiquitous content included audiovisual techniques, team-based learning, use of assessment tools, evidence regarding teaching skills, and curriculum design. Depending on the resources and allotment for curricular time, content for a well-constructed RATs program might include, in order of priority:

Core Content

- *Foundational Teaching Concepts and Skills*
 - Reflection on residents' role as teacher
 - Learning climate
 - Teachable moments
 - Role modeling

A safe and positive learning climate is a basic necessity for learning and is associated with greater patient safety and learner/team well-being. The attitudes, actions, and behaviors of the teacher are the largest contributor to a medical

student or junior resident's experience of a learning climate. Table 24.5 outlines specific high yield steps residents can be taught to foster a positive learning climate [69–71]. Identifying “teachable moments” involves highlighting the right time for discussing a topic when a situation of interest is noticed. Learners look favorably on residents who effectively use informal or unplanned occurrences as opportunities to “teach on the fly.” [13] Among medical students, role modeling is the single most important attribute of good teachers [13, 14]. Role modeling occurs in the context of physician–patient relationship, healthcare team communication, interaction with colleagues, interdisciplinary teams, humanistic behavior, application of knowledge, clinical reasoning, and many other areas. Successfully managing the dual roles of clinicians and teachers, while still learners themselves, allows residents to role model time management, efficiency, and leadership skills [12]. In addition to teaching knowledge and skill, residents model professionalism and work ethic for learners [13]. Despite the importance of role modeling in learning, there is no encapsulated “role model” skill or

behavior that can be easily taught. RATs content usually centers on ensuring that residents are aware of the impact of their behaviors and interaction with learners, have a level of competence in establishment of learning climate and other core teaching skills, and have opportunities for direct observation of their teaching followed by feedback and reflection [12, 30].

- *Orienting Learners/Expectations/Goal Setting*

In addition to general skills in effective orientation and goal-setting, content should be tied to the specific goals, objectives, and expectations of the institution or program for students or other learners.

- *Giving and Receiving Feedback Effectively*

Feedback is one of the highest yield educational tools to help improve performance. Learning to give specific, behaviorally based, learner-centered feedback is foundational for any educator. Relative to other learned teaching skills, residents (and faculty) report a higher level of interpersonal and attitudinal barriers to giving formative feedback. For this reason, the feedback section of any RATs course should include a reflective and practice-with-debriefing component.

- *Clinical Teaching Skills*

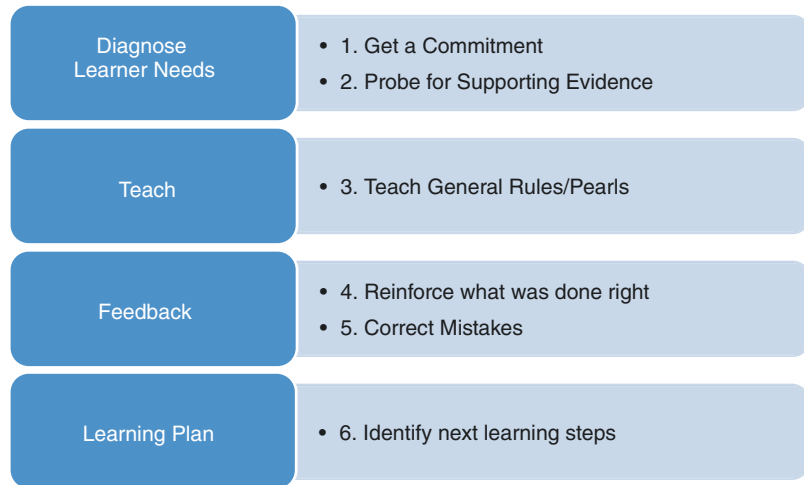
The One-Minute Preceptor (OMP) model has been shown to make feedback more specific, center teaching toward specific disorders/learning issues, allow correct diagnosis, improve instructor confidence in rating students, and is considered more effective by students than traditional models [72]. Also known as the five (or sometimes six) microskills for clinical teaching [73], OMP is the single most widely utilized teaching strategy in RATs programs with published outcomes [26]. See Fig. 24.1.

Relative to primary care residents, psychiatry residents may have more difficulty adapting OMP techniques in their teaching settings. Brand et al. [74] compared the self-assessments of psy-

Table 24.5 Resident as teacher behaviors that promote a safe-learning climate [69–71]

| |
|---|
| Set clear and consistent expectations |
| Show enthusiasm and interest |
| Keep learners involved |
| Look at them |
| Listen to them |
| Encourage them to set individual learning goals |
| Encourage them to participate |
| Make introductions, address learners by name |
| Actively encourage learners to speak up/take risks/ask questions |
| Reinforce positively when they do (this is key) |
| Show respect for divergent positions |
| Avoid ridicule; do not interrupt |
| Be aware of our implicit bias |
| Provide focused, behaviorally based feedback |
| Be consistent in interactions and behaviors; even if having a bad day, be calm, kind, and patient |
| Laugh! |
| Let learners know it is OK to not know something |
| State explicitly and role model it! |
| Invite learners to discuss their own problems/limitations/error |

Fig. 24.1 One Minute Receptor [72, 73]



chiatry and family medicine residents and found that psychiatry residents rated themselves lower in their understanding of their teaching role and clinical skills, including use of OMP. They suggest specifically teaching psychiatric residents to adapt OMP to psychiatry patient populations and treatment settings.

- *Learning Theory*

Outside of current evidence about the different approaches to teaching and the underlying principles, data on how much knowledge of learning theory a resident teacher needs and which theories may be more applicable are scant. Residents should be encouraged to explicitly think of themselves as teachers and not limit their understanding of teaching as an acquisition of skills. This can be done by self-assessment, regular reflection, and examining personal teaching and learning styles. Using self-assessment tools on teaching perspectives and learning styles tools such as the Learning Styles Inventory [75] and Clinical Teaching Perspectives Inventory [76] may be useful.

- *Small Group Teaching*

Small group teaching may include inpatient rounds, problem-based learning sessions, ambulatory or multidisciplinary rounds, or similar other settings. A challenge of small group teaching is that the teacher simultaneously facilitates

learning for multiple learners, who may be from different levels of training or from different disciplines. Bedside teaching is a specific form of small group clinical teaching that takes place in the presence of the patient [77]. If faculty utilize this teaching approach with residents, it should be included in the RATs curriculum.

- *Learner Assessment*

This should be considered core RATs content if residents are responsible for evaluating learners and should include instruction tied to the specific instruments utilized by the program and/or institution.

- *Planning and Delivering Effective Presentations*

This generally includes instruction on how to deliver a didactic presentation that utilizes effective use of context, interactive techniques, and repetition of key points to maximize audience engagement and enhance learning and recall. Content may also include instruction on effective use of slides.

- *Virtual Teaching*

A more extensive RATs curriculum might include instruction or experiential learning in electronic learning modules. Training in virtual platforms for delivery of effective teaching is increasingly gaining relevance. This might

include content about available technologies, videoconferencing software, social media platforms, and their uses and limitation in teaching. Techniques to maximize learner engagement and interaction in a virtual setting would be useful, as well as instruction in how to adapt existing teaching resources for virtual delivery.

Optional Content

- *Supervision skills*
- *Patient education skills*
- *Teaching psychiatry-specific procedures*
- *Teaching about charting and documentation in the electronic health record*
- *Leadership skills*
- *Educational scholarship*

Medical Educator Tracks

While a RATs curriculum strives to impart a level of competency in basic teaching skills for all residents, a Medical Educator Track (MET) aims to develop budding clinician educators. Driven by the current and projected shortage of physicians, particularly psychiatrists, the number of psychiatry training programs has expanded. Between 2014 and 2020, the number of accredited psychiatry programs grew by 43% [78]. In addition to the need for a cadre of direct supervisors with strong basic teaching skills to teach residents clinically and to prepare residents for their role as teachers, there has been a corresponding need for skilled clinician educators. The concept of a clinician educator has been around since the 1980s [79, 80]. The role of the clinician educator has historically been broadly defined as a clinician whose educational focus goes beyond basic teaching skills and incorporates educational theory, principles, and scholarship into his or her roles and responsibilities. In a 2014 study of Canadian educators, Sherbino et al. [68] delineated key competencies of the clinician educator for the twenty-first century. They define a clinician educator as one who participates in clinical practice, applies theory to education practice, engages in education scholarship, and consults on education issues. They

Table 24.6 Domains of competence and core competencies for clinician-educators [68]

| Domain | Competency |
|------------------------|--|
| Assessment | Designs assessment programs using appropriate strategies and instruments |
| Communication | Employs effective communication strategies to accurately convey ideas to learners and colleagues |
| Curriculum development | Applies learning theories and adopts best practices to systematically design education programs Conducts program evaluations to measure impact |
| Education theory | Maintains knowledge of education theory, psychology, and principles and applies this knowledge to education practice |
| Leadership | Leads or implements change in educational programs or organizations Administers education programs |
| Scholarship | Contributes to the development, dissemination, and translation of health professions education knowledge and practices |
| Teaching | Effectively uses scholarly teaching techniques in the clinical and extraclinical environments Promotes the educational development of other faculty |

From Sherbino et al. [70]. Used with permission

further define seven domains of competence and one or more core competencies in each domain (See Table 24.6) [68].

In addition to more traditional tracks in psychiatry programs, such as those in research or community psychiatry, it is becoming common for programs to develop a specific MET for residents with an interest in academic psychiatry and/or building a career as a clinician educator. A track is a training stream to differentiate a resident experience from the normative resident experience. It is more overarching than an elective and often extends across multiple years. Unlike Medical Education Fellowships or advanced degrees, tracks do not require additional years of training. A MET brings value to a program in many ways. It creates a pipeline of future faculty who enter practice with the skills necessary to develop, maintain, and assess curri-

cula, provide faculty development, and engage in educational scholarship. MET availability can be attractive in resident recruitment. It also spotlights the importance of teaching skills, curricular development, and educational scholarship in the program or department and provides ongoing opportunities to integrate track activities with faculty development. MET residents are particularly well suited to serve as teachers and preceptors in RATs curricula.

METs take a variety of forms. As a specialty, psychiatry has led the way in MET development. Some of the first education tracks described in the literature were from psychiatry programs [21]. In 2019, Friedman et al. [81] published a review of clinician educator tracks in GME. Of the 18 separate tracks reviewed, the majority were specialty-specific in psychiatry [5], internal medicine [3], pediatrics [3], internal medicine fellowships [2] with one each in family medicine, emergency medicine, and radiology. Two were open to all specialties. The average length was 2 years although there was a high level of variability regarding the amount of time and work required over those 2 years. Most required some sort of application and good academic standing of matriculants.

The most common curricular foci among these tracks were direct teaching skills (94%) and educational scholarship (72%). About half included curriculum development (56%) and leadership skills (50%) in their core content. Few (22%) reported a focus on developing skills in mentoring and advising and none included assessment skills or quality improvement. The most common educational strategies utilized were didactics (100%), work-based practice opportunities (94%), and mentoring (72%). 89% required a curriculum development or scholarly project.

Regardless of size or content focus, a successful MET is one in which the curriculum and learning activities are synergistic with the both the skill sets of the MET faculty and the local availability of teaching and educational opportunities. To illustrate this, we will describe the MET at Southern Illinois University School of Medicine (SIU). The SIU MET is young – it

graduated its first residents in 2020. The approach we chose may not be the best for other programs but can serve to outline an approach to MET development.

Needs Assessment In some instances, consideration of a MET arises organically in the context of faculty recruitment or development of clinician educators. In other programs, it could stem from the interests and passion of a single educator. Regardless of the stimulus, before embarking on a MET, it is wise to gauge the level of faculty and resident interest, the availability of skilled clinician-educator faculty and other educational experts, the availability of workplace-based teaching and assessment opportunities, and most importantly, the level of support from department, program, and institutional leadership.

Resources and the Importance of Departmental and Institutional Support Chair and program director's (PD) support are vital for a successful MET. The most important resource by far is the investment of time and energy, not just by track faculty but other core faculty who allow MET residents to co-teach their seminars and other teaching or assessment activities. While it had been a departmental priority for many years, the formalization of the SIU MET became possible only when there was a critical mass of track faculty with sufficient background and skills in curriculum development and educational scholarship. It is imperative that the time faculty devote to a MET is recognized and rewarded. A small amount of financial support is also helpful. SIU MET didactic sessions are open to all residents and faculty. They generally take place after hours with food provided (pandemic permitting). Department support also allows each track participant to receive textbooks on curriculum and career development and support for presenting scholarly works at national meetings. SIU MET is open to residents in psychiatry, internal medicine psychiatry, and child and adolescent psychiatry programs. Strong support from all three PDs creates a mechanism for MET residents to judiciously block clinical time to participate in teach-

ing opportunities and to utilize elective time for MET activities and projects.

As described by Friedman [81], most METs are based in a single program or department. In institutions with multiple GME programs, either a departmental or an institutional program is a viable option. Because a secondary goal of the MET is to increase professional development opportunities in teaching and curriculum development for psychiatry faculty, we limit the MET to training programs within the Department of Psychiatry. This allows for more focused curricular content and delivery. Perhaps more importantly, MET didactics and other activities can be organized around the calendar, teaching activities, and schedules of faculty and residents in just one department, maximizing participation in and communication about MET activities.

Even with a departmental or program focus, strong relationships with educators across the institution will open up a steady supply of workplace-based teaching and assessment activities for MET participants, whether in an undergraduate medical education (UGME), institutional GME, interprofessional, or continuing medical education (CME) arena, and a pool of experts for MET didactic sessions. This exposes MET residents to an education community outside of their home base, bringing a wider perspective and fostering networking and collaboration. The institution's Designated Institutional Official (DIO) and directors of clinical UGME experiences (if applicable) can be very helpful in identifying institutional opportunities and needs. A seasoned PhD educator from the institutional Department of Medical Education (DME) is on the SIU MET Steering Committee, bringing a valuable perspective to the vetting of MET applicants and mentor assignments.

Educational Objectives and Strategies The SIU MET objectives and curriculum are outlined in Appendix 1. These objectives were chosen because they are core to excellent teaching and they are content areas in which SIU has good resources in place. They were formulated to be achievable within the 2-year length of the track

and with the expectation that a resident who completes the MET will have at least a minimal level of competence in the core competencies necessary to begin a career as a fledgling clinician-educator. Most of the psychiatry-based MET programs reviewed by Friedman accepted residents at the PGY 2 level. PGY 1 and 2 residents are welcome and encouraged to attend the MET didactic sessions, but we limit full MET participation to residents PGY 3 or above, and who have at least 2 years remaining in their program. This ensures that MET residents have experienced a baseline level of normative teaching and assessment experiences and have a clear idea of where they want to grow.

Consistent with the programs reviewed by Friedman et al., the MET is built on the strategies of mentorship, experiential learning with reflection and feedback, focused didactics, and individual curricular and scholarly projects. The role of mentorship in any sort of trainee development is well delineated [82–85]. The relationship of the MET resident with their developmental mentor, who is a seasoned clinician-educator, is considered to be the primary educational strategy. The developmental mentor helps the trainee forge an identity as a medical educator and begin to assemble a dossier, shepherds them through their curricular and scholarly product(s), and role models a successful career as a clinician educator. We have not yet had to decline acceptance for any qualified MET applicant based on the availability of developmental mentors, but this is a potentially limiting factor. The PhD Educator member of the MET Steering Committee interviews the incoming MET residents about their personal goals for the track, preferred learning styles, and what they are looking for in a mentor. This guides the steering committee in pairing matriculants with available mentors.

MET residents are encouraged to participate in as many core teaching and assessment activities as they can in the residency, UGME, and institutional GME curricula and in the community. Their first experience in any teaching or assessment activity is under the tutelage of their mentor or another faculty. After that they can

perform independently. Thus, the MET is viewed institutionally as a value added program, as it makes a small but talented number of senior residents available for the myriad of UGME, institutional GME, and community activities in which teachers are needed. Wherever possible, we try to tie the didactic sessions to clinical teaching activities. The SIU RATs course is conducted on an institutional level. Each year, MET residents serve as small group preceptors for this program. The MET didactic session on small group teaching skills serves as preparation for this role.

A primary goal of the MET is for participants to gain the skills required to design, implement, and assess curricula in a scholarly manner. Residents are encouraged to choose their curricular projects early in their MET program, to allow time for completion. Frequent communication with PDs keeps the mentors apprised of any seminars in the psychiatry residency or child and adolescent psychiatry fellowship that are appropriate for residents to teach or co-teach. Mentors have multiple institutional roles and are aware of teaching opportunities throughout the medical school. Some MET residents have done multiple small curricular projects. Others have designed an entirely new seminar series, medical student elective, or other curriculum. The only requirement is that they must (with one or multiple projects) work through the six steps of curriculum development as outlined by Thomas and Kern [38]. Some have begun educational research projects unrelated to their curricular work, although none have completed these by the time of the graduation from the MET. It is wise to decide in advance what level (if any) of peer-reviewed dissemination of scholarship via publication or presentation will be required for successful completion of the program. Educational scholarship is a key, and sometimes rate-limiting, step to a successful career as a clinician-educator, and is often quantified in units of publications or external, peer-reviewed presentations. MET residents are strongly encouraged to present their work externally, but because their projects may not be completed in time for an abstract, poster, or workshop submission or

may not be accepted, we provide a forum for local presentation.

Program Assessment As with any curriculum, assessing the effectiveness of a MET is a challenge. In order to gauge meaningful impact on participants' careers and performance as a clinician-educator, long-term follow-up is necessary. For acceptance into the SIU MET, candidates must agree to follow-up for at least 10 years after graduation. In Friedman's review, commonly reported or planned outcome measures included participant satisfaction and perceived increase in knowledge or skills, completion and/or dissemination of MET projects, obtaining an academic position upon graduation, and scholarly productivity after graduation. A handful of programs measured impact on resident recruitment or medical student/faculty assessment of participant teaching skills, and one assessed content knowledge of curricular design. None included a control group of non-MET residents from the same program. It is sensible, at the inception of a MET, to consider in advance the most important goals of the MET for your program and outline the corresponding outcome measures to which you will have access.

Summary and Conclusions

Both the LCME and the ACGME expect programs to adequately prepare residents for their important role as teachers. At a minimum, residents who work with medical students or junior residents in a clinical setting need strong skills in establishing a positive learning climate, recognizing how much students look to them as role models, setting expectations, giving and receiving feedback, "on the fly" teaching in clinical settings, and a working knowledge of institutional goals and expectations for students or other learners. Depending on their teaching roles, residents may also need skills in assessment and didactic and small group teaching. Specific RATs content and learning objectives are informed by the specific learners and clinical settings in which residents teach. A successful RATs curriculum

should include training in the One Minute Preceptor and include at least 3 hours of contact time (preferably 8–13 hours) and have some level of pre- and post-assessment. A longitudinal experience with personal goal setting, active learning, reinforcement of key concepts and opportunities for observed, workplace teaching with feedback and reflection is the optimal model. The establishment of a Medical Educator Track can prepare interested residents for clinician educator careers, aid in recruitment of both residents and faculty, increase the pool of talented teachers, and highlight the value afforded to education in a program. The SIU MET program and curriculum, outlined in this chapter, provide one possible example for other programs.

Appendix 1: SIU Department of Psychiatry

Medical Educator Track Manual

MET Goals and Objectives

Mission and overall goal

In addition to being an outstanding teacher, a successful educator must be able to effectively design and deliver educational curricula, evaluate learners and programs, investigate and disseminate educational scholarship, and be an efficient administrator and leader of people. The Medical Educator Track at SIU SOM Department of Psychiatry is designed for residents who are planning or considering a career in academic psychiatry. It provides future psychiatric leaders in education with the opportunity to develop the skills they need to excel as teachers and as educational administrators, scholars, mentors, and leaders.

Objectives

1. Develop medical education knowledge and skills including the following:
 - (a) Adult Learning Theory and Styles
 - (b) Giving and receiving feedback
 - (c) Clinical teaching skills
 - (d) Didactic presentation skills

- (e) Small group teaching skills
 - (f) Learner assessment
 - (g) Curriculum design
 - (h) Curriculum and program assessment
 - (i) Basics of educational technology/distance learning
2. Develop, teach (or co-teach), and evaluate a formal curriculum.
3. Demonstrate expertise in a given area pertinent to medical education via the presentation or publication of a scholarly product(s).
4. Begin to identify and develop personal mentorship and leadership skills and style.
5. Participate in at least one professional organization (AAP, AADPRT, ADMSEP) relevant to academic psychiatry.
6. Identify factors, experiences and abilities that are associated with successful career advancement in academic psychiatry.

Met Curriculum

A curriculum is defined as a *planned education experience*. If all goes well, by the end of this MET experience, you will have achieved all or most of the objectives outlined above. The means by which a curriculum's objectives are achieved are known as the *educational strategies*. Devising a good educational strategy requires attention to both the content and method of delivery.

The primary educational strategy for MET is mentoring, geared primarily toward helping you forge an identity as a medical educator and begin to assemble a dossier, to shepherd you through scholarly product(s) and to role model a successful career as a clinician educator. Because many of the objectives are attitudinal and/or performance based, other important educational strategies include self-directed learning and lots of practical teaching experience, followed by reflection and feedback. Because it is sometimes more efficient (or just more fun) to set aside some time to learn about a specific content area together, there will also be a number of didactic sessions. If you have applied for and been accepted into the MET, you have made a commitment to yourself and to the program to put time and effort into it. We believe the MET objectives are very achiev-

able, but many of them require some advance planning. Please carefully review the section on planning and logistics in your Welcome Letter.

Mentorship

You will have a Developmental Mentor to guide you through the whole MET experience. It is the expectation that you and your Developmental Mentor will meet monthly, on average. We understand that sometimes a project may require more frequent meetings and sometimes life conspires to interfere with a meeting.

Twice per year, you and your Developmental Mentor are asked to fill out a Mentoring Guide Sheet. This is to help keep you both focused and to allow us to gather some data about how our MET residents focus their time and energy.

Before your first meeting with your Developmental Mentor, we would encourage you to read the resources provided in Dropbox on how to get the most out of a mentoring relationship. A rewarding mentoring relationship is much like any other relationship – it requires a regular line of communication about goals and needs, ongoing mutual feedback, etc. Each MET resident will need different things from their mentor (see self-directed learning below). We will be asking both of you for feedback on the mentoring process from time to time, but a yearly form cannot substitute for ongoing conversation!

You will also have access to a variety of technical Mentors – other faculty within the Department of Psychiatry or other departments in the school to help with specific projects, learning issues, or teaching opportunities, or to provide expertise and guidance in areas where your Developmental Mentor has gaps.

Reflection and Feedback Opportunities

In addition to mentoring, reflection and feedback are key educational strategies for the MET experience. Every 6 months, we ask that you write up a formal reflection, reviewing the experiences you have had, what you have learned about yourself as an educator, how this learning is (or will be) applied, and your next learning steps. This should be about one page or so in length. In addition,

we ask you to reflect on all of your learning and teaching experiences and note in your Educational Passport or Teaching Activities Log. These reflections will be brief and will likely center more on cognitive or skill learning.

We encourage you to seek feedback at every opportunity, especially on your teaching skills. It has been our experience that learners are generous in sharing their input regarding what has been helpful or not helpful for them, especially if you follow the principles of a safe learning climate¹ and inform them in advance that you will be soliciting feedback. In addition, you can invite MET faculty to observe you in your natural clinical teaching habitat or in formal teaching sessions and offer feedback. Faculty are available to give you focused feedback on presentation skills and on your CV.

Self-Directed Learning

Self-directed learning means that you take primary responsibility for your learning, identify what you need to know (or know how), clarify and refine your personal goals and objectives, and identify and use the resources and educational strategies that best help you meet them. It also means that you regularly (and accurately!) assess your achievements and repeat your learning cycle if necessary.

Because the number and variety of available resources can be a bit overwhelming, we offer some resources to help you get started:

- Both you and your Developmental Mentor will have a copy of *Curriculum Development for Medical Education: A 6 Step Approach, 3rd Edition*; Thomas, et al., Eds. This is an outstanding book and we encourage you to read it cover to cover!
- You will receive an invitation to a Dropbox account for an MET resource library. The materials contained here are either classics or a reasonable starting point for any given content area.

¹See Quick and Easy Guide to Creating a Safe Learning Environment.

Didactic Offerings

MET has a specific 2-year rolling didactic curriculum. It looks like this – with the usual disclaimer that we reserve the right to change at any moment. The shaded areas indicate core content that will be addressed yearly. The ses-

sions in this list are all content areas that we feel are well delivered in a didactic format, and not already a part of the residency training. We have flexibility in these sessions, so please let us know if you have topic requests.

| YEAR 1 | YEAR 2 |
|--|---|
| Feedback Basics/Clinical Teaching and One – Minute Preceptor | Feedback Basics/ Clinical Teaching and One – Minute Preceptor |
| Feedback Challenges | Feedback Challenges |
| Adult Learning Theory and Styles | Adult Learning Theory and Styles |
| Learner Assessment | Learner Assessment |
| Educational technology | Educational technology |
| Curriculum Design – Educational Strategies (Objectives, Content and Methods) | Leadership Styles and Skills |
| Problem Based Learning/Tutor Training | Team Based Learning |
| Educational Research/Survey Design | Clinical Skills Verification |
| Conflict Management | Miscellaneous/Other |

Please use the Education Passport provided to keep track of any and all of your didactic or other formal learning experiences during your MET participation.

Teaching Opportunities

Clinical teaching

There is no shortage of opportunities to participate in clinical teaching. As a result, we have not built extra clinical teaching experiences into the curriculum. We encourage you to stretch your clinical teaching wings as much as you can – take every opportunity to teach, hone, and expand your clinical teaching skills and actively seek feedback on your teaching skills.

Didactic teaching

Didactic just means the art or science of teaching. Functionally, when we use the term didactic, it implies a group of learners gathering in the same space and time with one or more folks serving as

“teachers,” as opposed to bedside clinical teaching. Didactic teaching might involve giving a lecture, facilitating a small group for discussion or team-based learning, serving as a problem-based learning tutor, or organizing or delivering a seminar session or series.

One of the important skill objectives for MET is to develop, teach (or co-teach), and evaluate a formal curriculum. We encourage you to start thinking about this aspect of your MET experience early. Identifying opportunities to teach or co-teach takes some lead time and scheduling takes some forethought. It is very rewarding to be able to develop, deliver, and assess the same curriculum. However, you may find that it works out better for you to assess, or help teach an existing curriculum, and build your development skills on another project.

Please use the Teaching Activities Log provided to keep track of any and all of your didactic or clinical teaching experiences during your MET participation.

Scholarly Opportunities

An important skill objective for MET is to demonstrate expertise in a given area pertinent to medical education via the presentation or publication of a scholarly product(s). As with your curricular objectives, we encourage to start thinking about this early!

What We Ask of You

At various points in your MET journey, we ask that you provide us with copies of the following materials:

- Your initial and 6-month Mentor Meeting Guides
- Your Educational Passport (yearly)
- Your Teaching Activities Log (yearly)
- MET Participant Update forms (as requested)
- Feedback forms on MET experiences, sessions, etc. (as requested)
- Any curricular or scholarly projects you complete (as they arise)
- Follow-up surveys after you leave us to go do great things

You are welcome to provide copies of your 6-month reflections, but we will not require this. We do ask that you discuss them with your Developmental Mentor, but sometimes knowing that others will read your reflection can be a barrier to transformational learning.

We feel that this information can give us a good idea of what participants are doing, and which aspects of the MET program may need to be adjusted. We also recognize that, even though MET is voluntary and we will not be keeping attendance, a little bit of accountability can be a helpful motivator when lives get busy.

References

1. Hickie C, Nash L, Kelly B. The role of trainees as clinical teachers of medical students in psychiatry. *Australas Psychiatry*. 2013;21(6):583–6.
2. Crisp-Han H, Chambliss RB, Coverdale J. Teaching psychiatry residents to teach: a national survey. *Acad Psychiatry*. 2013;37(1):23–6.
3. Greenberg LW, Goldberg RM, Jewett LS. Teaching in the clinical setting: factors influencing residents' perceptions, confidence and behaviour. *Med Educ*. 1984;18(5):360–5.
4. Melvin L, Kassam Z, Burke A, Wasi P, Neary J. What makes a great resident teacher? A multicenter survey of medical students attending an internal medicine conference. *J Grad Med Educ*. 2014;6(4):694–7.
5. Sheets KJ, Hankin FM, Schwenk TL. Preparing surgery house officers for their teaching role. *Am J Surg*. 1991;161(4):443–9.
6. Isenberg-Grzeda E, Weiss A, Blackmore MA, Shen MJ, Abrams MS, Woesner ME. A survey of American and Canadian psychiatry residents on their training, teaching practices, and attitudes toward teaching. *Acad Psychiatry*. 2016;40(5):812–5.
7. Morrison EH, Friedland JA, Boker J, Rucker L, Hollingshead J, Murata P. Residents-as-teachers training in U.S. residency programs and offices of graduate medical education. *Acad Med*. 2001;76(10 Suppl):S1–4.
8. Liaison Committee on Medical Education. Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the MD Degree. 2021. <https://lcme.org/publications/#Standards>. Date of Access: 8 Sept 2021.
9. Accreditation Counsel for Graduate Medical Education. Program Requirements for Graduate Medical Education in Psychiatry. 2021. https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/400_Psychiatry_2021.pdf?ver=2021-06-15-161510-003. Date of access: 8 Sept 2021.
10. Accreditation Council for Graduate Medical Education. Psychiatry Milestones 2021. <https://acgme.org/Portals/0/PDFs/Milestones/PsychiatryMilestones.pdf?ver=2021-07-27-133814-957>. Date of Access: 8 Sept 2021.
11. Polan HJ, Riba M. Creative solutions to psychiatry's increasing reliance on residents as teachers. *Acad Psychiatry*. 2010;34(4):245–7.
12. Ramani S, Mann K, Taylor D, Thampy H. Residents as teachers: near peer learning in clinical work settings: AMEE guide no. 106. *Med Teach*. 2016;38(7):642–55.
13. Karani R, Fromme HB, Cayea D, Muller D, Schwartz A, Harris IB. How medical students learn from residents in the workplace: a qualitative study. *Acad Med*. 2014;89(3):490–6.
14. Rutz M, Turner J, Pettit K, Palmer MM, Perkins A, Cooper DD. Factors that contribute to resident teaching effectiveness. *Cureus*. 2019;11(3):e4290.
15. Sotsky J, Senter MS, Golkin E, Cabaniss DL. No fear of near Peer: How resident teachers can boost a program in psychiatry. *Acad Psychiatry*. 2021. <https://doi.org/10.1007/s40596-021-01462-7>. Date of access: 2 May 2022.
16. Brinko KT. The practice of giving feedback to improve teaching: what is effective? *J Higher Educ*. 1993;64(5):574–93.
17. Adams L. Learning a new skill is easier said than done. Gordon Training International. <https://www.gordontraining.com/free-workplace-articles/learning->

- [a-new-skill-is-easier-said- than-done/](#). Date of access: 8 Sept 2021.
18. Busari JO, Prince KJ, Scherpbier AJ, Van Der Vleuten CP, Essed GG. How residents perceive their teaching role in the clinical setting: a qualitative study. *Med Teach*. 2002;24(1):57–61.
 19. Daniels-Brady C, Rieder R. An assigned teaching resident rotation. *Acad Psychiatry*. 2010;34(4):263–8.
 20. Bos KJ, Wang RS. Increasing resident knowledge and skills in quality improvement using residents-as-teachers. *Acad Psychiatry*. 2016;40(2):363–5. <https://doi.org/10.1007/s40596-015-0309-x>. Epub 2015 Mar 20
 21. Jibson MD, Hilty DM, Arlinghaus K, Ball VL, McCarthy T, Seritan AL, Servis ME. Clinician-educator tracks for residents: three pilot programs. *Acad Psychiatry*. 2010;34(4):269–76.
 22. Busari JO, Scherpbier AJ. Why residents should teach: a literature review. *J Postgrad Med*. 2004;50(3):205–10.
 23. Huynh A, Savitski J, Kirven M, Godwin J, Gil KM. Effect of medical students' experiences with residents as teachers on clerkship assessment. *J Grad Med Educ*. 2011;3(3):345–9.
 24. Musunuru S, Lewis B, Ridders LF, Chen H. Effective surgical residents strongly influence medical students to pursue surgical careers. *J Am Coll Surg*. 2007;204(1):164–7.
 25. Goldenberg MN, Williams DK, Spollen JJ. Stability of and factors related to medical student specialty choice of psychiatry. *Am J Psychiatry*. 2017;174(9):859–66.
 26. Post RE, Quattlebaum RG, Benich JJ 3rd. Residents-as-teachers curricula: a critical review. *Acad Med*. 2009;84(3):374–80.
 27. Morrison EH, Boker JR, Hollingshead J, Prislun MD, Hitchcock MA, Litzelman DK. Reliability and validity of an objective structured teaching examination for generalist resident teachers. *Acad Med*. 2002;77(10 Suppl):S29–32.
 28. Fakhouri Filho SA, Nunes MDPT. Objective structured teaching examination (OSTE): an underused tool developed to assess clinical teaching skills. A narrative review of the literature. *Sao Paulo Med J*. 2019;137(2):193–200.
 29. Latov DR, Levine M, Cutler JL, Park HC, Arbuckle MR, Cabaniss DL. Developing an observed structured teaching exercise for psychiatry residents. *Acad Psychiatry*. 2018;42(6):867–8.
 30. Morrison EH, Rucker L, Boker JR, Gabbert CC, Hubbell FA, Hitchcock MA, Prislun MD. The effect of a 13-hour curriculum to improve residents' teaching skills: a randomized trial. *Ann Intern Med*. 2004;141(4):257–63.
 31. Morrison E, Garman K, Friedland J. A national website for residents as teachers. Letter to the Editor, *Acad Med*. 2001;76(5):544–5.
 32. BEST website: <https://residentteachingskills.ucr.edu/bringing-education-service-together- curriculum-best>. Date of Access: 8 Sept 2021.
 33. Gaba ND, Blatt B, Macri CJ, Greenberg L. Improving teaching skills in obstetrics and gynecology residents: evaluation of a residents-as-teachers program. *Am J Obstet Gynecol*. 2007;196(1):87.e1–7.
 34. Ostapchuk M, Patel PD, Miller KH, Ziegler CH, Greenberg RB, Haynes G. Improving residents' teaching skills: a program evaluation of residents as teachers course. *Med Teach*. 2010;32(2):e49–56.
 35. Chochol MD, Gentry M, Hilty DM. et al. Psychiatry Residents as Medical Student Educators: a Review of the Literature. *Acad Psychiatry*. 2021. <https://doi.org/10.1007/s40596-021-01478-z>. Date of access: 2 May 2022.
 36. Naji SA, Maguire GP, Fairbairn SA, Goldberg DP, Faragher EB. Training clinical teachers in psychiatry to teach interviewing skills to medical students. *Med Educ*. 1986;20(2):140–7.
 37. McKean AJ, Palmer BA. Psychiatry resident-led tutorials increase medical student knowledge and improve national board of medical examiners shelf exam scores. *Acad Psychiatry*. 2015;39(3):309–11.
 38. Thomas PA, Kern DE, Hughes MT, Chen BY, editors. Curriculum development for medical education: a six-step approach. 3rd ed. Baltimore: Johns Hopkins University Press; 2016.
 39. Ende J. Feedback in clinical medical education. *JAMA*. 1983;250(6):777–81.
 40. Fleischman HL, Williams L. A introduction to program evaluation for classroom teachers. Development Associates, Inc.; 1996. <https://www.ccc.edu/colleges/daley/departments/Documents/Introduction%20to%20Program%20Evaluation%20-%20Fleischman.pdf>. Date of Access: 10 Sept 2021.
 41. Bree KK, Whicker SA, Fromme HB, Paik S, Greenberg L. Residents-as-teachers publications: What can programs learn from the literature when starting a new or refining an established curriculum? *J Grad Med Educ*. 2014;6(2):237–48.
 42. Coverdale JH, Ismail N, Mian A, Dewey C. Toolbox for evaluating residents as teachers. *Acad Psychiatry*. 2010;34(4):298–301.
 43. Fluit CR, Bolhuis S, Grol R, Laan R, Wensing M. Assessing the quality of clinical teachers: a systematic review of content and quality of questionnaires for assessing clinical teachers. *J Gen Intern Med*. 2010;25(12):1337–45.
 44. Zackoff MW, Real FJ, DeBlasio D, Spaulding JR, Sobolewski B, Unaka N, Jerardi K, Klein M. Objective assessment of resident teaching competency through a longitudinal, clinically integrated, resident-as-teacher curriculum. *Acad Pediatr*. 2019;19(6):698–702.
 45. Boillat M, Bethune C, Ohle E, Razack S, Steinert Y. Twelve tips for using the objective structured teaching exercise for faculty development. *Med Teach*. 2012;34(4):269–73.
 46. Julian K, Appelle N, O'Sullivan P, Morrison EH, Wamsley M. The impact of an objective structured teaching evaluation on faculty teaching skills. *Teach Learn Med*. 2012;24(1):3–7.

47. Aboul-Fotouh F, Asghar-Ali AA. Therapy 101: a psychotherapy curriculum for medical students. *Acad Psychiatry*. 2010;34(4):248–52.
48. Stern DT, Williams BC, Gill A, Gruppen LD, Woolliscroft JO, Grum CM. Is there a relationship between attending physicians' and residents' teaching skills and students' examination scores? *Acad Med*. 2000;75(11):1144–6.
49. Langenfeld SJ, Helmer SD, Cusick TE, Smith RS. Do strong resident teachers help medical students on objective examinations of knowledge? *J Surg Educ*. 2011;68(5):350–4.
50. Wamsley MA, Julian KA, Wipf JE. A literature review of “resident-as-teacher” curricula: do teaching courses make a difference? *J Gen Intern Med*. 2004;19(5 Pt 2):574–81.
51. Association of American Medical Colleges. Medical School Graduation Questionnaire: 2018 All schools summary report. 2018. <https://www.aamc.org/media/9386/download>. Date of access: 9 Sept 2021.
52. Warren MB, Hutchison EP, DeHaan J, Krause AJ, Murphy MP, Velez ML. Residents teaching residents: results of an interdisciplinary educational endeavor. *Acad Psychiatry*. 2018;42(4):473–6.
53. Hodges B, Regehr G, Martin D. Difficulties in recognizing one's own incompetence: novice physicians who are unskilled and unaware of it. *Acad Med*. 2001;76(10 Suppl):S87–9.
54. Davis DA, Mazmanian PE, Fordis M, Van Harrison R, Thorpe KE, Perrier L. Accuracy of physician self-assessment compared with observed measures of competence: a systematic review. *JAMA*. 2006;296(9):1094–102.
55. Spada M, Lundblad W, Glance J, Rosenstock J, Gopalan P, Azzam PN, Jacobson SL, Travis MJ. Self-assessment of teaching skills among psychiatric residents. *Acad Psychiatry*. 2018;42(4):477–81.
56. Mann KV, Sutton E, Frank B. Twelve tips for preparing residents as teachers. *Med Teach*. 2007;29(4):301–6.
57. Messman A, Kryzaniak SM, Alden S, Pasirstein MJ, Chan TM. Recommendations for the development and implementation of a residents as teachers curriculum. *Cureus*. 2018;10(7):e3053.
58. Zackoff M, Jerardi K, Unaka N, Fleming A, Patterson B, Klein M. Resident-as-teacher curriculum and assessment tool for brief didactic teaching in pediatrics. https://www.mededportal.org/doi/10.15766/mep_2374-8265.10030. Date of Access: 8 Sept 2021.
59. Harrell H, Wipf J, Aronowitz P, Rencic J, Smith D, Hingle S, Bordley D, Mendez P, Green E, Friedman E, Loftus T, Simons R, Stark R, Diaz Y and Hersman W. Resident-as-teacher curriculum. https://www.med-edportal.org/doi/10.15766/mep_2374-8265.10001. Date of Access: 8 Sept 2021.
60. Smith J. An Objective Structured Teaching Exercise (OSTE) for physicians employing multi-source feedback. https://www.mededportal.org/doi/10.15766/mep_2374-8265.10157. Date of Access: 8 Sept 2021.
61. University of Alabama School of Medicine Creating Effective Resident Teachers (CERT). <https://www.uab.edu/medicine/home/residents-fellows/current/cert>. Date of Access: 8 Sept 2021.
62. Bensinger LD, Meah YS, Smith LG. Resident as teacher: the Mount Sinai experience and a review of the literature. *Mt Sinai J Med*. 2005;72(5):307–11.
63. Martins AR, Arbuckle MR, Rojas AA, Cabaniss DL. Growing teachers: using electives to teach senior residents how to teach. *Acad Psychiatry*. 2010;34(4):291–3.
64. Vestal HS, Sidelnik SA, Marcovitz D, Huffman J. A novel resident-as-teacher rotation for second-year psychiatry residents. *Acad Psychiatry*. 2016;40(2):389–90.
65. Lehmann SW. A longitudinal “teaching-to-teach” curriculum for psychiatric residents. *Acad Psychiatry*. 2010;34(4):282–6.
66. Tobia A, Bhatt S, Grigo H, Katsamanis M. Teaching housestaff to enhance student education with the Use of fantasy sports (THESEUS). *Acad Psychiatry*. 2013;37(1):60–2.
67. Burke S, Schmitt T, Jewell C, Schnapp B. A novel virtual emergency medicine residents-as-teachers (RAT) curriculum. *J Educ Teach Emerg Med*. 2021;6(3):C8–63.
68. Sherbino J, Frank JR, Snell L. Defining the key roles and competencies of the clinician-educator of the 21st century: a national mixed-methods study. *Acad Med*. 2014;89(5):783–9.
69. Bynum WE 4th, Goodie JL. Shame, guilt, and the medical learner: ignored connections and why we should care. *Med Educ*. 2014;48(11):1045–54.
70. Musselman LJ, MacRae HM, Reznick RK, Lingard LA. ‘You learn better under the gun’: intimidation and harassment in surgical education. *Med Educ*. 2005;39(9):926–34.
71. https://www.siumed.edu/sites/default/files/u801/quick_and_easy_guide_to_creating_a_safe_learning_environment.pdf. Date of Access 8 Sept 2021.
72. Tsao CI. One-minute preceptor model: brief description and application in psychiatric education. *Acad Psychiatry*. 2010;34(4):317–8. <https://doi.org/10.1176/appi.ap.34.4.317>.
73. Neher JO, Gordon KC, Meyer B, Stevens N. A five-step “microskills” model of clinical teaching. *J Am Board Fam Pract*. 1992;5(4):419–24.
74. Brand MW, Ekambaram V, Tucker P, Aggarwal R. Residents as teachers: psychiatry and family medicine residents' self-assessment of teaching knowledge, skills, and attitudes. *Acad Psychiatry*. 2013;37(5):313–6.
75. Kolb DA. *The Kolb learning style inventory*. Hay Resources Direct: Boston; 2007.
76. Morrison EH, Hitchcock MA, Harthill M, Boker JR, Masunaga H. The on-line clinical teaching perception inventory: a “snapshot” of medical teachers. *Fam Med*. 2005;37(1):48–53.
77. Ramani S. Twelve tips to improve bedside teaching. *Med Teach*. 2003;25(2):112–5.

78. Accreditation Council for Graduate Medical Education Data Resource Book Academic Year 2018–2019 and 2019–2020. <https://www.acgme.org/about-us/publications-and-resources/graduate-medical-education-data-resource-book/>. Date of Access 8 Sept 2021.
79. Greenberg L. The evolution of the clinician–educator in the United States and Canada: personal reflections over the last 45 years. *Acad Med.* 2018;93(12):1764–6.
80. Branch WT, Kroenke K, Levinson W. The clinician-educator—present and future roles. *J Gen Intern Med.* 1997;Suppl 2(Suppl 2):S1–4.
81. Friedman K, Lester J, Young JQ. Clinician-educator tracks for trainees in graduate medical education: a scoping review. *Acad Med.* 2019;94(10):1599–609.
82. Geraci SA, Babbott SF, Hollander H, Buranosky R, et al. AAIM report on master teachers and clinician educators part one: needs and skills. *Am J Med.* 2010;123(9):769–73.
83. Geraci SA, Kovach RA, Babbott SF, Hollander H, et al. AAIM report on master teachers and clinician educators: part two: faculty development and training. *Am J Med.* 2010;123(9):870–2.
84. Castiglioni AC, Aagaard E, Spencer A, Nicholson L, et al. Succeeding as a clinician educator: useful tips and resources. *J Gen Intern Med.* 2012;28(1):136–40.
85. Detsky AS, Baerlocher MO. Academic mentoring—how to give it and how to get it. *JAMA.* 2007;297(19):2134–6.



Managing the Culture and Teaching of Patient Safety and Quality Improvement in Psychiatry Residency Training

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For many psychiatry residency program directors (PDs), the idea of teaching patient safety (PS) and quality improvement (QI) is often considered somewhere on the continuum of a major challenge to boredom. This can be due to lack of understanding, previous experience, or

lack of education in these areas, as well as perceived increased administrative and clinical workload burdens imposed by regulatory agencies without accompanying value—the proverbial “checking the box” or “unfunded mandate.” All physicians would agree, however, that safe and quality patient care are their goals, and training residents to provide such care is a top priority for PDs. How, then, is this dichotomy resolved?

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The purpose of this chapter is to guide and assist psychiatry residency PDs in the overall approach to and management of PS/QI training. The content is intended both for the seasoned PD looking to refresh program curricular content and for the new PD who may be looking for where to begin the process of PS/QI curriculum development. Inspiring a positive attitude and framework for PS/QI, i.e., developing the culture in the program’s faculty and residents, is the principal goal and contributes to the PD’s and the program’s legacy. Additionally, the effects of program mission and size are considered. While PS/QI theory and science are foundational throughout, practical information is the main focus. Resources for further reading and study are provided.

Why PS/QI in Psychiatry Residency Training?

Relative to other comparable industrialized democracies, the US healthcare system has the highest rates of medical, medication, and lab errors [1]. Annual deaths due to medical errors in US hospitals have been estimated to be as high as ~400,000 [2]. Though there is a lot of controversy about that number, more conservative estimates in the tens of thousands [3, 4] are still unconscionably high. Unfortunately, mental health care in the United States mirrors the larger healthcare system with regard to patient safety. Marcus et al. [5] found that across all Department of Veterans Affairs (VA) inpatient psychiatry settings nationally, approximately 20% of patients experienced a medical error, including medication errors (highest rate), adverse drug events, falls, and assaults. Not all medical errors lead to injury or death. But, even one “bad” outcome, such as inpatient suicide, can be devastating to patients, families, those who participate in their care, the overall community, and the institution’s or facility’s reputation. Medical errors are generally not due to uncaring or incompetent medical personnel. There are inherent systems issues that contribute to adverse outcomes of care. By practicing and teaching PS/QI, residency programs have the opportunity to improve safety margins now while preparing graduates to lead these efforts in the future. In so doing, many lives can be saved, needless suffering can be prevented, and healthcare dollars spent due to medical errors can be reduced for generations to come. It is a far-reaching legacy for PDs and programs that are worth building.

Similarly, by most indices, the quality of health care in the United States is low. A seminal study by RAND indicated that about 50% of the health care delivered in the United States did not conform to best practices [6]. Compared to other developed countries, the U.S. healthcare system has the highest mortality rate due to conditions amenable to health care [7], lowest life expectancy at birth [8], high rates of preventable hospitalizations, and longer wait times for a first available appointment [9]. If anything, the US

healthcare system performs even more poorly with respect to mental health care. The United States has the highest death rate due to mental health and substance use disorders, and nearly 35% of people with serious mental illness do not receive treatment [10]. Despite these quality limitations, the United States spends more per capita on healthcare than any other nation [1]. Relatively low quality combined with high cost translates into low value. Engaging residents in learning QI methodologies will help bridge the quality chasm in US health care. Embedding continuous QI (CQI) in the residency program’s design will not only serve as a powerful model for residents but also will lead to better educational programs.

Looking back over the past two decades, it is clear that the 1999 Institute of Medicine report, “To Err is Human” [4] and the subsequent “Crossing the Quality Chasm” series [11] triggered a sea change in US health care. These reports highlighted the prevalence of patient deaths and injuries due to preventable medical error and the profound and troubling gaps between actual and best practices. The subsequent public discourse galvanized the PS and QI movement in the United States and led to multiple high-profile, ongoing initiatives across all levels of health care and throughout society. Parallel reforms ensued in medical education. In 2013, the Accreditation Council for Graduate Medical Education (ACGME) initiated the Next Accreditation System (NAS) [12], which includes the Clinical Learning Environment Review (CLER) program [13]. CLER encourages teaching hospitals to engage residents in priority domains, one of which is patient safety. In addition, the ACGME Common Program Requirements evolved to require all programs to teach PS/QI (see Table 25.1).

Patient Safety and Quality Improvement Curriculum

Given the public mandate to improve quality and safety and new regulatory requirements, many institutions have developed PS and QI curricula for resident physicians. Systematic reviews in

Table 25.1 Web resources for PS/QI curriculum development

| Organization | Resource/Website(s)/page(s) ^a |
|---|--|
| Accreditation Council for Graduate Medical Education (ACGME) | Psychiatry Program Requirements and FAQs: https://www.acgme.org/Specialties/Program-Requirements-and-FAQs-and-Applications/pfcatid/21/Psychiatry/ Psychiatry Milestones: https://www.acgme.org/Specialties/Milestones/pfcatid/21/Psychiatry/ Common Program Requirements (CPRs): https://www.acgme.org/What-We-Do/Accreditation/Common-Program-Requirements/ (also in bold in the Psychiatry Program Requirements) CLER information: https://www.acgme.org/What-We-Do/Initiatives/Clinical-Learning-Environment-Review-CLER/ CLER Pathways to Excellence 2.0: https://www.acgme.org/Portals/0/PDFs/CLER/1079ACGME-CLER2019PTE-BrochDigital.pdf |
| Agency for Healthcare Research and Quality (AHRQ) | https://www.ahrq.gov Surveys on Patient Safety Culture (SOPS): https://www.ahrq.gov/sops/surveys/index.html |
| American Association of Directors of Psychiatric Residency Training (AADPRT), Curriculum, Virtual Training Office (VTO) | https://www.aadprt.org Curriculum: https://www.aadprt.org/training-directors/curriculum Virtual Training Office (VTO): https://www.aadprt.org/training-directors/virtual-training-office List of available peer-reviewed QI curricula: https://www.aadprt.org/application/files/5115/9121/3981/Model_Curricula_060320.pdf |
| American Board of Medical Quality | For board certification (CMQ) in medical quality: http://www.abmq.org |
| American Board of Quality Assurance and Utilization Review Physicians | For board certification (CHCQM) in healthcare quality and management: https://www.abqaurp.org/ABQMain/HCCQM_FAQ.aspx |
| American Psychiatric Association (APA) Learning Center Association for American Medical Colleges (AAMC) | https://education.psychiatry.org Teach for Quality (Te4Q), faculty development certificate program to train clinical faculty how to effectively teach PS/QI: https://www.aamc.org/what-we-do/mission-areas/medical-education/teaching-for-quality-certificate-program MedEdPortal for general teaching resources; also QI curricula: https://www.mededportal.org/ |

(continued)

Table 25.1 (continued)

| Organization | Resource/Website(s)/page(s) ^a |
|--|---|
| Institute for Healthcare Improvement (IHI) | <p>Main site (check out the education tab): http://www.ihl.org</p> <p>IHI Open School: http://www.ihl.org/education/ihlopenschool/Pages/default.aspx</p> <p>IHI certificates and continuing education (check out the basic certificate in Quality & Safety): http://www.ihl.org/education/IHIOpenSchool/Courses/Pages/OpenSchoolCertificates.aspx</p> <p>Mr. Potato Head Activity (PDSA): http://www.ihl.org/education/IHIOpenSchool/resources/Pages/Activities/WilliamsPotatoHead.aspx</p> <p>Coin spinning activity (PDSA): http://www.ihl.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/QI-Games-Learn-How-to-Use-PDSA-Cycles-by-Spinning-Coins.aspx</p> <p>PDSA tool: http://www.ihl.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx</p> <p>Personal Improvement Project: http://www.ihl.org/education/IHIOpenSchool/resources/Pages/Tools/ImproveYourself2013.aspx</p> <p>Failure Modes and Effects Analysis (FMEA) tool: http://www.ihl.org/resources/Pages/Tools/FailureModesandEffectsAnalysisTool.aspx</p> <p>Fishbone Diagram: http://www.ihl.org/resources/Pages/Tools/CauseandEffectDiagram.aspx</p> <p>Process Mapping: http://www.ihl.org/communities/blogs/5-steps-for-creating-value-through-process-mapping-and-observation</p> <p>Root Cause Analysis (RCA) tool: http://www.ihl.org/education/ihlopenschool/Courses/Documents/SummaryDocuments/PS%20104%20SummaryFINAL.pdf</p> <p>Prevent-Harm.aspx: http://www.ihl.org/resources/Pages/Tools/RCA2-Improving-Root-Cause-Analyses-and-Actions-to-Prevent-Harm.aspx</p> <p>Model for Improvement: http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx</p> <p>Visual management board: http://www.ihl.org/resources/Pages/Tools/Visual-Management-Board.aspx</p> |
| Intermountain Healthcare | <p>Advanced Training Program: http://intermountainhealthcare.org/about/transforming-healthcare/hdi/atp/atp-overview/</p> |
| National Patient Safety Foundation | <p>Model curricula and knowledge assessments: https://npsf.digitellinc.com/npsf/</p> |

^a Accessed 9/13/2021

2010 and 2015 identified a total of 33 published curricula in graduate medical education (GME) [14, 15]. These and subsequent studies have found a high degree of variability in the quality of these curricula. The poor alignment between resident PS/QI education and health system PS processes has especially been noted [16]. Both systematic reviews and other published reports have identified multiple barriers to the sustainability of these PS/QI curricula, including inadequate protected time for trainees and faculty, lack of faculty expertise, and insufficient opportunities to engage in meaningful institutional PS/QI activities [14, 16, 17]. Nevertheless, a consensus has emerged around key features and best practices, including integration across all years of training, emphasizing experiential learning that addresses authentic problems and is aligned with the clinical service in which the residents operate. Didactics should be interactive and provided just-in-time to facilitate the application of the foundational science and the development of robust schemas. The preponderance of the PS/QI education ideally should be part of daily clinical practice [18], with didactics serving as foundational or supplemental to clinical education. Learning skills is more effective and likely long-lasting, and measuring outcomes is more compelling to learners if done as part of the clinical experience rather than in the classroom.

What Are PS and QI, and What Is the Difference Between Them?

Patient safety (PS), in short, is a discipline aimed at recognizing, reducing, and preventing risks, medical errors, and harm to patients [19] by using system sciences to identify sources of error and to design processes that are less prone to error. Quality improvement (QI) uses process improvement sciences and strategies to improve care in the various dimensions of quality, including effectiveness, efficiency, patient- and family-centered, timeliness, and equity. Common strategies include standardization of processes and providing structure (e.g., culture and leadership) to reduce variations in care that can lead to medi-

cal errors [20]. While distinct, PS and QI are highly complementary, and PS is often considered a dimension of quality. Consider the following example. A suicide attempt on the inpatient unit is recognized, reported through an incident report system, and then investigated using a system's approach to error analysis (e.g., root-cause analysis, see below), which identifies several sources of error in the procedure for constant observation of high-risk patients; this is PS. Subsequently, a team of diverse unit stakeholders proposes an action plan for changing the faulty procedure, makes an intervention on the unit, and iterates several "PDSA" cycles (Plan-Do-Study-Act; see next section) of measuring and adapting the change; this is QI. In practice, the boundaries of these disciplines may overlap: PS can include making interventions, and QI can involve investigating sentinel events. They share a systems focus and an overall goal to improve the care and health of patients, communities, and other populations.

A full literature review of PS/QI is beyond the scope of this chapter, but there are seminal studies and reports that serve as the foundation for knowledge in this area. Two, in particular, that are often referenced and that should be the basis for all learning in PS/QI are the Institute on Medicine's (now the National Academy of Medicine) *To Err is Human* [4] and *Crossing the Quality Chasm: A New Health System for the Twenty-First Century* [11]. The former sheds light on medical errors as a significant cause of patient death; the latter calls for a complete redesign of the healthcare delivery system to improve care and reduce or eliminate these unnecessary deaths. PDS, program and department PS/QI leadership, and residents should have at least some familiarity with these reports.

PS/QI Design Principles

Both PS and QI are based on scientific principles of taking clinical process observations, making a prediction based on those observations, designing a means to test that prediction, analyzing the data/outcomes of the test, and drawing conclusions,

often only to generate more questions and start the whole process over again. In QI, this is called the Plan-Do-Study-Act (PDSA) Cycle, described by W. Edwards Deming and Walter A. Shewhart. It has been used for over 100 years for continuous QI efforts. PDSA is a simple and organized means of testing a change and improving practice processes (see Table 25.1). It is analogous to the scientific method (Hypothesis-Testing/Experimentation-Analysis Theory), also often thought of as a cycle. A big difference between PDSA and the scientific method is that in PDSA tests of change are often done in rapid succession without concern for controlling all the variables or reaching statistical significance. Unlike basic and clinical science studies that may take months, years, or even decades to complete, PDSA cycles are meant to have small sample sizes and be completed in rapid succession to fine-tune clinical processes. This is a “just-in-time” endeavor where multidisciplinary process improvement teams work interactively to test and implement change that can impact patient care relatively immediately.

As already noted, PS/QI learning is best when experiential in nature. While a didactic curriculum is helpful and provides the theoretical basis, there is no substitute for learning by doing. Residents and other learners must move beyond proposals of what they might do to actual implementation. At a bare minimum, simulation can be used, especially in the early stages of learning. Still, it is important to get residents participating in a real review of clinical performance and practice habit data, participating in adverse event reviews, and performing meaningful QI projects [21–23].

Providing residents with their own practice habit data is valuable, but having easy access to such data in a usable and digestible format is challenging for training programs. Good advice for PDs is to invest some time in finding out who can get these data to residents on a regular basis. “Adopting” (keeping very close contact and a good relationship with) the risk manager, quality officer, or information technology/electronic medical record (IT/EMR) specialist who can assist is very helpful. Getting invited to meetings where such data are regularly discussed, and inviting other faculty and residents to attend, can

be eye-opening. Hospitals are constantly collecting a plethora of data via the EMR and other means, so there is plenty to data mine.

Two examples of practice habit data are instructive. First, in 2019, as part of their National Patient Safety Goals, the Joint Commission (TJC) began requiring a validated suicide risk screening and assessment for psychiatric hospitals [24]. One of the authors’ general psychiatry programs began using the Columbia Suicide Severity Rating Scale (CSSR-S) and Suicide Assessment Five-Step Evaluation and Triage (SAFE-T) at admission and discharge. With the help of IT personnel, a weekly report was generated from the EMR and reviewed by the departmental quality officer, who would send an e-mail every Monday to all psychiatrists, including residents and fellows, about their compliance with the completion and accuracy of these items. Constructive feedback was given as needed, especially initially, but as physicians showed improvement, more and more positive praise could be given. Many physicians, especially the residents, were pleased and actually said they looked forward to the e-mails. With time, the departmental quality officer began to train the chief and other senior residents to review these reports and provide weekly feedback, allowing for greater resident participation in QI and basic administrative and leadership work. For the last 10 of the 12 months since this process was put in place, the 95% completion goal has been met or exceeded. As a second example, in collaboration with the nursing supervisor, a psychiatric hospital assistant medical director (also teaching faculty from the above program) gave similar regular reports on compliance with seclusion and restraint requirements, including the timing of writing orders and notes. This was done approximately monthly, also via e-mail, with detailed feedback on what went well and what needed improvement. Similar to the CSSR-S/SAFE-T project, chief and senior residents were incorporated into the process. Though ongoing, overall improvements have been noted including lack of citation during a recent TJC survey.

Getting residents involved in QI projects is an important part of PS/QI learning. It is highly rec-

ommended to have residents work in teams instead of individually. This provides experience and learning about the importance and role of teamwork, and it gives the PD valuable information about residents' professionalism, interpersonal and communication skills, and other important competencies. One way to do this is to form teams with a resident from each PG year. Pairing the team with a faculty mentor(s) is also vital. One approach that can be helpful in terms of mentoring is to have a psychiatrist and a non-psychiatrist "faculty" as co-mentors. The latter could be a psychologist well versed in developing surveys or a nurse manager on the unit most affected by the possible project outcomes who can help guide the residents along the way. Another idea is to have the second mentor be a less-experienced faculty member who needs more experience with PS/QI and is interested in being a future QI project mentor. The junior faculty member can learn both from the residents and the more seasoned faculty mentor. Individual resident QI projects are discouraged because, for example, in a large program, the number of projects can become unwieldy and may result in little to no relevant outcomes as the availability of mentors and resources could be outstripped. Some residents also request to do individual projects, trying to avoid working in teams, defeating many of the tenets of PS/QI. At the very least, an individual resident should be teamed up with other personnel such as nurses, risk managers, social workers, or pharmacists for their QI projects.

When deciding on the focus of resident QI projects, PDs should also look to the hospital, clinic, or health system needs. Obviously, there are many problems to be solved in the healthcare arena, but there is precious limited time and resources. It is important to align PS/QI efforts and projects with those of the clinical learning environment (CLE) [18, 23]. Most health systems, hospitals, or facilities have PS/QI goals. These goals (e.g., reduction of central line infections) may not always align with psychiatry, but a quick discussion with the Chief Quality Officer (CQO) or Chief Medical Officer (CMO) may help to delineate what could be useful to the overall enterprise. Improving physician communica-

tion with patients, for example, is a goal that crosses specialties and may be one that could be worked on in a particular psychiatric service such as consultation liaison. If the program is affiliated with a standalone psychiatric facility, a discussion with the facility's leadership could lead to fruitful projects as well. This would likely be a very welcome conversation.

One thing to keep residents focused on is producing outcome data from their QI projects. Residents frequently get caught up in spending a lot of time planning and researching the background for their projects (the P of PDSA) but very little time doing and studying (the D and S of PDSA). This may be due to uncertainty and anxiety about performing their tests due to lack of experience. Reminding residents of the need to produce outcomes that can impact patient care and setting frequent deadlines to review their projects and the output is very important. It is helpful to request assistance from program coordinators to send out reminders and assist the PD or their designee with tracking. Reminding resident QI teams, including their mentors, to spend approximately equal time in each part of the PDSA cycle can help.

There are many questions about the best way to teach PS/QI. Should it be taught longitudinally, say one hour or one afternoon per month throughout residency, or in more concentrated blocks, say in a 4–12 week block each year? There is also the question of whether PS/QI should be introduced early in training versus later. Some psychiatry programs wait until the PG-3 year, for example, because they feel that the residents have gotten a lot of clinical experience "under their belts" by then and can understand the intricacies of the healthcare system. Also, the PG-3 year in psychiatry is most often all outpatient-based, so it is much easier to block schedules to allow for concentrated PS/QI learning and practice, which is near impossible in the PGY-1 and -2 where residents are on block inpatient and C/L rotations. Longitudinal vs. blocks, and early vs. late? All have pros and cons.

Longitudinal experience has the advantage of keeping the material "alive" throughout training so it is not learned and easily forgotten as it could be

with a concentrated block. The drawback is that it can take a long time to get to the finish line and runs the risk of being “diluted” by other curricular content. Sustaining momentum over a long haul can also be difficult, both for teachers and residents. Optimal timing of concentrated blocks can be hard to determine. It has to be remembered that not all residents are at the same educational milestones level at the same time. They may not have had the same rotation experience, so some may easily absorb the material while others struggle.

More and more, it is recommended to incorporate PS/QI education from “day 1” [25]. It has to be remembered that the CLE (e.g., the hospital) needs residents to be ready to participate and even lead PS/QI endeavors as soon as possible. Residents will need lots of “practice” in PS/QI before they graduate. Waiting until PGY-3 or – 4 may be too late. Ultimately, PDs must decide based on what is right for their program and available resources, but it is important to keep these insights in mind.

One way to make PS/QI a part of daily practice is to add sentinel/major patient safety event reporting into every handoff. Figure 25.1 illustrates a list of psychiatry sentinel events that residents should learn to recognize, report, and incorporate into verbal and written handoffs. One of the authors’ program initially created this tool out of a need to ensure communication of such events “up the chain” to leadership. It creates a quick and efficient visual in handoffs for ease of review by PDs and other faculty to give feedback and support. Also, if the PD/faculty are aware of a major safety event, and it is not reported in the handoff tool, the discrepancy can be clarified with the resident, and more teaching can occur.

Making PS/QI relevant, efficient, and fun (REF, for short) is a brief but easy mnemonic to remember how to think about, develop, and carry out all aspects of PS/QI curriculum and learning activities. “Relevant” refers to the importance of teaching content that is pertinent and applicable

| | |
|---|------|
| Sentinel Events During Shift | 3 |
| Death | None |
| Suicide/attempted suicide | None |
| Elopement from the facility to the outside | None |
| Any serious assault that requires a patient to be sent out for care/follow up | None |
| Significant patient assaults towards staff | None |
| Significant patient assaults towards other patient(s) | None |
| Facility issues (fire, flood, utility outage) | None |
| Falls, with serious injury | None |
| Serious adverse medication/treatment events | None |
| New onset and/or unanticipated medical issues that require send out/follow up care or transfer to higher level of care (e.g. ICU) | 2 |
| High profile events | 1 |

Fig. 25.1 Sentinel event handoff tool

to the clinical care of patients. It should not be too abstract. “Efficient,” in terms of time, refers to considering the hectic schedules and limited time for study that all physicians, especially trainees, face. Consider 10–15 minute teaching sessions instead of 1–2 hour sessions. Remember that the human attention span is limited. “Fun” is the icing on the cake. Not all subjects are equally as entertaining, but inserting some humor and enthusiasm into the topic can aid learning and keep learners willing to come back for more. The next time there is a need to develop a PS/QI, or any other learning activity, REF is a quick mnemonic to focus efforts.

“PDSA Your Way” to PS/QI Curriculum Design

As noted previously, the PDSA Cycle is a model for CQI efforts and is often used to teach residents and facilitate QI projects. PDs can use PDSA both to teach residents and in curriculum design. They can Plan and test (Do) a single learning session, review and assess the outcomes of that learning session (Study), then decide what to do next based on those outcomes (Act), for example deciding to repeat the session in the next academic year but move it to July instead of December. We suggest starting with a small project to learn the process.

Getting Started

Getting started with PS/QI curriculum design is the first hurdle for many residency PDs. The first piece of advice is to just start. The old clinical adage, often applied in geriatric medicine and psychiatry, “start low and go slow,” can be sound advice. One of the biggest mistakes any educator can make is to be overly ambitious in curriculum design, especially in an area that may be unfamiliar or not a forte. The authors have heard a further adaptation: “start low and go slow...but go (all the way)!”. To apply “start low and go slow...but go!”, consider beginning with a single session as discussed above, such as a clinical simulation or lecture, review resident feedback and evalua-

tions, assess their learning, then build from there. It is important to just keep moving forward with PDSA cycles and refrain from getting stuck in the P phase.

A great session to help get started is the Institute for Healthcare Improvement (IHI) “Mr. Potato Head” activity (see Table 25.1). This is an interactive, hands-on team exercise that can be done with faculty and residents. It is a PDSA cycle simulation. It also teaches great skills like using run charts to plot and follow QI project and process data. The IHI also offers the “coin spinning” activity (see Table 25.1) as an alternative for learning PDSA cycles. It is highly recommended to do this as early as possible in the academic year to get even interns thinking about PS/QI. All levels of residents (and faculty mentors) can be trained initially, with only interns trained in subsequent years. Alternatively, the Mr. Potato Head activity can be done at the beginning of the PG1 year and Coin Spinning at the beginning of the PG2 year as a refresher on PDSA.

Another great way to teach PDSA is to have residents (and faculty) do their own personal improvement projects (see Table 25.1, IHI). This exercise allows the individual learner to develop their own project that can be applied to their personal or academic life. For example, perhaps they want to stay fit. By doing this exercise, they can develop their own SMART (Specific-Measurable-Achievable-Relevant-Timely) [26] goal such as “to be running 3 miles 3 times per week by September” and track their progress. This can be a great way to incorporate well-being into a PS/QI curriculum. An academic goal might be “to review 5 PRITE questions weekly from August 1-September 30.”

It should be noted that several institutions require that all residents participate in a certain number of the IHI Open School’s PS/QI courses (see Table 25.1) during onboarding or early in the PG-1 year. Some recommended courses to start with are PS101 (Introduction to Patient Safety), PS102 (From Error to Harm), PS104 (Teamwork and Communication in a Culture of Safety), QI102 (How to Improve with the Model for Improvement), and QI103 (Testing and Measuring Changes with PDSA Cycles). Some programs and institutions require physicians to

Table 25.2 Literature resources (with PubMed links) for PS/QI curriculum development

| Reference |
|--|
| A novel experiential quality improvement training program during residency improves quality improvement confidence and knowledge: a prospective Cohort Study. Ridout SJ, Ridout KK, Theyel B, Shea LM, Weinstock L, Uebelacker LA, Epstein-Lubow G. <i>Acad Psychiatry</i> . 2020;44(3):267–71. https://doi.org/10.1007/s40596-020-01184-2 . Epub 2020 Jan 21. PMID: 31965515 |
| A quality improvement curriculum for psychiatry residents. Reardon CL, Hafer R, Langheim FJP, Lee ER, McDonald JM, Peterson MJ, Stevenson J, Walaszek A. <i>MedEdPORTAL</i> . 2020;16:10870. https://doi.org/10.15766/mep_2374-8265.10870 . PMID: 32051851 |
| Continuous quality improvement for psychiatry residency didactic curricula. Benson NM, Vestal HS, Puckett JA, Taylor JB, Hogan C, Smith FA, Beach SR. <i>Acad Psychiatry</i> . 2019;43(1):110–3. https://doi.org/10.1007/s40596-018-0908-4 . Epub 2018 Apr 10. PMID: 29637515 |
| A curriculum for residents to develop successful quality improvement projects. Reardon CL, Creado S, Hafer R, Howell-Little E, Langheim FJ, Lee ER, McDonald JM, Peterson MJ, Walaszek A. <i>WJM</i> . 2018;117(2):79–82. PMID: 30048577 |
| Delivering on the promise of CLER: a patient safety rotation that aligns resident education with hospital processes. Patel E, Muthusamy V, Young JQ. <i>Acad Med</i> . 2018;93(6):898–903. https://doi.org/10.1097/ACM.0000000000002145 . PMID: 29384750 |
| Training in quality improvement for the next generation of psychiatrists. Ewins E, Macpherson R, van der Linden G, Arnott S. <i>B J Psych Bull</i> . 2017;41(1):45–50. https://doi.org/10.1192/pb.bp.115.051409 . PMID: 28184318 |
| QI-on-the-Fly: continuous faculty development to enhance patient safety teaching and reporting. Roy MH, et al. <i>J Grad Med Educ</i> . 2016;8(3):461–2. https://doi.org/10.4300/JGME-D-15-00716.1 . PMID: 27413467 |
| Improving the completion of Quality Improvement projects amongst psychiatry core trainees. Ewins L, Macpherson R, van der Linden G, Arnott S. <i>BMJ Qual Improv Rep</i> . 2015;4(1):u205682.w2554. https://doi.org/10.1136/bmjquality.u205682.w2554 . eCollection 2015. PMID: 26734408 |
| Training psychiatry residents in quality improvement: an integrated, year-long curriculum. Arbuckle MR, Weinberg M, Cabaniss DL, Kistler SC, Isaacs AJ, Sederer LI, Essock SM. <i>Acad Psychiatry</i> . 2013;37(1):42–5. https://doi.org/10.1176/appi.ap.11120214 . PMID: 23338873 |
| A didactic and experiential quality improvement curriculum for psychiatry residents. Reardon CL, Ogrinc G, Walaszek A. <i>J Grad Med Educ</i> . 2011;3(4):562–5. https://doi.org/10.4300/JGME-D-11-0008.1 . PMID: 23205210 |
| Quality education: a pilot quality improvement curriculum for psychiatry residents. Sockalingam S, Stergiopoulos V, Maggi J, Zaretsky A. <i>Med Teach</i> . 2010;32(5):e221–6. https://doi.org/10.3109/01421591003690346 . PMID: 20423249 |

complete the Basic Certificate in Quality & Safety of which the preceding courses are a part. For those PDs looking to build or refresh their didactic curriculum, these basic certificate courses could go a long way toward that effort.

Another applicable adage is “don’t reinvent the wheel.” The above examples from IHI are instructive because they are already developed and available for free online to teaching faculty and trainees. Many excellent resources, including published PS/QI curricula, are available for use by residency PDs (see Tables 25.1 and 25.2). Some are specific to psychiatry (Table 25.2) while others are for more general concepts like PDSA (e.g., IHI; see Table 25.1).

Model QI Curricula

We highlight several QI curricula in Table 25.2. Arbuckle et al. (2013), Reardon et al. (2011; 2018), and most recently Ridout et al. (2020) have described comprehensive PGY-3 QI curricula that include experiential and didactic learning. Example projects are provided. Resident knowledge, confidence in, and product output (successfully completed projects) for QI performance were significantly improved. Reardon et al. (2020) have also updated their original curriculum and made it available in MedEdPortal (see Table 25.1). Ewins et al. (2017) provide

advice on developing resident QI projects at various levels of training. Sockalingam et al. (2010) describe a pilot longitudinal QI curriculum spanning PGY2–4. An interesting take on CQI is Benson’s (2019) approach to revising general, not just PS/QI, didactic curricula for psychiatry which illustrates the use of QI in curriculum design and overall program process improvement and management. All of these are excellent resources for psychiatry residency PDs looking to implement or refresh QI curricula in their own programs (see Table 25.2 for all references).

Model PS Curricula

While QI and PS overlap and can be taught simultaneously, it is recommended that programs have a dedicated PS component to their PS/QI curriculum. A pair of systematic reviews of published PS/QI curricula [14, 15] found that while

many of the 33 curricula included PS content in their didactics, only some had interactive pedagogy (e.g., case discussion or small group activities), and only seven had PS experiential learning components (e.g., participating in a formal root cause analysis (RCA) for the hospital). Four studies described curricula that were mandatory for all residents, and only one of those was formally aligned with QI or PS processes of the hospital (i.e., residents participated in ongoing, official hospital safety processes). In fact, no study described a curriculum that simultaneously was (1) required of all trainees in the program, (2) included an experiential PS component, and (3) formally aligned with the sponsoring hospital’s quality and safety program. Finally, only two of the curricula with experiential PS components assessed resident knowledge and behavior changes with a measure other than self-report.

Patel, Muthusamy, and Young designed and implemented a PS rotation (see Table 25.3) for

Table 25.3 Key features of a model patient safety rotation

| Feature | Description |
|-------------------------------|--|
| Learning goals | Differentiate key concepts such as medical error, near miss, and adverse event. Appreciate the role of error analysis in systems improvement. Utilize patient safety tools, such as the timeline, fishbone, and smart action plan to identify contributing factors to an adverse event. Write and present a report that rigorously analyzes the underlying causes of an adverse event, determines whether medical error contributed, identifies possible opportunities for improvement, and proposes corrective actions as necessary. |
| Engage foundational concepts | Watch IHI Patient Safety video modules: QI 102: The Model for Improvement: Your Engine for Change PS 100: Introduction to Patient Safety PS 101: Fundamentals of Patient Safety PS 102: Human Factors and Safety PS 104: Root Cause and Systems Analysis Read 6 selected patient safety articles on complex adaptive systems, root cause and error analysis, human factors, and culture of safety. |
| Apply and practice | Conduct a mock root cause analysis of a prior adverse event at Zucker Hillside Hospital with emphasis on creating a fishbone diagram and smart action plan. Feedback provided by preceptors. |
| Learn by doing authentic task | Complete a special review on a current, actual adverse patient safety event and present at special review committee meeting. Iterative feedback and supervision provided on draft written and verbal reports. |
| Assessment for learning | Formative feedback: Oral feedback on mock root cause analysis exercise from chief resident. Oral and written feedback on written special review report from chief resident and faculty sponsor. Oral feedback on special review presentation from chief resident and/or faculty sponsor. |
| Assessment of learning | Knowledge exam (MCQ and short answer essays), faculty evaluation of quality of report and presentation. |

Adapted from Patel et al. [21]

Abbreviations: *IHI* indicates Institute for Healthcare Improvement, *QI* quality improvement, *PS* patient safety

second-year psychiatry residents that incorporated many of the principles discussed above [21]. The rotation was two weeks long (100% time) and required for every resident. The rotation had three components: engagement with foundational science, practice applying the science (simulation), and demonstration of competence through completing an actual RCA (for more on RCA, see section “Partnering for Success”).

Through asynchronous didactic learning, residents engaged with the foundational concepts by completing four online modules from the IHI and reading selected articles that highlighted key PS topics: root cause and systems analysis, complex adaptive systems, human factors, and culture of safety. These didactics allowed for engagement with the foundational concepts just before the practical component. This just-in-time feature supported the integration of formal and experiential knowledge, essential to developing competence [27]. To facilitate the application of the concepts (i.e., skill-building), each resident performed a mock RCA that included the construction of a timeline, fishbone diagram, and corrective action plan from a prior adverse patient event. The chief resident provided the residents with constructive feedback.

These activities prepared the resident for the key part of the rotation: performing a “special review” of an actual, recent adverse event that required an official hospital investigation that otherwise would have been performed by a nurse, nurse practitioner, or attending physician. Consistent with workplace learning theory, completing actual, authentic work promotes further skill development and the satisfaction that stems from a meaningful contribution to the workplace [22]. Partnering with nursing, the quality department, and other disciplines, the resident investigated and prepared a written analysis of the adverse event with iterative feedback from the faculty sponsor and the chief resident. Once the written report was finalized, the resident practiced their formal oral presentation with the faculty sponsor and chief resident, who provided real-time feedback. Lastly, each resident submitted the written report, presented findings orally to the hospital’s Special Review Committee, and

participated in subsequent interprofessional deliberations about whether any corrective actions were necessary. The faculty sponsor or chief resident, both of whom sat on the committee, gave the resident constructive feedback immediately after their final presentation.

When evaluated by residents, faculty, and patient safety leaders, this rotation had very promising outcomes. Residents demonstrated enhanced interest in future PS work and substantial knowledge gains. The quality committee members rated the quality of the resident written reports as better than those performed by faculty. And, most importantly, the residents’ reports and subsequent participation in corrective actions led to meaningful changes to patient care and the hospital environment. Of course, a two-week block rotation such as this must be combined with QI and strategic return to PS over the course of the residency to ensure that the activities are not “one and done” or “perfunctory” and that residents continue to grow their skill as well as their appreciation for the importance of PS/QI.

Partnering for Success

Sage advice is that no PD can be expected to be an expert in all aspects of PS/QI or to create and deliver the entire curriculum. When possible, it is important to partner with relevant stakeholders. It is important to remember that the institution, hospital, and department have a vested interest in the success of training programs in this area. Their reputation for safe and quality patient care in general and based on regulatory body quality measures is at stake.

PDs should always look to their Graduate Medical Education (GME) office and Designated Institutional Official (DIO) for guidance and resources. There are Accreditation Council for Graduate Medical Education (ACGME) institutional requirements for PS and QI, and the sponsoring institution (SI) must partner with programs to meet their own ACGME requirements. Some GME offices and DIOs may have more resources than others, but the DIO can often point PDs in the right direction. Some SIs offer a standardized PS/QI curriculum for all their training programs.

Many institutions and hospitals have quality offices and officials (e.g., Chief Quality Officer or CQO) as well as risk managers who are often very well versed in PS/QI, and again have a vested interest in the success of this training.

Looking within, a PD should work very closely with their chief of service, department or division quality and safety officer, and/or department chair for direction and resources. These individuals may have relevant expertise, but if not, they can be a great resource for determining next steps. For example, are there other faculty members who have relevant PS/QI expertise, experience, or at least an interest in learning about and teaching these subjects? Perhaps this is an associate program director (APD), site director, or someone who could be given a title (e.g., Director of PS/QI training) and protected time (or other incentives) to develop PS/QI curriculum.

The PS/QI curriculum does not have to be solely taught by physicians/psychiatrists, though it is highly recommended to have a physician/psychiatrist leader in this area for modeling to faculty and residents. Nurses often have significant background and training in PS/QI. Risk managers, who may or may not be nurses, are employed by hospitals and can often provide relevant training to residents and also serve as rich resources for PS/QI data.

PDs can also look to other psychiatry PDs around the country (such as via the American Association of Directors of Psychiatric Residency Training [AADPRT], see Table 25.1), other specialty and subspecialty programs and faculty locally, regionally, or nationally to provide mentoring, share curricular resources, or just generally commiserate. The latter is just as important because knowing that one is not alone in struggling to develop PS/QI curriculum and culture can be very helpful and calming.

One example of sharing curriculum is to partner with other programs, within or outside psychiatry (e.g., emergency medicine), to do mock or actual RCAs (see Table 25.1). RCA is a comprehensive and systematic review of an event to uncover all the possible systems and process causes and determine action plans to prevent future such events. A mock RCA is a simulated

RCA that may focus on a realistic but made-up (can be an amalgam of more than one example case) sentinel (e.g., patient suicide) or near-miss (e.g., patient prescribed but not given a wrong medication) event. Although actual events are often preferable because they are real and cannot be brushed off as “not important because they did not really happen,” mock events when carefully crafted can be powerful teaching and learning tools and lower the inhibitions often felt during review of actual events that may elicit feelings of shame and blame (even though they should not).

If your program has any ACGME survey areas of low compliance, citations, or areas for improvement (AFIs) related to PS/QI, it should not be a source of panic. It can be a powerful tool to strongly motivate the institution/DIO and department chair to provide support and resources, including funding. The PD, APD, other faculty, and residents (e.g., chief residents) can benefit from training courses. Buy-in by leadership, institutional and departmental, is important to allow protected time and financial support for such courses.

Faculty Development

Faculty development in PS/QI is of paramount importance for training programs to ensure optimal patient care and meet an ACGME requirement. Per ACGME CPR II.B.2.g)(2), faculty must receive annual faculty development in PS/QI. PDs should document such training, which can be as simple as having a training session on the PDSA cycle or RCA, or review of practice habit data, for example, during a regularly scheduled faculty meeting. Whenever and wherever the majority of the faculty are gathered, it is a great time to do faculty development. It does not have to be an hour-long session. Even a brief 15-minute session can be a start and go a long way. See Chap. 23 for a discussion of formats for faculty development.

For PDs, APDs, or other program faculty who are interested in gaining added or more advanced training in PS/QI, there are many opportunities. Programs affiliated with universities may have access to graduate-level (and sometimes online)

certificates in risk management and programs affiliated with large healthcare systems and/or hospitals may have access to institutional PS/QI courses. The Association of American Medical Colleges (AAMC) offers Teach for Quality (Te4Q) that provides faculty development to effectively teach PS/QI to residents and other learners. As noted above, IHI offers its basic certificate and continuing education/faculty development courses in PS/QI. Another resource is Intermountain Healthcare training courses. Faculty who have gained experience and other education and training in PS/QI can also become board certified (by examination) in Medical Quality by the American Board of Medical Quality or in Healthcare Quality and Management by the American Board of Quality Assurance and Utilization Review Physicians. These are just a few examples (see Table 25.1) for further PS/QI training for faculty.

Assessment of and for Learning

Assessment is integral to success for a PS/QI curriculum, just as it is a core feature of the QI process itself. Only by assessing residents—their mastery of key concepts and skills, the quality of their PS/QI projects, the outcomes in their patient care—can we know if learning has been effective. Just like with a QI-driven change to a clinical process, only the assessment of valid outcome measures can justify the cost and effort required to make and sustain the changes in curriculum and culture needed for excellence in PS/QI. Assessment should be longitudinal, and it should be integrated into the curricular plan at every step.

Miller's pyramid of assessment [28] is frequently cited and used as a guide to assessing the clinical competence of a medical trainee. The sequence progresses from cognitive to behavioral assessment, starting with knowledge (the trainee "knows") and competence (the trainee "knows how") and advancing to performance ("shows how") and finally action ("does"). Foundational knowledge ("knows") is, as ever, the most straightforward level to assess; a simple multiple-choice question test or short answer essays will usually suffice to prove mastery of basic facts. The second

level of competence ("knows how") is demonstrated by applying knowledge to interpret data and make a plan, as is commonly tested by clinical supervisors with "what if" questioning. A standardized assessment of "knows how" requires the use of a structured tool to grade learner responses to a vignette-based exam—see the Quality Improvement Knowledge Application Tool Revised (QIKAT-R), described below. Miller's third level, performance ("shows how"), involves assessing practice with direct observation. This can be accomplished by simulation, such as a standardized patient encounter, mock RCA, or constructing a timeline, fishbone, and/or process map from a paper case, and with a standardized grading tool like the Quality Improvement Proposal Assessment Tool (QIPAT-7) (see below). Finally, the pinnacle of the pyramid is action ("does"), which represents the assessment of routine practice in the CLE. Assessment at this level ideally measures the processes and outcomes of an actual PS/QI project—did the learner's action lead to a meaningful difference in patient care? Such outcomes can be supplemented by relevant multi-source feedback of the learner such as faculty assessment of the quality of the RCA (using a rubric). Miller's pyramid of assessment reminds us of this spectrum, because the trade-off between ease and reliability (at the bottom of the pyramid) and validity (at the top) makes no level of assessment sufficient on its own.

A useful tool for assessing learner competence with QI concepts is the QIKAT-R [29]. The learner is presented with a series of three scenarios, each illustrating a systems-level quality problem, such as a lack of standardized order sets or an overly complex admission process. For each scenario, the learner is prompted to propose an aim, a measure, and a change (aligned with IHI's Model for Improvement; see Table 25.1) to address the quality concern. The grader evaluates each written response with nine yes/no judgments (e.g., the measure captures a key process or outcome), resulting in a maximum total score of 27 over the three scenarios. Scenarios have been published specific to psychiatry and are available in AADPRT peer-reviewed model curricula (see AADPRT website in Table 25.1, Arbuckle et al. and Reardon et al. references in

Table 25.2) and available scenarios can easily be modified to better match the local context. Because of the written format, simple grading rubric, scoring 0–27, and ease of customizability, the QIKAT-R can be part of a pre-post or serial assessment during a longitudinal QI course. Similarly, programs can use short answer questions to assess PS knowledge. One example with a grading rubric has been published for psychiatry [21]. In addition, the National Patient Safety Foundation has a multiple-choice question knowledge examination that can be purchased (see Table 25.1).

Other structured tools are available to assess the quality of a QI project charter, which is a document outlining the rationale and plan for a QI project. The creation and presentation of a project charter is essential to the process of QI, so course directors need to deliver both formative and summative feedback on this product. One such tool is the Quality Improvement Proposal Assessment Tool (QIPAT-7) [30]. The reviewer of a QI proposal uses this tool to assign scores in six domains. The reviewer must have a degree of QI expertise, as the scores are chosen from a Likert scale anchored on whether each domain meets, fails to meet, or exceeds expectations for a QI proposal. In addition to the Likert scales, each item has a comment box to prompt reviewers to justify their rating or provide additional detail. This tool is useful when residents are presenting their QI project proposals, perhaps to a mixed audience including the course director, the PD, service leaders, and hospital administration. It can be used formatively or as a basis for a final summative evaluation.

One form of assessment of a resident's mastery of PS/QI is measuring their routine use of safe and high-quality practices in their own workflows. This can be accomplished via chart audit tools such as performance in practice (PIP) resources. The journal *Focus* has published several PIPs for psychiatry over the last several years [31–34], the most recent for care of the patient with schizophrenia [35]. Typically, residents would review five of their charts and complete a guided comparison of their patient care to the evidence base and practice guidelines. Once completed, any gaps in the provision of care, such as failure to document a suicide risk assess-

ment, would be the focus of an improvement plan for future care such as determining a validated risk assessment and incorporating it into the note template. In this way, assessment drives learning, as residents become motivated to reduce gaps between what they do and what should be.

A comprehensive assessment plan includes evaluation of the curriculum itself. Time and effort are precious in a residency training program, so any new (or, for that matter, legacy) curricular component should prove its worth. One model for program evaluation commonly used in medical education is the Kirkpatrick model [36] which distinguishes four levels of learner outcomes that should be assessed in order to fully evaluate a training program. The four levels of outcomes are reaction, learning, behavior, and results. At the level of “reaction,” a PS/QI training program might demonstrate that learners are more favorably inclined towards PS/QI, that they more readily endorse the value of the disciplines. Reaction level data could be easily gathered with a survey, although care should be taken to encourage candor given that “the right answer” may be obvious, and such surveys should be anonymous and aggregated. Examples of such surveys can be found at the Agency for Healthcare Research and Quality website [Surveys on Patient Safety Culture (SOPS)], see Table 25.1). The second and third Kirkpatrick levels of program evaluation (“learning” and “behavior”) correspond well to the learner assessments used for Miller's cognitive and behavioral layers, respectively. The tools described above can be presented in aggregate to demonstrate learning and behavior change in the learners over the course of the curriculum. Finally, the top Kirkpatrick level of “results” should assess change in the residency, the hospital, the patients, or any other broader community that might feel the downstream impact of residents' learning and PS/QI projects. Like the Miller pyramid for learner assessments, the Kirkpatrick hierarchy of program evaluation guides us to start with easily accessible impact and build up to the most important outcomes. Table 25.4 shows how one program used the Kirkpatrick Model to evaluate its PS rotation.

Assessment and evaluation are important not just because they (hopefully) produce evidence

Table 25.4 Kirkpatrick model of program evaluation applied to a patient safety rotation

| Kirkpatrick level | Description | Study measures |
|-------------------|---|---|
| Level 1 | Learner satisfaction | Post-rotation survey, Likert scale (1–4; no value, minimal value, some value, significant value) |
| Level 2a | Changes in learner attitudes and perceptions | Pre- and post-rotation short answer questions |
| Level 2b | Gains in learner’s knowledge | Pre- and post-knowledge assessment |
| Level 3 | Changes in learner’s behavior | Patient safety (or quality) committee members rate the quality of the resident’s written and oral reports |
| Level 4a | Organizational changes in relation to identified gaps | Action steps taken by special review committee based on resident report |
| Level 4b | Benefits to patients | Outcomes such as improved assessment of suicide, reduced seclusion and restraint, reduced falls etc.... |

that a training program is effective but also because their presence in the curriculum is a useful incentive to motivate effort. Most physicians (residents and faculty alike!) are sensitive to incentives like “grading,” even when a grade is not actually tied to other consequences. A well-designed assessment turns “teaching to the test” (and learning for the test) into an efficient, desired outcome. In this way, assessment can simultaneously be “of learning” and “for learning.”

Creating a Culture of Patient Safety and Quality

A culture of patient safety and quality is absolutely necessary for optimal clinical care. Such a culture is one where all members of the treatment team regardless of position, education, experience, and background feel safe to speak up when there is concern for patient safety or quality. There is a true sense of team and trust.

As discussed in the opening of this chapter, the “hidden curriculum” can undermine efforts to create or sustain such a culture. Negative undertones and reactions to PS/QI efforts, including training, can become internalized by learners at all levels. One example is that a new quality measure (e.g., metabolic monitoring for antipsychotics) is introduced into the inpatient psychiatric service. Every time an antipsychotic is ordered for a patient, an alert “fires” in the EMR requiring the psychiatrist to order laboratory testing, such as a lipid panel, to screen for metabolic syndrome. The attending psychiatrist might blurt out in the physician workroom where residents and medical students are present, “I don’t have time for this, and since when does a stupid computer get to tell me how to practice medicine...I went to medical school; the computer didn’t!” The attending may be late for clinic and pressed for time; any other day, they would likely agree that metabolic monitoring is very important for their patient’s care, but it’s too late, the negative message has possibly already been passed to trainees that metabolic monitoring and clinical decision-support software in the EMR are a waste of time or “bad.”

Of course, everyone has bad moments or days in medical practice. Modeling a culture of PS/QI is, however, extremely important. Minimizing the “hidden curriculum” is important. Creating a clinical and training environment where psychiatry residents and other trainees can feel safe to speak up when they are concerned about a patient’s safety is crucial. Trainees often already feel “less than” in the training setting given their lower level of experience. Absolute trust is vital for them to feel empowered to bring their concerns to the attending or team. PDs, faculty, and department leadership must model important behaviors such as saying “I don’t know,” admitting when they have made a mistake, and asking other team members for their input and really listening to them.

Transparency (e.g., openness about operations and administrative decision-making), as much as possible, is also key. This can be modeled by the way in which the department and residency training program are run and managed. Leadership meetings with faculty and residents where lead-

ers promote transparency and willingness to listen are an important means of modeling. David Marquet, author of *Turn the Ship Around!* talks about having certifications, not briefings, during meetings [37]. For residency training, there would be a bottom-up approach where there is more talking from residents who feel safe to speak up about concerns or problems, program leadership listens more than talks, and all come to a mutual decision instead of just being told what to do and assuming everyone will just follow suit.

Tackling program problems and concerns as well as all aspects of program operations using the above and various other PS/QI principles is a great way to teach PS/QI and create a culture of safety. Using process mapping, failure mode and effects analysis (FMEA), fishbone diagramming, RCA methodology, and PDSA to work through, process, action plan, and make decisions for the program can be great ways to model PS/QI principles (see Table 25.1). This approach also must be reflected at the hospital and institutional levels, i.e., be enterprise- and health system-wide, to be ultimately successful. The leadership and physicians must buy in and participate in a culture of safety. Having a similar and pervasive “language” and methodology of safety and quality are criti-

cal. It does not work to have the Dean/DIO/PD developing PS/QI content that is not aligned with what the Chief Executive Officer (CEO)/hospital/clinical services are doing. Mixed messages are very difficult for trainees to understand.

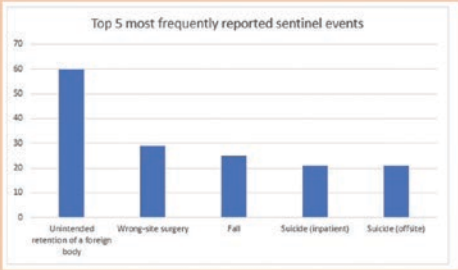
Another way to develop a culture of safety is to make PS/QI a daily habit of resident and faculty practice. Some concrete ways of doing this are to redesign daily teaching rounds to highlight PS/QI. For example, faculty can start off rounds by asking the team about any events overnight, asking if a patient safety (incident) report was filed (working as a team to do so if not done already), reviewing the handoff tool for relevant insights, ensuring all team members who want to speak can do so, and discussing possible action plans for preventing such events for a particular patient during their hospitalization or others in the future. Developing instructive but brief cases to discuss during team rounds that illustrate PS/QI principles for the team can also be helpful. Haggerty Roy et al. in their “QI-on-the-Fly” (see Table 25.2) put this process into successful action and can provide further guidance and examples. One of our authors sends a weekly “Tuesday’s Tip for Quality and Safety” e-mail that provides education and reminders about various aspects of PS/QI (Fig. 25.2).

Today's Tip for Quality and Safety: **Falls and Suicide Among Top Sentinel Events**

Hooray for Tuesday!

The Joint Commission (TJC) recently released the first 6 months of data for 2019 on reported sentinel events. **Falls** and **suicide** were among the top 5. It should also be noted that there are now 3 new categories for suicide: emergency department, inpatient, and offsite within 72 hours. Page 1 of the attached TJC report discusses this further.

It is important that we continue to work as a team to reduce falls and suicide in our patient population.



| Sentinel Event | Frequency (Approximate) |
|--|-------------------------|
| Unintended retention of a foreign body | 60 |
| Wrong-site surgery | 30 |
| Fall | 25 |
| Suicide (inpatient) | 20 |
| Suicide (offsite) | 20 |

Hope this is helpful.
Let me know if you have questions.
Thanks,
Dr. H
Jacqueline A. Hobbs, MD, PhD
Jacqueline A. Hobbs, MD, PhD, DFAPA, LHRM, CMO

Fig. 25.2 Tuesday’s tip e-mail message example

As alluded to above, part of any culture is a common language. Talking openly and often about PS/QI and its principles, using the vocabulary of PS/QI science, are means to facilitate the development of a safety culture. “Cross-training” in PS/QI in all aspects of resident teaching can help with retention of terminology. For example, RCA methodology can be employed in patient case conferences. Faculty facilitators might say, “Let’s think about all the possible reasons this patient did not adhere to our prescribed medication regimen” or “What communication lapses may have occurred that led to the patient becoming agitated?” Even in psychotherapy supervision, faculty can ask residents to do a modified fishbone diagram depicting relevant psychosocial stressors, significant supporters and non-supporters, and environmental factors that are potential “root causes” of affect, behaviors, or defense mechanisms.

Developing and maintaining a culture of safety requires motivation of the team. The concepts of the coach, team captain, or cheerleaders from sports may come to mind as figures who can lead, “champion the cause,” and stimulate enthusiasm. Developing faculty and resident champions for PS/QI is frequently utilized to invigorate the clinical team. PDs must be on the lookout for faculty and residents who seem to have a penchant for PS/QI. Those with even the slightest appetite for PS/QI can be encouraged and further trained. Junior faculty and residents with interests in academic psychiatry careers, especially those who may not be as inclined towards more traditional research pathways, should be introduced to PS/QI (and training in these areas) as a track to academic promotion and job prospects.

To solidify the culture of safety, recognition and incentives are very important. They serve as reinforcers of desired behaviors. Recognition can be as simple as a “shout out” in a meeting for a job well done to improve patient safety. One program gives monthly “Quality and Safety Star Awards,” sending out an e-mail (with a prominent and consistent background) to the teaching faculty and residents stating the action or behavior that led to the nomination by peers, faculty, or staff. The awardees are also featured in the department monthly newsletter. At the end of the

academic year, during the annual “awards day,” certificates are given to each monthly awardee as a reminder of their good work and reinforcing the PS/QI culture. Nominating faculty and residents for institutional PS/QI awards is also a means to recognize and elevate PS/QI culture and showcase the program’s work to others. One of the authors sponsors a QI rotation in which PGY-3 residents present their projects (including data from at least one PDSA cycle) to hospital and department leaders and at the annual hospital QI poster day. This provides both recognition and a platform that motivates residents.

Many academic (and private) institutions have incentives for PS/QI in their compensation plans. Teaching faculty should be encouraged to review the parameters for such incentives as reminders that PS/QI work can enhance their earning power for what is typically thought to be uncompensated busywork. Additionally, PS/QI work more and more can fulfill clinical, education, service, and scholarly requirements for academic promotion (e.g., from assistant to associate professor). Meeting quality measures that lead to increased insurance reimbursements, developing and publishing peer-reviewed curricula and clinical findings, grants, and honors and awards related to PS/QI may all be essential elements of successful promotion packets for clinical faculty.

Finally, to create a culture of patient safety and quality, the most important thing is to just get started and take first steps. As Churchill said, “Perfection is the enemy of progress.” Just as PDSA cycles are intended to be relatively rapid, PDs should try various means, small at first, to create their safety culture, get residents and faculty involved, and determine what aspects to adopt, abandon, or adapt.

Special Considerations for New, Smaller, or Community-Based Programs

Some might ask, “Well this is all fine for larger, well-resourced programs and institutions, but what about brand new, small (including subspe-

cialty fellowships) or community-based programs that may not have direct access to all the resources and expertise of an academic health system?” One thing that the COVID-19 pandemic has taught residency programs is that expertise is a virtual video call away. Faculty experts can provide didactics, quality case conferences, and collaboration on QI projects from anywhere there is an internet connection.

Generally, larger programs with abundant resources, interest, and experience with QI are more likely to be able to foster a culture where QI projects can succeed. In contrast, it has been shown that smaller programs struggle to implement QI projects due to lack of a “QI Champion,” having a “nothing will ever change” philosophy, lack of QI education, lack of QI experience in leadership, and lack of implementation of the PDSA cycle [38]. Although they may struggle, programs exhibiting some or all of these deficiencies may still have successful QI projects.

In smaller programs, rather than trying to take on large, system-wide issues in an organization that has not participated in many (if any) QI initiatives, it would be more productive to start small (remember “start low...”) and increase awareness from there. There are multiple models and approaches for QI, with much overlap. In addition to the PDSA improvement model, other approaches are Total Quality Management, Six Sigma, and Lean. Choosing any of these models would be useful for the new or small program as they provide an established framework to follow for continuous improvement and a plan for execution once you have identified the area for change. The Six Sigma model was first introduced at Motorola, and its main focus is to decrease defects or mistakes in a process. The Lean model was first introduced at Toyota and its main focus is to improve outcomes by decreasing wastes of time or resources in a process. In the past, these strategies have been combined to form Lean Six Sigma which synergistically uses strategies of both models with Six Sigma focusing on process consistency (i.e., decreasing variability or defects) and Lean focusing on flow between those processes (i.e., eliminating waste).

A brief summary of the Lean model implementation in healthcare systems can be found in the *New England Journal of Medicine Catalyst* article “What Is Lean Healthcare” [39]. IHI has written white papers comparing Lean and the IHI’s quality improvement model [40] and providing information on Lean implementation strategies in health care [41]. A more in-depth look at the implementation of these strategies across an entire healthcare organization can be found in the book *On the Mend* written about Lean implementation at ThedaCare [42]. For example, a team at a psychiatric hospital reduced the time to first appointment for new outpatients from 28 days to less than 3 days through systematic removal of bottlenecks in the process [43]. No additional clinical resources were necessary. Similarly, the same group applied Lean and patient safety principles to improve outpatient transfers leading to significant improvement in the proportion of acute patients identified and seen soon after the handoff [44].

The Lean model provides methods of improving organization through visual management strategies. Visual management strategies are techniques used to communicate important information clearly, succinctly, and visually in the workspace. Often these strategies employ color coding and use information displays, signs, or labels instead of relying on written manuals or auditory instructions. The idea is to be able to process a large amount of information at a glance or to better understand a set of production steps based on a quick visual assessment. These visual management strategies might be a good starting point for programs new to QI as the visual nature could help others intuitively understand the implementation of the visual strategies and, more generally, the QI process. In turn, this might inspire others working in smaller programs to start their own QI projects.

One way to implement a visual management strategy is by setting up a visual management board to track outcomes (see Table 25.1, IHI). An example of a visual management board would be having a central bulletin board that tracks an outcome in the clinic over time (e.g., percentage of patients being screened with PHQ-9 or vaccination rate in the clinic population). The idea is that

the board would be in a central location for all employees to see. The outcome being tracked would be visually displayed with different colors coding different achievement levels, or a figure showing the percentage of completion towards a goal. In new or smaller programs, these visual strategies are sure to capture others' attention and allow them to see the power of QI in real time by tracking the changes on a visual management board.

When considering implementing QI projects at smaller programs, despite the difficulties, there are possible benefits to be found as well. For example, there are likely fewer and consistent staff. This should allow the PDSA cycle to take place more rapidly. If a culture of QI can be fostered and an open exchange can be created, areas for improvement could likely be found quickly. This open exchange would allow staff to voice their suggestions for patient care improvement.

This open exchange is also a part of CLER Pathways to Excellence guidelines that QI projects be "interprofessional" and "aligned and integrated with the clinical site's priorities for sustained improvements in patient care" (see Table 25.1, ACGME). In helping residents select projects, it is best to find one with an interprofessional team approach and high clinical priority as these align with the ACGME requirements [45]. Furthermore, QI projects are often seen as isolated endeavors thus not promoting sustainable change as residents often are only in training at their locations for a limited period of time. Instead, if an interprofessional team-based approach is taken, these projects could lead to lasting change not only because they would be implemented for longer periods of time but also because others would have ownership/creatorship of these projects. Moreover, working in a smaller or subspecialty program might more easily lend itself to collaborating in an interdisciplinary setting.

In subspecialty fellowships, the short amount of time in training may be an issue for consideration. Most trainees should have completed a QI curriculum during their previous training thus allowing the focus to be less didactic and more on implementation. However, abbreviated curricula

have been developed such as the "SAFE QI" which was implemented for training programs lasting 2 years [46].

Summary and Future Directions

Teaching PS/QI to residents is critical to the overall management of a successful psychiatry residency program. Improving PD and faculty readiness, enthusiasm, and effectiveness as teachers of PS/QI are and will continue to be major goals of psychiatry (and related training) professional organizations. Since 2019, AADPRT has been working with the Program Director in Patient Safety and Quality Improvement (PDPQ) Educator's Network, a collaboration among the ACGME, the Organization of Program Director Associations (OPDA), and Project ECHO (Extension for Community Healthcare Outcomes), to develop, model, and evaluate resident and fellow engagement in PS/QI. AADPRT continues to work with the PDPQ to bring more and enhanced opportunities for PD and faculty development in PS/QI to psychiatry programs across the nation using a virtual platform. The hope is to bring expertise, connection, and enjoyment to PS/QI training and practice so that psychiatry residency PDs can leave a legacy of PS/QI culture, teaching, and ultimately safe and quality patient outcomes for which they can be proud.

References

1. Peterson-KFF Health System Tracker. 2020. <https://www.healthsystemtracker.org/chart-collection/quality-u-s-healthcare-system-compare-countries/#item-age-adjusted-mortality-rates-of-respiratory-diseases-per-100000-population-1980-2017>. Accessed Sept 2021.
2. Makary MA, Daniel M. Medical error—the third leading cause of death in the US. *BMJ*. 2016;353:i2139. <https://doi.org/10.1136/bmj.i2139>.
3. Rodwin BA, Bilan VP, Merchant NB, Steffens CG, Grimshaw AA, Bastian LA, et al. Rate of preventable mortality in hospitalized patients: a systematic review and meta-analysis. *J Gen Intern Med*. 2020;35(7):2099–106. <https://doi.org/10.1007/s11606-019-05592-5>.

4. Kohn LT, Corrigan J, Donaldson MS. To err is human: building a safer health system. Washington, D.C.: National Academy Press; 2000.
5. Marcus SC, Hermann RC, Frankel MR, Cullen SW. Safety of psychiatric inpatients at the veterans health administration. *Psychiatr Serv*. 2018;69(2):204–10. <https://doi.org/10.1176/appi.ps.201700224>.
6. McGlynn EA, Asch SM, Adams J, Keesey J, Hicks J, DeCristofaro A, et al. The quality of health care delivered to adults in the United States. *N Engl J Med*. 2003;348(26):2635–45. <https://doi.org/10.1056/NEJMs022615>.
7. Peterson-KFF Health System Tracker. 2019. <https://www.healthsystemtracker.org/chart-collection/mortality-rates-u-s-compare-countries/#item-start>. Accessed Sept 2021.
8. Peterson-KFF Health System Tracker. 2019. https://www.healthsystemtracker.org/chart-collection/u-s-life-expectancy-compare-countries/#item-le_life-expectancy-at-birth-by-gender-in-years-2017_dec-2019-update. Accessed Dec 2021.
9. Peterson-KFF Health System Tracker. 2015. <https://www.healthsystemtracker.org/brief/measuring-the-quality-of-healthcare-in-the-u-s/>. Accessed Sept 2021.
10. Peterson-KFF Health System Tracker. 2017. <https://www.healthsystemtracker.org/chart-collection/current-costs-outcomes-related-mental-health-substance-abuse-disorders/#item-cost-per-case-treatment-illness-grew-3-percent-2000-2012>. Accessed Sept 2021.
11. America IoMUCoQoHCi. Crossing the Quality Chasm: A New Health System for the 21st Century. 2001.
12. Nasca TJ, Philibert I, Brigham T, Flynn TC. The next GME accreditation system—rationale and benefits. *N Engl J Med* 2012;366(11):1051–1056. doi:<https://doi.org/10.1056/NEJMs1200117>.
13. Weiss KB, Wagner R, Nasca TJ. Development, testing, and implementation of the ACGME Clinical Learning Environment Review (CLER) program. *J Grad Med Educ*. 2012;4(3):396–8. <https://doi.org/10.4300/JGME-04-03-31>.
14. Wong BM, Etechells EE, Kuper A, Levinson W, Shojania KG. Teaching quality improvement and patient safety to trainees: a systematic review. *Acad Med*. 2010;85(9):1425–39. <https://doi.org/10.1097/ACM.0b013e3181e2d0c6>.
15. Kirkman MA, Sevdalis N, Arora S, Baker P, Vincent C, Ahmed M. The outcomes of recent patient safety education interventions for trainee physicians and medical students: a systematic review. *BMJ Open*. 2015;5(5):e007705. <https://doi.org/10.1136/bmjopen-2015-007705>.
16. Myers JS, Nash DB. Graduate medical education's new focus on resident engagement in quality and safety: will it transform the culture of teaching hospitals? *Acad Med*. 2014;89(10):1328–30. <https://doi.org/10.1097/ACM.0000000000000435>.
17. Mitchell TO, Li L. Overcoming the barriers to resident engagement in quality improvement initiatives in psychiatry. *Acad Psychiatry*. 2021;45(4):481–6. <https://doi.org/10.1007/s40596-020-01363-1>.
18. Nasca TJ, Weiss KB, Bagian JP. Improving clinical learning environments for tomorrow's physicians. *N Engl J Med*. 2014;370(11):991–3. <https://doi.org/10.1056/NEJMp1314628>.
19. World Health Organization. 2019. <https://www.who.int/news-room/fact-sheets/detail/patient-safety>. Accessed Sept 2021.
20. CMS.gov. 2021. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/Quality-Measure-and-Quality-Improvement->. Accessed 14 Nov 2021.
21. Patel E, Muthusamy V, Young JQ. Delivering on the promise of CLER: A patient safety rotation that aligns resident education with hospital processes. *Acad Med*. 2018;93(6):898–903. <https://doi.org/10.1097/ACM.0000000000002145>.
22. Billett S. Learning through health care work: premises, contributions and practices. *Med Educ*. 2016;50(1):124–31. <https://doi.org/10.1111/medu.12848>.
23. Weiss KB, Bagian JP, Nasca TJ. The clinical learning environment: the foundation of graduate medical education. *JAMA*. 2013;309(16):1687–8. <https://doi.org/10.1001/jama.2013.1931>.
24. The Joint Commission. 2019. https://www.joint-commission.org/-/media/tjc/documents/standards/r3-reports/r3_18_suicide_prevention_hap_bhc_cah_11_4_19_final1.pdf. Accessed Sept 2021.
25. Passiment M, Wagner R, Newton RC, Weiss KB. The CLER pursuing excellence pathway leaders collaborative: enhancing resident and fellow engagement in patient safety. *J Grad Med Educ*. 2019;11(5):618–20. <https://doi.org/10.4300/JGME-D-19-00629.1>.
26. Doran G. There's a S.M.A.R.T. way to write management's goals and objectives. *Manag Rev*. 1981;70(11):35–6.
27. Woods NN. Science is fundamental: the role of biomedical knowledge in clinical reasoning. *Med Educ*. 2007;41(12):1173–7. <https://doi.org/10.1111/j.1365-2923.2007.02911.x>.
28. Miller GE. The assessment of clinical skills/competence/performance. *Acad Med*. 1990;65(9 Suppl):S63–7. <https://doi.org/10.1097/00001888-199009000-00045>.
29. Singh MK, Ogrinc G, Cox KR, Dolansky M, Brandt J, Morrison LJ, et al. The Quality Improvement Knowledge Application Tool Revised (QIKAT-R). *Acad Med*. 2014;89(10):1386–91. <https://doi.org/10.1097/ACM.0000000000000456>.
30. Leenstra JL, Beckman TJ, Reed DA, Mundell WC, Thomas KG, Krajicek BJ, et al. Validation of a method for assessing resident physicians' quality improvement proposals. *J Gen Intern Med*. 2007;22(9):1330–4. <https://doi.org/10.1007/s11606-007-0260-y>.
31. Fochtman LJ, Duffy FF, West JC, Kunkle R, Plovnick RM. Performance in practice: sample tools

- for the care of patients with major depressive disorder. *Focus*. 2008;VI(1):22–35.
32. Duffy FF, Craig T, Moscicki EK, West JC, Fochtman LJ. Performance in practice: clinical tools to improve the care of patients with posttraumatic stress disorder. *Focus*. 2009;VII(2):186–203.
 33. Duffy FF, Moscicki EK, Fochtman LJ, Jacobs DG, Clarke D, Plovnick R, Dunkle R. Performance in practice: physician practice assessment tool for the assessment and treatment of adults at risk for suicide and suicide-related behaviors. *Focus*. 2011;IX:171–82.
 34. Duffy FF, West JC, Fochtman LJ, Dixon L, Kreyenbuhl J, Moscicki EK, Plovnick R, Kuncle R. Performance in practice: physician practice assessment tool for the care of adults with schizophrenia. *Focus*. 2012;X(2):157–71.
 35. Fochtman LJ, Medicus J, Hong SH. Performance in practice: practice assessment tool for the care of patients with Schizophrenia. *Focus (Am Psychiatr Publ)*. 2020;18(4):402–23. <https://doi.org/10.1176/appi.focus.20200034>.
 36. Frye AW, Hemmer PA. Program evaluation models and related theories: AMEE guide no. 67. *Med Teach*. 2012;34(5):e288–99. <https://doi.org/10.3109/0142159X.2012.668637>.
 37. Marquet LD. *Turn the ship around! : a true story of turning followers into leaders*. New York: Portfolio; 2012.
 38. Chase SM, Miller WL, Shaw E, Looney A, Crabtree BF. Meeting the challenge of practice quality improvement: a study of seven family medicine residency training practices. *Acad Med*. 2011;86(12):1583–9. <https://doi.org/10.1097/ACM.0b013e31823674fa>.
 39. Innovations in Care Delivery. In: *NEJM Catalyst*. 2018. <https://catalyst.nejm.org/doi/full/10.1056/CAT.18.0193>. Accessed Sept 2021.
 40. R S, K L. *Comparing Lean and quality improvement 2014*.
 41. *Going Lean in health care*. Cambridge, MA:2005.
 42. Toussaint J, Gerard RA. *On the mend: revolutionizing healthcare to save lives and transform the industry*. Cambridge, MA: Lean Enterprise Institute; 2010.
 43. Young JQ, Wachter RM. Applying Toyota Production System principles to a psychiatric hospital: making transfers safer and more timely. *Jt Comm J Qual Patient Saf*. 2009;35(9):439–48. [https://doi.org/10.1016/s1553-7250\(09\)35061-8](https://doi.org/10.1016/s1553-7250(09)35061-8).
 44. Young JQ, Pringle Z, Wachter RM. Improving follow-up of high-risk psychiatry outpatients at resident year-end transfer. *Jt Comm J Qual Patient Saf*. 2011;37(7):300–8. [https://doi.org/10.1016/s1553-7250\(11\)37038-9](https://doi.org/10.1016/s1553-7250(11)37038-9).
 45. Bodenheimer T, Dickinson WP, Kong M. Quality improvement models in residency programs. *J Grad Med Educ*. 2019;11(1):15–7. <https://doi.org/10.4300/JGME-D-18-00556.1>.
 46. Cheung L. SAFE QI – a framework to overcome the challenges of implementing a quality improvement curriculum into a residency program. *Adv Med Educ Pract*. 2017;8:779–84. <https://doi.org/10.2147/AMEP.S150718>.



Research and Scholarly Activity During Psychiatry Residency Training

26

Nina Vanessa Kraguljac, Irena Bukelis,
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Definition of Scholarly Activities in Residency

Definition of Scholarship and Scholarly Activities

Boyer postulated in a seminal publication in 1990 that “it is time to move beyond the old ‘teaching versus research’ debate and give the familiar and honorable term ‘scholarship’ a broader, more capacious meaning, one that brings legitimacy to the full scope of academic work” [1]. Furthermore, Boyer suggested that scholarship serves four distinct, yet overlapping, functions which have informed the concept of scholarly activities:

1. The scholarship of discovery (publications based on original research or the development of scholarly books and book chapters)
2. The scholarship of integration (professional development workshops, literature reviews, or presentations of research at scholarly conferences)
3. The scholarship of application (research grants, the development of centers for study or service; research projects that address issues of local, state, or other need; prepara-

tion of documents such as briefs, manuals, or other publications based on research for the good of the community)

4. The scholarship of teaching (publication of findings in a pedagogical journal or presentation at a conference)

It is important to note that the general medical education literature differentiates scholarship and scholarly activities [2]. Scholarship suggests that the work done must advance knowledge in the field and be accessible in a format that others can build upon (e.g., publication). Building upon this conceptual framework, scholarly activities are defined as the application of a systematic approach to a question or project in a specific domain [3]. However, scholarly activities do not necessarily have to result in advancement in the field [4]. Therefore, it has been argued that program requirements should be focused on an expectation of scholarly activity rather than scholarship, as a mandate for scholarship could pose significant challenges for residency programs [5].

Integrating Scholarly Activities in Residency Training

Participation in scholarly activities is an important part of graduate medical education and teaches residents to develop habits of inquiry as a continu-

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ing professional responsibility [6]. It has been suggested that it is not the primary goal of graduate medical education to teach all residents how to do research or get them all involved in research projects, but that residents should be taught skills that allow them to critically appraise the literature and practice evidence-based medicine [7]. These skills include conducting a targeted literature search, critically appraising the medical literature, and applying medical research to clinical scenarios. There are diverse opportunities for scholarly activity, including case studies, literature reviews, teaching conferences, quality improvement projects, as well as research projects.

ACGME Program Requirements for Scholarly Activities

The ACGME states that “Medicine is both an art and a science. The physician is a humanistic scientist who cares for patients.” Scholarly activities are a common program requirement for program accreditation across all medical specialties. In this context, the scholarly approach is defined as a “synthesis of teaching, learning, and research with the aim of encouraging curiosity and critical thinking based on an understanding of physiology, pathophysiology, differential diagnosis, treatments, treatment alternatives, efficiency of care, and patient safety.” In other words, residency programs are expected to advance residents’ knowledge of the basic principles of research, including its application to patient care [8]. The ACGME mandates that training programs demonstrate resident and faculty scholarly activity, as well as an inquiry of scholarship. Training programs are expected to allocate adequate educational resources to facilitate resident involvement in scholarly activities. While some faculty members are responsible for fulfilling the traditional elements of scholarship through research, integration, and teaching, all faculty members are responsible for advancing residents’ scholarly approach to patient care.

The ACGME requirements provide a framework for creating, synthesizing, teaching, and applying new knowledge while nurturing an

environment of inquiry [2]. Of the six core competencies, practice-based learning and improvement and systems-based practice address using scientific evidence to improve patient care. Practice-based learning and improvement require residents to investigate and evaluate their own patient care and improve upon it after appraising and assimilating scientific evidence. Systems-based practice requires that residents show an awareness of and responsiveness to the larger context of health care and are able to use system resources to provide optimal patient care.

While the ACGME indirectly defines what a scholarly activity is based on accreditation reporting requirements, it is important to note that the ACGME has not given specific guidance as to how scholarly activity requirements should be fulfilled and has not established a specific curriculum for scholarly activities.

Importance of Scholarly Activities in Residency

Takahashi and colleagues found that a majority of residents reported that participation in a research activity is a worthwhile experience [9]. Participation in scholarship enhances analytical and critical thinking skills [10] and facilitates a greater understanding of the medical literature and increasing comfort with evidence-based medicine. This ultimately results in improved patient care.

It has also been shown that overall satisfaction with a residency program can increase with participation in scholarly activities [9]. In addition, greater scholarly activity productivity is associated with choosing an academic career [11] and increased subsequent fellowship opportunities [12, 13].

How to Design a Scholarly Activity Rotation/Curriculum

Scholarly activities should fall under one of the four components of scholarship [1]: scholarship of discovery [2], scholarship of integration

[3], scholarship of application, and [4] the scholarship of teaching [14]. ACGMEs purposeful vagueness in the requirements allows programs the necessary flexibility to structure the scholarship activities based on the programs strengths [15]. However, the potential downside to this approach is that individual residency programs must interpret the requirement and have the option of operationalizing their program scholarly activities in a large number of ways [16]. Medical educators are faced with the difficult task of implementing curricula and supporting residents through their scholarly experiences [17]. Unfortunately, the literature on best practices for scholarly activities for psychiatry residency programs is limited. However, successful curricular initiatives from nonpsychiatry residency programs can inform creating successful scholarly curricula for psychiatry residents.

General Considerations for Designing Scholarly Activity Curricula During Residency

Design of a formal scholarly activity curriculum should account for program resources and individual resident interests. When implementing and updating a curriculum, it is important to conduct a needs assessment [18], to develop goals and objectives, and to design a robust mechanism for evaluating the usefulness of the curriculum. A written policy should be developed that outlines ACGME defined scholarly activities, describes requirements of scholarly activities, and stipulates if participation is a requirement for program graduation. Adopting a universal language with clearly defined outcomes in order to reach the goals encompassing all domains of scholarship can help facilitate implementation of scholarly activity curricula.

Elements for a Scholarly Activity Curriculum During Residency

Scholarly activity curricula vary widely and can include didactics, workshops, lecture series, and

seminars. Protected time for residents to participate in these activities also diverge across programs [17], where some programs do not offer dedicated time for scholarly activities while other programs provide variable amounts of protected time. A meta-analysis by Wood and colleagues emphasized the need for having a supportive culture of resident scholarship as an important first step in incorporating scholarly activity into a residency program. Availability of protected time, a defined research curriculum, and dedicated mentors were determined to be crucial factors in successful implementation of scholarly activities during residency training [17].

A model adopted by a family medicine program [19] showed that having an individual education plan (IEP) for each resident increased scholarly output within 15 months of implementation. A parallel model in psychiatry involves having the residents submit to the training office an area of interest for their scholarly activity by the end of PGY-I. The training office then matches individual residents with a faculty advisor who can guide them through the process of completing a scholarly activity. Typically, the faculty mentor helps develop an IEP for the resident including learning objectives, elective experiences, focused educational activities, and plans for operationalizing the scholarly activity. In this way, each resident is committed to their IEP, setting them up for future success.

Types of Scholarly Activities

Many programs have residents participate in research projects to fulfill their scholarly activity requirements. However, not all programs have the resources to support research or have research faculty. If there is a resident who wants to do research in a community-based or rural residency program that does not have the necessary research support, off site rotations or collaboration with regional universities can be explored. Visiting faculty from other centers can be involved as mentors [20]. Alternatively, residents can get involved in nonresearch scholarly activities like quality improvement projects [21] or teaching curriculum development.

In 2010, the council of residency directors for emergency medicine recommended the creation of a separate scholarly track for each resident based on their area of interest. Here, clear goals and objectives were developed for each track, matching track topics with faculty expertise, protecting time for both faculty and residents to complete scholarly work, and providing adequate mentorship for the residents. This approach encourages residents to develop an area of expertise during residency training, giving them skills that would lend themselves to future faculty positions and academic careers [22, 23]. The scholarly tracks can include research, administration, and education but some also focused on clinical areas like global medicine or disaster medicine to name a few. For psychiatry, this approach could be modified to include tracks focused on psychotherapy, cultural psychiatry, community psychiatry, or curriculum development. Programs can consider [1] having preplanned tracks that residents could choose from or [2] having a system where each resident can customize their own scholarly curriculum that follows them throughout residency training.

Scholarship Committees

Another approach to encourage scholarship within residency programs is the creation of a scholarship committee consisting of faculty who are tasked to act as mentors and provide oversight of resident scholarly. Scholarship committees foster faculty and resident cooperation, promote academic growth, and encourage accountability for all involved [24]. The committees can promote available resources for scholarly activities in an ongoing manner, orient residents to a targeted set of scholarly projects, strategically engage program faculty, and systematically embed scholarly activity into pre-existing institutional and program infrastructure [25].

Specifically, scholarship committees can help residents identify a project and mentor to ensure that the resident is meeting the project milestones [16]. It has been suggested that the chair of a scholarship committee should have formal

research training to help guide residents and faculty with project selection and with structuring the didactic portion of the curriculum [16]. Scholarship committees can facilitate success by creating and updating shared databases of scholarly activities, including a listing of projects that residents could work on, and tracking project status and deadlines [24].

Considerations for Scholarly Activities for New Residency Programs

It is important for new programs to consider the ACGME requirements when designing their scholarship curriculum [26] as well as tailoring the curriculum to the institutional strengths and weaknesses. A community-based residency program might focus scholarly activity on quality improvement/patient safety initiatives focused on the needs of the hospital system or local clinical psychiatric community, while a large academic medical center may have offerings in bench or clinical research, such as clinical trials. Meeting scholarly activity requirements can be perceived as taxing by new residency training programs [27]. Furthermore, program citations by the ACGME are often related to deficiencies in scholarly activities [28]. It has been demonstrated that newly accredited programs can avoid unnecessary institutional deficiencies in scholarly activity by developing a structured scholarship curriculum [27] that is tailored toward institutional strengths.

How to Measure Output of Resident Scholarly Activities

The ACGME scholarly activity form (described in detail below) is designed to provide numerical summaries of scholarly activities for both faculty and residents. It is important to note that this descriptive approach to measuring scholarly activities [29, 30] disregards the level of the faculty or resident contribution to a project and the significance of the scholarly product.

Using a Point System to Measure Resident Scholarly Activities

A standardized objective evaluation of resident participation in scholarly activities is challenging. Scoring or point systems, specifically designed to comprehensively evaluate scholarly activities of residents, have been proposed as a possible solution [31, 32]. There are several reasons why a point system can encourage productivity in scholarly activities. It has been demonstrated that implementation of a point system can significantly increase the chances that a resident will successfully present and/or publish scholarly projects [32, 33]. Further point systems may reduce resident uncertainty about what deliverables count toward scholarship requirements [34].

Given that scholarly activities can be broadly defined, a well-developed point system can ensure that residents are treated equally by accounting for the fact that different scholarly projects require different amounts of resident effort. It has been suggested to weigh scholarly projects with respect to complexity, significance, and degree of resident involvement [31]. In this context, a relative weight or score can be assigned to specific deliverables. For example, residents can earn points based on [1] first vs co-authorship [2], journal impact factor [3], projects that have multiple residents involved, and [3] for repeated presentation of the same project [31].

The following are the common types of scholarly activity that are credited using point systems:

- Submission of a grant for intramural or extramural funding
- Submission of a manuscript presenting original data
- Submission of a systematic review or meta-analysis
- Submission of a research protocol
- Submission of a manuscript describing a case series or case report
- Publication of a book chapter or section
- Publication of a letter to the editor in a peer-reviewed journal
- *Publication* of an abstract
- Oral or poster presentation at a regional, national, or international conference
- Participating in a quality improvement or patient safety project
- Writing an IRB proposal
- Creation of an online teaching tool
- Creation of a simulation case for a simulation curriculum
- Publication for the lay public, such as newspaper articles on medical topics
- Participation on a national committee
- Instructor of a medical student course or facilitator for an education workshop

Finally, point systems enable programs to better gauge scholarly productivity, allowing residency programs to quantitatively assess the effectiveness of new educational initiatives designed to facilitate resident engagement in scholarly activities [31].

Reporting of Scholarly Activities to the ACGME

Programs report resident and faculty scholarly activity in detail on WebADS© every year on the Annual Program Evaluation (APE) for the ACGME. In addition, the ACGME reviews items from the resident/faculty survey regarding scholarly activities. The residency review committee (RRC) of the ACGME then utilizes all those reports to assess each residency program's commitment to scholarly activities from an accreditation standpoint and issues citations for any identified deficiencies. The process of program accreditation and review is discussed in detail elsewhere in this book. Programs must demonstrate accomplishments in at least three of the following domains to meet the ACGME program requirements [15]:

- Research in basic science, education, translational science, patient care, or population health
- Peer-reviewed grants
- Quality improvement and/or patient safety initiatives

- Systematic reviews, meta-analyses, review articles, chapters in medical textbooks, or case reports
- Creation of curricula, evaluation tools, didactic educational activities, or electronic educational materials
- Contribution to professional committees, educational organizations, or editorial boards
- Innovations in education

Metrics of scholarly activity are assessed for the residency program as a whole in 5-year intervals by the RRC to assess the effectiveness of the program for creating a scholarly environment.

Documentation of Scholarly Activities for Faculty and Residents

Programs are expected to document the following elements of scholarship of faculty:

- Peer-reviewed funding
- Publications of original articles
- Presentations at meetings
- National committees and/or educational organizations

The faculty template for scholarly activities in the last academic year includes four slots for PubMed© IDs of articles published, a numerical summary of conference presentations (abstracts, posters, presentations given at international, national, or regional meetings), a numerical summary for presentations given, invited materials developed, and work presented in non-peer reviewed publications, the number of chapters or textbooks published, the number of grants for which the faculty member had a leadership role (PI, co-PI, or site director), a yes or no answer for active leadership in national medical organization or membership on editorial boards for peer reviewed journals, and a yes or no answer for organization of a seminar, conference series, course coordination for any didactic training within the sponsoring institution. It is important to note that faculty presentations including lectures or grand rounds at the home institution

count toward these scholarly activities [35]. If core faculty members do not report an average of at least one scholarly activity in at least two of the seven categories of performance indicators per year (each peer-reviewed journal article and grant counts as one point), ACGME may select a program for added scrutiny and a shortened review cycle.

Interestingly, there are no specific requirements for program directors in terms of scholarly activities, other than maintenance of the scholarly environment. Scholarly activity in the form of publications by psychiatry residency program directors has been documented to be relatively low, although it is unclear what challenges may limit the ability of program directors when it comes to scholarly publications [36].

The common program requirements only state that residents must participate in scholarship. The resident template for scholarly activities does not include a section for presentations given, materials developed or work presented in non-peer reviewed publication, or a section about active leadership in a national medical organization or membership on editorial boards. Instead of leadership roles on grants, residents are asked if they participated in a funded or nonfunded basic science or clinical outcomes research project. Residents are also asked if they gave a presentation of at least 30-minutes duration within the sponsored institution rather than asked if they organized a seminar, conference series, or course within the sponsoring institution.

A Scholarly Activity Monitoring Tool

One tool for monitoring faculty and resident scholarly activity in the previously completed academic year is the use of PubMed© IDs for publications, which commonly leads to reporting errors [37]. PubMed© IDs often are flagged by the ACGME because the publication date is outside of the acceptable date range for reporting scholarly activities (the previous academic year). This issue with date range was reported to occur in about 18% of submitted ACGME ADS

entries [37]. In addition, manual checking of individual PubMed© IDs is laborious and subject to human error.

The Henry Ford Emergency Medicine program has developed an automated tool that offers a free service for the graduate medical education community that screens all PubMed© IDs and significantly reduces reporting errors [37].

Barriers to Successful Resident Scholarly Activities

Structural Barriers

Residency programs are reported to struggle to successfully integrate scholarly activities into the overall structure of the program [38]. Structural barriers cited include clinical service demands [30, 39], limited funding dedicated for resident scholarly projects, insufficient numbers of faculty mentors, and limited faculty time [30, 40]. Efforts to increase the breath of mentors available to residents through faculty development session and outreach to other departments or institutions may help mitigate these barriers [29]. It is perhaps not surprising that non-university programs are more likely to report a lack of faculty mentors and faculty time as major barriers to resident scholarship [29, 41, 42]. Graduate medical education experts acknowledge that community-based programs may experience greater difficulties in planning and implementing scholarly activities for their residents due to availability of fewer resources [25]. As such, GME experts have called for pragmatic planning strategies geared toward addressing increasing scholarly activity expectations by the ACGME. For example, customized scholarly activity planning tools (e.g., systematic needs assessment forms, annual resident project checklists, scholarship committees) can help facilitate development and progress of resident scholarly activities. Providing residents with protected time for scholarly activities increases the likelihood of success for individual projects and conveys that the residency leadership truly values scholarship [43].

Availability of structural support for resident scholarly activities, like financial support for

scholarly projects, access to a research coordinator, access to a data analyst or software support, or availability of a medical editor, also varies widely across programs [44]. Providing residents with assistance in research design, queries, and project selection have shown to be effective tools to help residents with time management [27] and ultimately increase the likelihood for success in completing scholarly projects. Availability of these resources has been identified as critical for success of resident scholarly activities. It is recommended for program directors to negotiate a commitment with their department chairs and institution to provide these resources [45].

Functional Barriers

While psychiatry residents generally acknowledge that scholarship is important in informing clinical practice, only a small proportion of residents are enthusiastic or very enthusiastic about participating in research [46]. Residents' lack of understanding regarding the intent of scholarly activity requirements is considered a significant barrier to productivity. It has been shown that it is important for the program to clearly communicate the clinical relevance of a scholarly activity requirement [47] and convey that scholarship is an educational process intended to move them toward a goal, and not the goal itself [34].

Uncertainty about scholarly activity expectations can add to learner anxiety and impede performance in scholarship during residency [34]. Clarifying the process of scholarship by clearly describing the logistic process, the mechanics of scholarship and codifying expectations can help alleviate these anxieties. Residents may also perceive a lack of control in establishing mentor relationships [47]. In this context, hosting mentorship "mixers" or matching residents with faculty mentors can help facilitate successful scholarship. Another factor creating uncertainty is a lack of clear accountability as well as achievable expected outcomes in scholarly activities [46]. In addition, it is important to address problematic planning expectations of resident scholarly activities. A summary list of problematic

expectations commonly encountered in residents at different project planning stages was summarized by Wisniewski and colleagues [48]. By establishing realistic expectations, potential missteps that typically impede scholarly activity productivity can be avoided.

Finally, a disconnect between resident and program perceptions about scholarly activities during residency has been reported [49] and can lead to resident dissatisfaction. Interestingly, program directors more strongly believe that all residents should be involved in scholarly activities, while residents more strongly believed that they should have protected time for scholarly activities [49]. Residents also more commonly felt that they already have sufficient training to complete a scholarly project, whereas faculty mentors felt that most residents were inadequately trained in research [50]. Furthermore, residency program directors more commonly perceive the lack of structural support such as funding or statistical support as major barriers for successful participation in scholarly activities [29], but this is not as commonly perceived by residents.

How to Increase Scholarly Activity Productivity During Residency

It is crucial for programs aiming to increase scholarly activity productivity to have necessary resources available to support scholarly activities. However, the mere availability of resources to support scholarly activities alone does not guarantee increased productivity. It is crucial to develop meaningful mentorship and resource allocation that inspires continued involvement of faculty and residents in scholarly activities [51]. Development of a formal strategic plan in collaboration with the department and institution aimed at creating a framework for increasing scholarly activities can be an effective tool in this context [52].

Most programs do not provide compensation for faculty involvement in scholarly activities [53], despite data demonstrating that faculty incentive plans taking scholarly work into account have been shown to increase scholarly

productivity [54]. It has been suggested that faculty scholarly activity could be measured either in contact hours or as relative value units. Addressing faculty productivity is important, as it has been shown that increased faculty commitment results in increased scholarly productivity of residents [55].

A systematic review of the literature found that interventions to increase resident participation in scholarly activity are universally positive in their effects [56], but increasing tangible products of scholarship such as publications are more difficult to attain. Protected time, a formal research curriculum, specialized research tracks, and dedicated research training directors were the most commonly described factors that have been associated with increased resident scholarly activity productivity [56]. However, for optimal results, it may be necessary to provide increased structure and rigor using multiple approaches.

For example, establishing a “roadmap to finishing a scholarly activity” has been shown to significantly increase scholarly productivity [57]. Here, the authors developed a handbook for ready access to guidelines for scholarly activities and a 13-step list of goals and accomplishments with corresponding deadlines. Since implementation of this program, resident publications more than doubled.

Several programs found that hiring an experienced medical editor assigned to work with faculty and residents in developing written material can significantly increase scholarly publications of residents [55]. Ideally, the editor is responsible not only for monitoring progress of all manuscripts from initial draft to publication but also to promote their revision and resubmission after rejection and provide advice on strategies for improving manuscripts and ensuring that they are revised and resubmitted in a timely fashion.

Others have shown that resident-led initiatives can be powerful tools to increase resident scholarly productivity. Resident peer leaders allow residents to overcome the uncertainty barriers to scholarly activities [58]. Peer-driven mentorship has been shown to be able to change residency culture and attitudes toward scholarly activity [59]. Specifically, direct and visible peer leader-

ship has been reported to increase resident interest and enthusiasm in scholarly activities [60]. Another interesting peer-led initiative improving resident scholarly engagement has recently been described. Here, a team of resident curators created a monthly digest that reviewed psychiatry research articles published in peer-reviewed journals and provided concise summaries of results and findings, directed primarily at an audience of psychiatry residents [61]. This initiative had a significant positive impact on the self-reported resident learning environment as well as resident interest in scholarly activities and research.

Finally, strategies using positive reinforcements like a transparent reward system have shown to stimulate scholarly activities and increase productivity [62, 63]. For example, the University of Missouri Otolaryngology program developed a point system for scholarly activities inspired by faculty performance-based compensation models and assigned a monetary reward per point to go toward the residents allowable educational expenses [62]. The authors found that scholarly productivity significantly increased and suggested that incentives are seen as strong drivers to motivate participants toward achieving desired performance measures. Another training program developed a dual incentive model where residents logged scholarly activities on a web interface that assigned points and ranks in relation to their peers in real time. Points could later be redeemed in a weighted cash lottery. Within 2 years of implementation of this system, scholarly productivity increased by over 50% [63]. Some programs have implemented less elaborate reward systems like annual institutional resident research competitions or provision of financial support for residents who have competitively accepted abstracts at regional or national meetings to attend [45].

Creating a Resident Research Track

Physician-scientists with dual training in research and clinical work are widely recognized as those best positioned to translate basic science discoveries into clinical advances [64, 65]. However,

recruiting and retaining a suitable and adequate workforce of psychiatric researchers has been challenging [66, 67]. This is particularly unfortunate as the progress in molecular biology, neuroimaging and other new technologies has made psychiatric disorders tractable problems. A dedicated research track integrates the unique developmental needs of research-oriented residents, provides them with a formal and systematized environment that prepares them for an academic career [68], and reduces the time to attaining independence by bridging the gap in research training that typically occurs during general residency training. Key components of a formal research track include personalized career development through mentoring, a didactic curriculum, and hands-on research training. Participation in this type of program has shown to have a positive impact on resident research activity and faculty involvement [17, 69], improves satisfaction with residency training, and increases the likelihood that residents will chose a career path as physician-scientist [70]. For any program that contemplates offering a formal research track, it is important to ensure that the institutional culture does not have an alternative focus, that adequate resources are available and that the program is designed to maximize trainee success [71]. However, little literature is available that provides evidence based and practical guidance for residency programs wishing to implement a dedicated research track in their program. Here, we aimed to review the evidence and provide practical guidance for a number of questions that are relevant when designing a resident research track (Box). In the following paragraphs, we will highlight general considerations that guide decision-making *and discuss practical implementation based on an example psychiatry resident research track, the UAB Psychiatry Supporting Training of Emerging Physician-scientists in Psychiatry (STEPP) program.*

Establishing a Research Track

Core residency training requirements mandated by the Accreditation Council for graduate medi-

cal education (ACGME) consist of 4 years of clinical training, but residency programs retain significant autonomy in allocating time for additional training experiences and educational opportunities [71]. Approximately 25% of all ACGME accredited programs describe a formal research track on their website [71], with widely varying time available for research. Data suggests that exposing and engaging psychiatry residents in research as early as possible in training is a key factor for promoting future research interest [72]. Many programs offer increasingly more time spent doing research as their training progresses [70] and most redirect electives toward research time. To minimize the perception of inequality, it is important to ensure that administrative responsibilities and call schedules are evenly distributed for residents who do and do not participate in a research track [70]. Some programs extend the overall length of the residency training, while others have all core requirements fulfilled by the end of PGY-IV. The National Institute of Mental Health (NIMH) recommends that the total length of the residency training program will not be extended for research track residents.

The STEPP program is structured in a way that allows the resident to spend progressively more time in research activities over the course of the program, while continuing their clinical training. The program permits a total of up to 14 months of research time, with research rotations beginning in the PG-II year. Research time (2 months in PGY-II, 2 months in PGY-III, 10 months in PGY-IV) may be scheduled as a full-time rotation during specific months, or part-time interspersed with clinical training, depending on the nature of the research project (for an example schedule, see Fig. 26.1). Importantly, the total length of the residency training program is not extended for research track residents.

Administration of a Research Track

It is imperative for any well-functioning research track to ensure that adequate resources are available to ensure trainee success [71]. Many research

track programs are primarily financially supported by their institution. In this case, having a research infrastructure with accessible mentors is essential along with a critical mass of research activity [70, 73]. Resident research projects are often supported by the resident's mentors, which are typically expected to have adequate grant funding to finance the trainee's proposed project. An alternative way for small programs to tap available clinical research resources is to seek out opportunities for interdepartmental or interinstitutional collaboration to provide an adequate environment for research track residents [74].

The National Institute of Mental Health offers a "Research Education Program Supporting Psychiatry Residents (R25)" that facilitates the development of research-oriented physician-scientists who are prepared to conduct research in scientific areas that fulfill the objectives of the NIMH Strategic Plan. The program provides significant financial support for a period of 5 years and can be renewed. Applications are solicited once a year, and funding decisions are made based on a competitive process. Currently, 11 universities have their resident research tracks supported by NIMH. In addition to Research Education Program grants, the NIMH also offers administrative supplements to existing research grants for MD/PhD trained residents to continue mentored research during residency. Unfortunately, this mechanism does not extend to research-oriented residents with substantial research experience who do not hold a PhD degree.

Very little is known about the optimal administrative structure of a resident research track. While appointing a dedicated research training director has been found to be important for the overall success of the program [75], only limited information is available for best practices on the organizational structure of a research track. One possibility is to form an executive committee that works together with the program director and provides overall programmatic guidance [76].

The STEPP training director, a physician-scientist who is actively involved in translational research in psychiatry is responsible for the overall scientific and administrative leadership of the

| PGY-I | | | | | | | | | | | | |
|----------------------|---------------------------|-----------------|-------------------|---------------------|-------------------------------|--------------------|---------------------------|-----------------|-----------------|-----------------|-------------------------------|-----------------|
| Block | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Rotation | Neurology | Neurology | Internal Medicine | Internal Medicine | Family Medicine/Pediatrics | Emergency Medicine | Adult Inpatient | Adult Inpatient | Adult Inpatient | Adult Inpatient | Psychiatry Emergency Services | Addiction |
| % Outpatient | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| % Research | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| PGY-II ⁺ | | | | | | | | | | | | |
| Block | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | | |
| Rotation | Research | Consult Liaison | Addiction | Geriatric Inpatient | Psychiatry Emergency Services | Child Outpatient | Adult Outpatient/Research | | | | | |
| % Outpatient | 10% | 10% | 10% | 10% | 10% | 100% | 80% | | | | | |
| % Research | 90% | 0% | 0% | 0% | 0% | 0% | 20% | | | | | |
| PGY-III ⁺ | | | | | | | | | | | | |
| Block | 1 | | | | | | 2 | 3 | 4 | 5 | 6 | 7 |
| Rotation | Adult Outpatient/Research | | | | | | Child Inpatient | Consult Liaison | Research | Adult Inpatient | Adult Inpatient | Adult Inpatient |
| % Outpatient | 80% | | | | | | 10% | 10% | 10% | 10% | 10% | 10% |
| % Research | 20% | | | | | | 0% | 0% | 90% | 0% | 0% | 0% |
| PGY-IV ⁺ | | | | | | | | | | | | |
| Block | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Rotation | Research | Research | Research | Research | Research | Consult Liaison | Research | Research | Research | Research | Research | Research |
| % Outpatient | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| % Research | 90% | 90% | 90% | 90% | 90% | 0% | 90% | 90% | 90% | 90% | 90% | 90% |

Fig. 26.1 Example rotation schedule for a STEPP resident. Red colored text depicts blocks of times that are protected for mentored research. Black colored text depicts clinical blocks. In accordance with ACGME program requirements for graduate medical education in psychiatry, clinical training includes no less than 2 months of primary care [medicine], 2 months of neurology, 6 months of

inpatient psychiatry, 12 months of organized continuous outpatient experience, 2 months of child and adolescent psychiatry, 2 months of consult-liaison psychiatry, 1 month of geriatric psychiatry, 1 month of addiction psychiatry, and 1 month of emergency psychiatry. Experiences in community psychiatry and forensic psychiatry are covered in their outpatient months

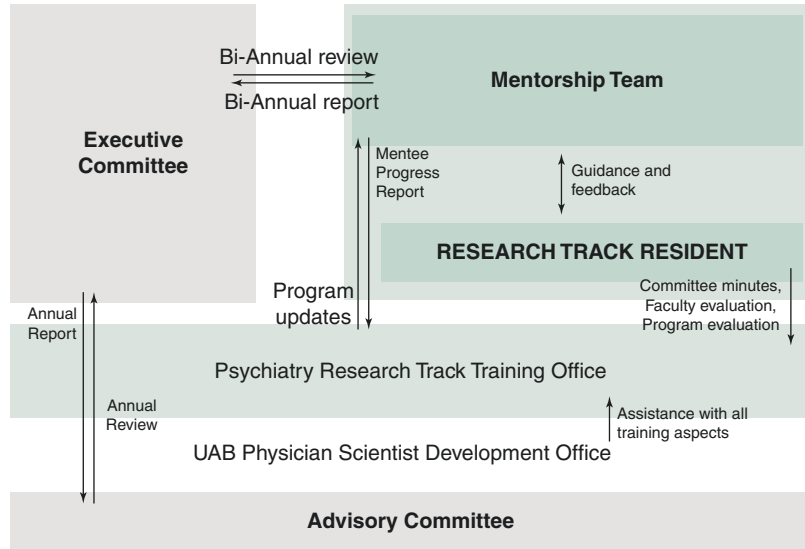
program with the assistance of the executive committee. The executive committee consists of two senior physician-scientists and a junior physician scientist faculty in the department, as well as one STEPP resident representative (the resident serves as liaison between the program and trainees, is elected by the peer-cohort and appointed for 1 year). Additional support for oversight of trainees and monitoring of their progress is provided by the UAB Physician Scientist Development Office. External guidance and critical review of the program is provided by the advisory committee. The advisory committee consists of three experts in neuroscience and in

the training of postdoctoral trainees and research track residents from other departments and institutions. All administrative and oversight activities are supported by one of the program coordinators of the General Psychiatry Residency Program (Fig. 26.2).

Recruitment Strategies

Programs can use the National Resident Matching Program (NRMP) to identify residents for their research track. This program allows to differentiate between different tracks in the same program

Fig. 26.2 Administrative structure of the STEPP initiative showing the flow of information and program oversight of the Psychiatry Residency Research Track. The program is supported by the UAB Physician Scientist Development Office and is embedded within the overall UAB research infrastructure



and designate a specified number of positions to a research track. This allows the program to create a separate rank order list for research track applicants [76]. Should slots go unfilled, these positions will revert back to the general residency program. This approach typically works best when the aim is to identify candidates who already have a substantial research experience and are already committed to a career as a physician scientist.

Because opportunities for research training offered to premedical and medical students are often too brief to allow the trainee to make informed career decisions [77], this avenue of recruitment may overlook candidates that have a less substantial research experience. Supporting research training among non-PhD psychiatry residents is critical in expanding the pipeline, as only approximately half of the physician-scientist workforce in psychiatry have a dual MD/PhD degree [65]. Providing multiple on-ramps for research track candidates allows greater opportunities to identify trainees with a less substantial research experience [77] that consider a research-oriented career.

There is a vast variety as to the timing of when programs formally appoint their residents to a research track. Some appoint residents before the start of their training, others have a formal application process that is open to residents already

enrolled in the general psychiatry residency program, some have a blended approach [76].

STEPP has established two complementary avenues to recruit candidates for our research track: (a) identify candidates during psychiatry residency recruitment prior to entering the residency program through NRMP and (b) identify candidates in the PG-I year of their general psychiatry residency training. A request for formal applications to the STEPP program is e-mailed by the training office to residents each year in October. Applications must include a curriculum vitae of the resident, a statement of interest including a statement of short- and long-term research career goals, a letter of support from the residents' prospective mentor, and an outline of the proposed research project. Applications are reviewed by the executive committee, who give their recommendations for acceptance to the research track training director. Selection of candidates is based on the candidate's good standing in the general residency program, their research potential, their research mentor, and the quality of the research statement. Applicants who are not accepted to the STEPP program will be given the opportunity to meet with a member of the executive committee to discuss how the application can be improved and to be encouraged to resubmit their application throughout the year. Appointments of residents to the research track

typically begin on July 1 in the PG-II year; to coincide with the start of the academic year.

Program Components

Most programs offer educational courses and seminars to enhance the hands-on research experience of research track residents. This often includes a seminar series for research track residents with varied frequency and courses on biostatistics, as well as evidence-based medicine [64, 78]. Additional enrichment activities commonly offered include career mentorship and focused networking opportunities [76]. Research track residents are typically also required to present their research findings in local settings, such as a departmental research day [76, 78], and are encouraged to publish their research in peer-reviewed journals [75, 76, 78].

Overall Components STEPP residents receive comprehensive research training by participating in didactic coursework and other learning opportunities outside the laboratory. They obtain knowledge in (a) ethics/ responsible conduct of research, (b) biostatistics and study design, (c) career development/ leadership, (d) communication of research findings, (e) scientific writing, and (f) individualized coursework specific to the field of study.

Mentorship The program faculty are selected based on academic excellence, appropriate funding, mentoring experience, and commitment to resident research. All mentors are asked to be prepared to commit a minimum of 3 years to the program; primary mentors must commit to be involved during the entire period of the resident's participation in STEPP. By the start of PGY-II, the STEPP resident, primary mentor, and executive committee will have worked together to identify three additional faculty members that will form the individual mentorship team. The STEPP training director serves as ex officio member on all resident mentorship teams to ensure their success.

Research Project The primary mentor works with the STEPP resident to identify a suitable research project and oversees all project activities. The appropriate selection of an initial project that has a high likelihood for success and publication is crucial. Ideally the project is relatively small in scope, like a secondary data analysis or a review paper which can be completed in 4–6 months [78, 79]. Mentors are expected to assist the resident in preparing abstracts and talks for regional and national scientific meetings and assist in developing publishable manuscripts for submission to peer-reviewed journals.

Dissemination of Research Findings PGY-III and PGY-IV STEPP residents are required to present their research project in poster format during the annual UAB Psychiatry Research Symposium [78]. We require STEPP residents to submit an abstract to a national meeting in their final year of residency training. PGY-IV residents will be required to present their research at Grand Rounds, giving them an opportunity to learn how to communicate their research findings to a mixed scientific and clinical audience. All STEPP residents are encouraged to have at least one first author peer-reviewed publication by the completion of PGY-IV [78]. Residents with a substantial prior research experience and high research productivity during their residency may also be encouraged to develop grant applications in their final year of residency.

Career Development We invite program faculty to discuss important considerations for residents interested in a career as a physician-scientist. These topics include: (a) The mentor–mentee relationship, (b) How to determine a realistic scope for a research project during residency training, (c) common misconceptions about working in an academic environment and a physician-scientists' lifestyle, (d) academic promotion within the institution, giving a clear timeline for an actual academic career path [80], (e) Given the reality that extensive debt burdens can limit the ability of young physicians to choose careers in research [67, 81], we invite junior and

senior researchers to educate residents on financial and lifestyle issues. The Friday STEPP lunches also serve as platform for residents to present “practice runs” of presentations of their work at local and national conferences. Peer feedback will be an essential component of these practice runs. Finally, we offer a workshop focused on planning for career transitions after residency. This workshop covers a broad range of topics, including how to search for available positions, how to respond to job advertisements, how to craft an effective curriculum vitae and research statement, how to prepare for a job interview, and what skills are needed to successfully compete for a postdoctoral or faculty position.

Evaluation of the Program

A successful research track should incorporate needs assessments, clearly defined learning objectives, and evaluation methods [10]. Evaluating the impact of a program is an important tool to help institutions and organizations tailor their efforts to support and grow this type of initiative [82]. Quantitative metrics including the number of grants, patents, contracts, peer-reviewed publications, and job titles are commonly used when measuring outcomes [83].

Ongoing evaluation of all aspects of the STEPP program is a critical element. The evaluation plan includes both formative and summative evaluation procedures, with collection of both quantitative and qualitative data, and is a joint effort by the executive committee, the advisory committee, and the Physician Scientist Development Office. Each year, recruitment statistics and applicant feedback will be recorded. Residents and mentors evaluate the program annually. At the completion of their training, each STEPP resident is asked to participate in an exit interview to review their experience with mentors and didactic components, address strengths/weaknesses of the STEPP program, and suggest recommendations for improvement of the program. We maintain a list of STEPP residents who have graduated for at least 10 years

after completion of the program. Alumni of the STEPP program are contacted annually and are asked to describe their current employment and research funding. We educate current STEPP residents on the importance of participating in follow-up efforts, regardless of what career decision they will ultimately have made [78]. We also conduct a PubMed© search to assess research productivity expressed as number of peer-reviewed publications and a search of the NIH RePORTER database to evaluate which individuals have gone on to receive funding to conduct research. Results are tabulated and updated annually, which will permit us to determine to what extent our STEPP residents go on to be productive physician-scientists. Ultimately, these concrete indicators of success are the “yardstick” by which we measure our success.

References

1. Boyer EL. Scholarship reconsidered: priorities of the professorate. Princeton: Princeton University Press; 1990.
2. Simpson D, Yarris LM, Carek PJ. Defining the scholarly and scholarship common program requirements. *J Grad Med Educ.* 2013;5(4):539–40.
3. Glassick CE, Huber MT, Meaeroff GI. Scholarship assessed: evaluation of the professoriate. San Francisco: Jossey-Bass; 1997.
4. Simpson D, Meurer L, Braza D. Meeting the scholarly project requirement-application of scholarship criteria beyond research. *J Grad Med Educ.* 2012;4(1):111–2.
5. Carek PJ, Simpson D, Yarris LM. Comments: authors’ response to letters regarding “defining the scholarly and scholarship common program requirements”. *J Grad Med Educ.* 2014;6(2):392.
6. Carek PJ, Jafri A. Promoting scholarly activity in family medicine residency programs: what’s the reward? *Ann Fam Med.* 2004;2(5):520–1.
7. Carek PJ, Association of Family Practice Residency D. Integrating scholarly activity into residency training. *Ann Fam Med.* 2004;2(1):87–8.
8. Carek PJ, Dickerson LM, Diaz VA, Steyer TE. Addressing the scholarly activity requirements for residents: one Program’s solution. *J Grad Med Educ.* 2011;3(3):379–82.
9. Takahashi O, Ohde S, Jacobs JL, Tokuda Y, Omata F, Fukui T. Residents’ experience of scholarly activities is associated with higher satisfaction with residency training. *J Gen Intern Med.* 2009;24(6):716–20.
10. Hebert RS, Levine RB, Smith CG, Wright SM. A systematic review of resident research curricula. *Acad Med.* 2003;78(1):61–8.

11. Burkhardt J, Kowalenko T, Meurer W. Academic career selection in American emergency medicine residents. *Acad Emerg Med*. 2011;18(Suppl 2):S48–53.
12. Byrnes AB, McCormack FX, Diers T, Jazieh AR. The resident scholar program: a research training opportunity for internal medicine house staff. *J Cancer Educ*. 2007;22(1):47–9.
13. Kurahara DK, Kogachi K, Yamane M, Ly CL, Foster JH, Masaki-Tesoro T, et al. A pediatric residency research requirement to improve collaborative resident and faculty publication productivity. *Hawaii J Med Public Health*. 2012;71(8):224–8.
14. Glassick CE. Boyer's expanded definitions of scholarship, the standards for assessing scholarship, and the elusiveness of the scholarship of teaching. *Acad Med*. 2000;75(9):877–80.
15. ACGME Program Requirements for Graduate Medical Education in Psychiatry https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/400_Psychiatry_2021.pdf?ver=2021-06-15-161510-003; ACGME; [updated 07/01/2021].
16. Abramson EL, DiPace JJ, Loughlin GM. Scholarly activity training during residency: ensuring a meaningful experience for all graduates. *J Pediatr*. 2018;201(5–7):e3.
17. Wood W, McCollum J, Kukreja P, Vetter IL, Morgan CJ, Hossein Zadeh Maleki A, et al. Graduate medical education scholarly activities initiatives: a systematic review and meta-analysis. *BMC Med Educ*. 2018;18(1):318.
18. Arora V, Bell PF, Hagberg S. Cultivating change: engaging residents in research. *Int J Psychiatry Med*. 2020;55(5):376–83.
19. Crownover B, Crawford PF. Areas of concentration increase scholarly activity: a 15-month experience. *Fam Med*. 2008;40(2):87–90.
20. Abramson EL, Naifeh MM, Stevenson MD, Mauer E, Hammad HT, Gerber LM, et al. Scholarly activity training during residency: are we hitting the mark? A national assessment of pediatric residents. *Acad Pediatr*. 2018;18(5):542–9.
21. Simasek M, Ballard SL, Phelps P, Pingul-Ravano R, Kolb NR, Finkelstein A, et al. Meeting resident scholarly activity requirements through a longitudinal quality improvement curriculum. *J Grad Med Educ*. 2015;7(1):86–90.
22. Regan L, Stahmer S, Nyce A, Nelson BP, Moscati R, Gisondi MA, et al. Scholarly tracks in emergency medicine. *Acad Emerg Med*. 2010;17(Suppl 2):S87–94.
23. Jordan J, Hwang M, Kaji AH, Coates WC. Scholarly tracks in emergency medicine residency programs are associated with increased choice of academic career. *West J Emerg Med*. 2018;19(3):593–9.
24. Doman ER, Abdo MS, Boyce DSK, Desmond DH, Roswarski JL, Hostler DC. Improvement of resident scholarship in an internal medicine training program. *J Gen Intern Med*. 2022;37:274.
25. Corser W, Church B, Rohrer J, Hortos K. The state-wide campus system scholarly activity developmental planning framework for community-based GME leaders. *Spartan Med Res J*. 2018;3(1):6521.
26. Barajaz M, Turner T. Starting a new residency program: a step-by-step guide for institutions, hospitals, and program directors. *Med Educ Online*. 2016;21:32271.
27. Sciarretta JD, Atchison CD, Onayemi AO, Davis JM. Starting line for scholarly activity in new residency programs: lessons learned for institutional success. *J Surg Res*. 2019;239:136–41.
28. Beasley BW, Scrase DR, Schultz HJ. Determining the predictors of internal medicine residency accreditation: what they do (not what they say). *Acad Med*. 2002;77(3):238–46.
29. Levine RB, Hebert RS, Wright SM. Resident research and scholarly activity in internal medicine residency training programs. *J Gen Intern Med*. 2005;20(2):155–9.
30. Alguire PC, Anderson WA, Albrecht RR, Poland GA. Resident research in internal medicine training programs. *Ann Intern Med*. 1996;124(3):321–8.
31. Emerick T, Metro D, Patel R, Sakai T. Scholarly activity points: a new tool to evaluate resident scholarly productivity. *Br J Anaesth*. 2013;111(3):468–76.
32. Seehusen DA, Asplund CA, Friedman M. A point system for resident scholarly activity. *Fam Med*. 2009;41(7):467–9.
33. Seehusen DA, Ledford CJ, Grogan S, Kim E, Johnson JJ, Stackle ME, et al. A point system as catalyst to increase resident scholarship: an MPCRN study. *Fam Med*. 2017;49(3):222–4.
34. Ledford CJ, Seehusen DA, Villagran MM, Cafferty LA, Childress MA. Resident scholarship expectations and experiences: sources of uncertainty as barriers to success. *J Grad Med Educ*. 2013;5(4):564–9.
35. Balon R, Stromberg N. Observations: will the ACGME faculty scholarly activity requirements promote dishonesty among program directors? *J Grad Med Educ*. 2015;7(2):299.
36. Johnston NS, Martinez AV, Schillerstrom JE, Luber MP, Hamaoka DA. Quantifying publication scholarly activity of psychiatry residency training directors. *Acad Psychiatry*. 2015;39(1):76–9.
37. Hermann G, Xi AS, Stevens B, Goyal N. Reducing errors in reporting scholarly activity to the ACGME: the annual update scholarly activity monitoring tool. *J Grad Med Educ*. 2016;8(3):447–8.
38. Himelhoch S, Edwards S, Ehrenreich M, Luber MP. Teaching lifelong research skills in residency: implementation and outcome of a systematic review and meta-analysis course. *J Grad Med Educ*. 2015;7(3):445–50.
39. Potti A, Mariani P, Saeed M, Smego RA Jr. Residents as researchers: expectations, requirements, and productivity. *Am J Med*. 2003;115(6):510–4.
40. Ullrich N, Botelho CA, Hibberd P, Bernstein HH. Research during pediatric residency: predictors and resident-determined influences. *Acad Med*. 2003;78(12):1253–8.
41. Kichler K, Kozol R, Buicko J, Lesnikoski B, Tamariz L, Palacio A. A structured step-by-step

- program to increase scholarly activity. *J Surg Educ.* 2014;71(6):e19–21.
42. Becker D, Garth H, Hollander R, Klein F, Klau M. Understanding faculty and trainee needs related to scholarly activity in a large, Nonuniversity Graduate Medical Education Program. *Permanente J.* 2017;21:16.
 43. Mulderig J, Sansone RA, Fine MA. Psychiatry residents' attitudes toward personal involvement in research. *Acad Psychiatry.* 1992;16(2):96–102.
 44. Shanmugalingam A, Ferreria SG, Norman RM, Vasudev K. Research experience in psychiatry residency programs across Canada: current status. *Can J Psychiatr.* 2014;59(11):586–90.
 45. Das SU, Bar-On ME. Innovative strategies to increase resident scholarly activity and engage faculty support. *J Investig Med.* 2018;66(1):e2–3.
 46. MacMaster FP, Cohen J, Waheed W, Magaud E, Sembo M, Langevin LM, et al. The psychiatry resident research experience. *BMC Res Notes.* 2016;9(1):486.
 47. Koo J, Bains J, Collins MB, Dharamsi S. Residency research requirements and the CanMEDS-FM scholar role: perspectives of residents and recent graduates. *Can Fam Physician.* 2012;58(6):e330–6.
 48. Wisniewski SJ, Corser WD. Common problematic scholarly activity project planning expectations of project novices. *Spartan Med Res J.* 2021;6(1):21274.
 49. Abramson EL, Naifeh MM, Stevenson MD, Mauer E, Gerber LM, Li ST, et al. Scholarly activity training during pediatric residency: how well aligned are program directors and residents? *Acad Pediatr.* 2020;20(7):998–1006.
 50. Tien-Estrada J, Vieira A, Percy V, Millar K, Tam H, Russell K, et al. Determinants of scholarly project completion in a paediatric resident program in Canada. *Paediatr Child Health.* 2019;24(2):e98–e103.
 51. Villwock JA, Hamill CS, Nicholas BD, Ryan JT. Otolaryngology residency program research resources and scholarly productivity. *Otolaryngol Head Neck Surg.* 2017;156(6):1119–23.
 52. Wolfe J, Wolfe J, Smith K, Yoho R, Vardaxis V. A strategic plan for increasing scholarly activity among medical students, residents, and faculty. *J Am Podiatr Med Assoc.* 2018;108(4):292–303.
 53. Helling TS, Dumire RD, Augustosky K. Incentives for scholarly activity at university and independent general surgery residencies: current practices. *Am J Surg.* 2009;197(3):360–4.
 54. Carmody KA. An academic relative value unit system: do transparency, consensus, and accountability work? *West J Emerg Med.* 2019;20(6):939–47.
 55. Manring MM, Panzo JA, Mayerson JL. A framework for improving resident research participation and scholarly output. *J Surg Educ.* 2014;71(1):8–13.
 56. Stevenson MD, Smigielski EM, Naifeh MM, Abramson EL, Todd C, Li ST. Increasing scholarly activity productivity during residency: a systematic review. *Acad Med.* 2017;92(2):250–66.
 57. Waheed A, Nasir M, Azhar E. Development of a culture of scholarship: the impact of a structured roadmap for scholarly activity in family medicine residency program. *Cureus.* 2020;12(3):e7153.
 58. Lennon RP, Fuentes RWC, Broszko C, Koch JJ, Sanchack K, Keck JW. A curriculum to increase resident scholarly activity. *Fam Med.* 2020;52(8):557–61.
 59. Seales SM, Lennon RP, Sanchack K, Smith DK. Sustainable curriculum to increase scholarly activity in a family medicine residency. *Fam Med.* 2019;51(3):271–5.
 60. Hoedebecke K, Rerucha C, Runser L. Increase in residency scholarly activity as a result of resident-led initiative. *Fam Med.* 2014;46(4):288–90.
 61. Aftab A, Lackamp J, Cerny C. Measuring perceived educational impact of a resident-led research newsletter. *Acad Psychiatry.* 2017;41(3):373–6.
 62. Chang CD, Mills JC. Effects of a reward system on resident research productivity. *JAMA Otolaryngol Head Neck Surg.* 2013;139(12):1285–90.
 63. Borman-Shoap EC, Zhang L, Pitt MB. Longitudinal experience with a transparent weighted lottery system to incentivize resident scholarship. *J Grad Med Educ.* 2018;10(4):455–8.
 64. Bhat V, Leong K, Lee J, Voineskos D, Daskalakis ZJ, Lam RW, et al. Research-track programs for residents in psychiatry: a review of literature and a report of 3 Canadian experiences. *Can J Psychiatr.* 2014;59(5):268–75.
 65. Arbuckle MR, Luo SX, Pincus HA, Gordon JA, Chung JY, Chavez M, et al. Trends in MD/PhD graduates entering psychiatry: assessing the physician-scientist pipeline. *Acad Psychiatry.* 2018;42(3):346–53.
 66. Yager J, Greden J, Abrams M, Riba M. The Institute of Medicine's report on Research Training in Psychiatry Residency: Strategies for Reform—background, results, and follow up. *Acad Psychiatry.* 2004;28(4):267–74.
 67. Kupfer DJ, Hyman SE, Schatzberg AF, Pincus HA, Reynolds CF 3rd. Recruiting and retaining future generations of physician scientists in mental health. *Arch Gen Psychiatry.* 2002;59(7):657–60.
 68. Costello JR, Mullins ME, Votaw JR, Karolyi DR, Kalb B, Gonzales P, et al. Establishing a new radiology residency research track. *Acad Radiol.* 2013;20(2):243–8.
 69. Fischer JL, Cation LJ. Impact of a residency research program on research activity, faculty involvement, and institutional cost. *Teach Learn Med.* 2005;17(2):159–65.
 70. Arbuckle MR, Gordon JA, Pincus HA, Oquendo MA. Bridging the gap: supporting translational research careers through an integrated research track within residency training. *Acad Med.* 2013;88(6):759–65.
 71. Blacker CJ, Morgan RJ. Research tracks during psychiatry residency training. *Acad Psychiatry.* 2018;42(5):698–704.
 72. Laliberte V, Rapoport MJ, Andrew M, Davidson M, Rej S. Career interests of Canadian psychiatry residents: what makes residents choose a research career? *Can J Psychiatr.* 2016;61(2):86–92.

73. Eisenberg L. Research training in psychiatry residency: strategies for reform. *Am J Psychiatry*. 2004;161(10):1930–1.
74. Abrams MT, Patchan K, Boat TF, editors. *Research training in psychiatry residency: strategies for reform*. Washington (DC); 2003.
75. Back SE, Book SW, Santos AB, Brady KT. Training physician-scientists: a model for integrating research into psychiatric residency. *Acad Psychiatry*. 2011;35(1):40–5.
76. Tsai AC, Ordonez AE, Reus VI, Mathews CA. Eleven-year outcomes from an integrated residency program to train research psychiatrists. *Acad Med*. 2013;88(7):983–8.
77. Roane DM, Inan E, Haeri S, Galynker II. Ensuring research competency in psychiatric residency training. *Acad Psychiatry*. 2009;33(3):215–20.
78. Gilbert AR, Tew JD Jr, Reynolds CF 3rd, Pincus HA, Ryan N, Nash K, et al. A developmental model for enhancing research training during psychiatry residency. *Acad Psychiatry*. 2006;30(1):55–62.
79. Hamann KL, Fancher TL, Saint S, Henderson MC. Clinical research during internal medicine residency: a practical guide. *Am J Med*. 2006;119(3):277–83.
80. Posporelis S, Sawa A, Smith GS, Stitzer ML, Lyketsos CG, Chisolm MS. Promoting careers in academic research to psychiatry residents. *Acad Psychiatry*. 2014;38(2):185–90.
81. Silberman EK, Belitsky R, Bernstein CA, Cabaniss DL, Crisp-Han H, Dickstein LJ, et al. Recruiting researchers in psychiatry: the influence of residency vs. early motivation. *Acad Psychiatry*. 2012;36(2):85–90.
82. Hall AK, Mills SL, Lund PK. Clinician-investigator training and the need to pilot new approaches to recruiting and retaining this workforce. *Acad Med*. 2017;92(10):1382–9.
83. Lee LS, Pusek SN, McCormack WT, Helitzer DL, Martina CA, Dozier AM, et al. Clinical and translational scientist career success: metrics for evaluation. *Clin Transl Sci*. 2012;5(5):400–7.



Considerations for Rural Training Programs

27

Arden D. Dingle and Lessley Chiriboga

Introduction

The recent public health crisis has made clearer the overwhelming need for mental health services in all areas of the United States and has exacerbated mental health disparities in rural regions. Ninety-seven percent of the United States is rural based on federal definitions and home to approximately 19% of the country's population [1, 2]. Rural America has lacked physicians of all specialties for decades, limiting access to appropriate health care for many individuals and populations [3–8]. While insufficient numbers of physicians is not the only reason for healthcare inadequacies in these regions, it has been an important one. For years, there has been a growing concern about rural healthcare across multiple entities: governmental, professional associations, community organizations, physician specialty societies, other allied health professionals, and also the general public. The government is the major funder of graduate medical education with the perspective being that physician training should serve the greater good. A number of local, regional, and national initia-

tives that have attempted to improve and supplement the rural physician workforce have had only modest success. A consistent approach with evidence of positive results has been providing medical students and physicians with innovative rural-based training experiences, hoping that exposure will increase the likelihood of continued practice in these settings [9–21].

Bolstering the psychiatry workforce and improving mental healthcare in a rural region are not the only reasons to start a psychiatry residency though they are compelling to those living in the area or responsible for the program. Other reasons to create this type of training are to: (1) provide clinical education designed to address the unique characteristics and needs of an area's population; (2) educate generalist clinicians who can manage all types of health problems with limited access to specialists; (3) develop a setting in which the program, faculty, and residents become integral members of the local community in a way that is not possible in larger urban/suburban places; and (4) create a milieu for individuals who prefer smaller programs and regions for training and practice. There is some information on rural training for physicians in psychiatry, though it is limited; most of the available literature on rural training is related to primary care and other non-psychiatric specialties [20–46]. This chapter covers the major considerations when creating, implementing, and overseeing a rural psychiatry residency or incorporating rural-

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based tracks into an existing residency program. Much of the material is covered in more detail elsewhere in this book, so this chapter will emphasize those aspects of training specific to rural psychiatry residencies and tracks. Though the discussion will focus on general psychiatry residency training, the topics reviewed are relevant to any of the psychiatric subspecialties as well as training in other medical specialties.

Overview

Residency programs, especially in psychiatry, can seem challenging to develop and maintain in rural environments due to the apparent lack of basic required elements for reasonable educational experiences. A natural tendency when creating residency programs is to begin by identifying the existing infrastructure, personnel, and other resources within the chosen environment and use that information to determine the program development plan. However, a more productive and innovative approach can be to start with determining the ideal educational program for the type of psychiatrist desired for the region, then using this information to determine how to best create and implement the desired training. Having a vision that is inspiring from educational and community perspectives generally helps with recruiting supporters and allies. This strategy leads to developing a training program that not only provides the educational and clinical basics but can also be pioneering and inventive. After determining what resources are available, an important next step is to ascertain what else is needed for the residency program, the community, as well as determining additional allies and supporters. Another key element of designing a successful program is identifying the community's unique characteristics, strengths, needs, and possible partners. It is beneficial to reach out to as many potential collaborators as possible, aiming to reach a number of entities representing distinct components of the community in order to learn their perspectives, needs, and desires. Many individuals and organizations, as well as those involved in physical and mental

healthcare, often are very interested in improving the mental health of their community and can offer unexpected, valuable contributions. Local entities tend to be the most invested. However, it can be surprising to see the number of individuals and organizations interested in the development of training programs, both regionally and nationally. An often-neglected component of this process is to learn about and understand the influence of the history and culture of the region on program development, as well as becoming knowledgeable about prior similar projects and their outcomes. Mentorship and information from others who have developed similar programs elsewhere can be indispensable. These elements of planning and implementation generally are accomplished simultaneously. Having a fair amount of common sense, an interest in understanding how systems of all types work, noting the roles and responsiveness of those working within them, together with the motivation for and vision of improvement across multiple spheres is invaluable.

It is key to decide what kind of psychiatrist the program wants to produce and how these desired characteristics produce practitioners who can work within and contribute to the community even while trainees. In addition to being a competent general psychiatrist, consider what other qualities are important in program graduates, what the program considers essential, and what the community wants and needs. Deciding upon these criteria early and with enough detail provides a framework for developing educational programming, finding faculty, selecting residents, and implementing relationships with community partners. Also, starting the process with the desired outcomes in mind provides a foundation for determining the specific experiences the residents need to have and how the training activities can be organized. Being able to explore the community with this type of vision helps community members understand how the training program will be contributing and how they could participate. Rotating within local programs that assist individuals with housing, food, employment, and childcare can be integral components of residents learning about the lives and environ-

ments of their patients. Being embedded in community outreach teams can help residents better appreciate some of the challenges faced by patients and families that complicate their health care. Working with public health and environmental agencies can promote residents' comprehension of environmental impacts on overall health as well as mental health and how physicians can participate in community improvement efforts.

Creating or modifying graduate medical educational training programs that meet community needs, attract desirable applicants, while also prioritizing essential, core aspects of physician practice can be difficult. Most residencies rely on traditional Graduate Medical Education (GME) federal funding through the Centers of Medicare and Medicaid Services (CMS), which is tied closely to hospitals, often limiting the educational opportunities that can be provided. Utilizing additional financing such as local, state, and other national funding can provide supplementary options. Varied funding allows the use of facilities other than hospitals, creating a range of potential partners and training experiences. Many states have initiatives to fund residencies, including psychiatry programs, with the goals of addressing workforce shortages and retaining medical students to improve the health care of the population. There is dedicated federal funding for rural residencies, with psychiatry frequently considered primary care for the purposes of this assistance [28, 30, 47, 48]. These types of funding can provide flexibility to implement innovative programming that enhances training and addresses community needs, producing psychiatrists who are integrated into communities while targeting health disparities and those in need. The funding can also support educational activities that are attractive to resident applicants, such as longitudinal psychotherapy rotations, school or court consultation, integrated care activities, community agency immersion, and public health experiences, making it more likely these residency candidates will consider a rural training program. Being able to articulate how the program will use the funding and how the supported activities will further the funding entity's aims

can be persuasive in obtaining and maintaining funding to support program activities and personnel, especially for state and local agencies. Having a strategic plan that starts with the initial core training program and deliberately includes future goals such as expansion of training slots, types of services, and forms of training such as specialization and subspecialty fellowship programs helps potential donors and funding agencies understand the program's planned trajectory. Identifying and providing metrics that demonstrate desired outcomes provides key information regarding program value and justifies continued support. Being in an area or institution that qualifies physicians for loan repayment also is helpful. It is often possible to become eligible for loan repayment, especially in mental health since most rural areas are significantly underserved. A list of useful websites is provided in Table 27.1.

Special Considerations

Community/Program Management

Educational programs and their participants in smaller regions ideally become integrated, core components of their communities. Residents and the program faculty not only provide psychiatric care, they also have opportunities to be leaders within the community, participate in a range of community activities, demonstrating physician leadership in and outside of the healthcare system[49]. However, working in rural communities can be complicated and may impact physician wellness. Active involvement in the community can mean a heightened level of scrutiny both in and outside of work that may take some adjustment for both residents and faculty. Not only will residents and faculty probably frequently have to interact with patients and families outside of work, they may also be easily identifiable as the local psychiatric care providers, with expectations to be available to provide advice and care and be on their best behavior at all times. Also, being a physician, particularly a psychiatrist, in a healthcare shortage area, can often mean longer hours, with finite resources, constant requests for

Table 27.1 Resources and websites for rural residencies

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| Health Resources & services administration, rural health, https://www.hrsa.gov |
| Federal governmental site with information on funding, data, and training resources |
| Substance Abuse and Mental Health Services Administration, rural health/ mental health, https://www.samhsa.gov |
| Federal governmental site with programming and funding information related to mental health care, including rural initiatives |
| Rural graduate medical education, https://www.ruralgme.org |
| Information and resources on rural residency program development and maintenance |
| Rural health information hub, RHlhub, https://www.ruralhealthinfo.org |
| Information and resources related to rural health |
| The RTT collaborative, https://rttcollaborative.net |
| Information and resources on rural health professions education and training |
| National Rural Health Association, https://www.ruralhealthweb.org |
| Information, resources, and advocacy related to rural health issues |
| Rural prep, https://ruralprep.org |
| Scholarship and evidence-based practices for rural primary care practice |
| National Rural Health Resource Center, https://www.ruralcenter.org |
| Information and resources to improve rural health |
| Rural community toolbox, https://www.ruralcommunitytoolbox.org |
| Resources to address substance use |
| State and tribal government websites |
| Information and resources on specific state and tribal programs and initiatives for rural areas |
| National Professional Organization Websites |
| Information and resources on medical and psychiatric care and education, some specific for rural practice |
| AMA, https://www.ama-assn.org |
| AAFP, https://www.aafp.org/home.html |
| APA, https://www.psychiatry.org |
| AACAP, https://www.aacap.org |
| AADPRT, https://www.aadprt.org |

help, and few colleagues[50–61]. Being very explicit and methodical in addressing these issues, both the benefits and challenges, in all stages of program planning and execution, including recruitment, is essential. Providing adequate education to understand and deal with these issues is crucial as well as having supportive and available mentors. Residents and faculty

can learn to thrive in these environments, learning balance and boundaries, while being active community members and leaders.

All residency programs are dependent on the systems they work within, and it can be a delicate balance between the priorities and needs of all involved, which at times may not be the same. In addition to clearly and consistently communicating, being able to effectively negotiate as described elsewhere in this book, is advantageous. Relationships with people within the system and community can help with program resources, since the community and involved organizations can appreciate the need to support the training program. However, it can be complicated when educational and community needs are not aligned and satisfying training requirements means not fulfilling clinical needs within the region. Small town professional relationships can feel remarkably personal and often it can be difficult for community partners to understand and accept the importance of prioritizing training requirements. For example, it can be frustrating that residents can only care for limited numbers of patients, especially early in training due to the importance of teaching basic psychiatric knowledge and skills. Furthermore, residents require a significant amount of time for education that does not involve direct patient care. Preserving educational quality and implementing program changes and improvement are much easier when the residents primarily rotate on services that are not totally dependent on the residents for clinical care unless they are specific rotations designed for resident learning (i.e., resident training outpatient clinic).

Maintaining consistently positive community relationships is key to having adequate continuing support and resources for the program. It is essential to have and consistently share an understandable vision for the program that emphasizes the benefit for the region overall. Continuing to involve and communicate on a regular basis with those interested in and connected to the residency helps promote transparency and trust. Having community advisory groups, stakeholder meetings, newsletters, program updates, and other similar events maintains connections and helps all involved understand program and educational

priorities. Becoming acquainted with and making a consistent effort to provide program updates to those involved in local, regional, and state governments independent of asking for funds can provide the groundwork to clearly demonstrate program value. Including the expectation that a core program value is interacting with and educating the community, makes the program visible and conveys its worth in a range of settings. Activities such as faculty and resident participation in wellness, prevention, and early intervention events such as health-related fairs, presentations to the lay population, and school visits can be very helpful. The ideal vision for the program involves growth, both in numbers and retention of physicians and also in the types of care available. Development of fellowships, specialized experiences within the residency, and collaboration with additional local agencies can help the community understand the long-term plan. A main component of the vision should be realistic goals and expectations for workforce improvement. Determining the desired number of practicing psychiatrists for the region within a time frame can help the program and community partners set goals and strategies for the retention of graduates, understanding that keeping all graduates in the area is unlikely. Aiming to retain 25–50% of the graduating residents is generally achievable and allows for the gradual expansion of and support for more psychiatrists within the community. Embedding experiences in the residency, which can directly lead to future practice within the region, can demonstrate benefit to the community as well as create additional learning opportunities. Advancing services in both traditional and innovative ways such as adding psychiatrists to the county health early intervention team can add value to the community. Additionally, it is important to start planning for possible faculty opportunities for graduates so that the program can expand.

Recruitment

In the last decade, psychiatry has become a more desired specialty for medical students. With the increasing number of medical students currently

graduating each year, psychiatry residencies now uniformly fill their slots and can be more selective in choosing applicants. For regional, less prominent programs, the pressure to ensure all positions are filled is lessened with an increased ability to emphasize the type and quality of the residents accepted, with a focus on applicant fit with the program. In psychiatry, like the rest of the medicine, there are programs nationally known due to being prominent in the field as well as another set in geographically ‘desirable’ locations. These programs receive many applicants and struggle less with having a competitive field of applicants who are likely to rank them highly. The rest of the psychiatry residencies are regional programs which often attract medical student interest based on an applicant’s personal reasons to be in the region or the concern about not matching into a position. For these programs, choosing who to interview can be challenging due to limited slots and needing to select applicants who will seriously consider training at the program and practicing in the region following graduation. These programs also can have more difficulty ‘selling’ themselves due to varying levels of specialized, tertiary experiences, less exposure to experts and psychiatric subspecialties, and perceived limitations of the environments. Rural psychiatric residencies can find these issues especially daunting. To be successful in a rural environment, residents need to possess certain qualities, especially if a major program goal is retention after graduation. Rural residents need to like living in smaller communities and find satisfaction in being effective clinicians in systems with limited resources of all types. Having clear criteria for screening, interviewing, and selecting applicants for the program can make recruitment more manageable and successful. It can be particularly useful to identify the characteristics of physicians generally and psychiatrists specifically who practice in the community. These commonalities might inform criteria for applicants, especially in terms of identifying those who are likely to choose rural training and likely to remain to practice. There is some literature on characteristics of physicians who practice in rural environments. Relevant variables have included being from a rural area, having family ties in an area,

participating in a medical educational program with a designated rural component, having employment opportunities for domestic partners, having educational resources for children, being able to access local clinical coverage, having access to local training opportunities, being integrated as a key member of the community, and having a stable, reasonable income[62, 63]. Getting the perspectives of physicians in the area, community partners, and other key stakeholders is invaluable since they can provide first-hand information on what drew them to the region and why they stayed. It also can be informative, though it may not be possible, to learn what led practitioners to leave the area so those issues can be improved.

To be appealing to applicants, the program needs to articulate and demonstrate the advantages of training in the program with how it stands out from other similar programs. It is helpful to identify the appealing characteristics of the region in terms of daily living as well as recreational activities. However, over emphasizing the benefits of the region can lead to attracting residents who prioritize their personal lives outside of work; thus, necessitating a delicate balance during recruitment. It is also common for rural programs to have smaller class sizes, with participants and faculty interacting frequently and in the course of time knowing each other well. However, emphasizing the benefits of working with specific individuals at the program can cause difficulties if they leave. Identifying and promoting what is unique and different about the residency program itself can help with attracting applicants and identifying those who would be the best fit. Possible approaches include identifying clinical populations within the region that may be different than other areas of the country, programming related to rural-based care, and other aspects of the program such as opportunities for integrated care, working with patients and providers within primary care environments, and providing preventive care and early intervention. As mentioned previously, having funding that is flexible and can be used to develop needed community-based experiences can help with resident and faculty recruitment as well as with meeting population

needs. Broadening the pool of applicants to consider those who may not be included if using traditional screening metrics can allow the identification of individuals who will be competent physicians and could be a good fit for a rural-based residency. Factors such as time since medical school completion, standardized examination scores, number of years in an urban setting, or limited rural experience need not eliminate a candidate if there are other strengths present. Applicants can be reviewed based on program criteria for interest in community work, commitment to working with underserved populations, and desire to live in a less urban setting. An effective supplement to the traditional application process is to request that applicants write a brief statement describing their specific interest in the program and region. Another effective recruitment strategy can be scheduling regular meetings during the clerkship rotations for medical students connected to the residency, such as students at affiliated or nearby medical schools. Learning the motivations of medical students who rotate in a rural environment may be useful in developing strategies to attract these students and others to train in a residency in the region.

Faculty

Identifying and recruiting an informed and motivated group of individuals to teach across all aspects of the curriculum is crucial and should be incorporated early in the planning and developing of the curriculum. While many of the faculty need to be psychiatrists, casting a wide net and considering practitioners from other specialties and disciplines can yield individuals who contribute meaningfully. For instance, licensing boards and certification entities can provide useful information about who practices in the region including physicians and practitioners from other disciplines such as psychology, nursing, and social work. Asking professional organizations, local providers, and community institutions for recommendations can all be effective strategies to find interested teachers and faculty. Individuals actively teaching at local educational institutions

may also be able to contribute. In many regions, physicians and other practitioners are eager to contribute to and benefit from a structure that identifies their capabilities, interests, and facilitates their involvement. Faculty can contribute by developing curricula, teaching in clinical or didactic settings, and by providing services such as mentorship. In general, successfully involving community-based practitioners works best if their faculty roles are connected to their current clinical activities, which generally means having them teach clinically and helping them modify their clinical activities to incorporate education. If faculty work for an institution, arranging at an institutional level how to incorporate teaching and supervision while maintaining clinical priorities is key. Then, involved faculty can be supported within their system and teaching does not become a competing demand, minimizing expectations that can be perceived as burdensome or interfering. Examples include creating the required descriptive paperwork (e.g., goals and objectives) at the program level and having community-based faculty review and approve the content; having them complete necessary paperwork according to their preference and transcribing the documents into the electronic system later if necessary; and having faculty participate in committees scheduled around their clinical schedule only when required and meaningful. Determining what would be incentivizing and of value in terms of compensation for faculty time and effort is crucial. Often practitioners do not need monetary rewards and appreciate regular, informal, and formal acknowledgement of their contributions, access to information systems such as libraries, and assistance with lifelong learning activities.

Having time and support to be involved in teaching didactics works better for all individuals and leads to superior teaching content. While having psychiatrists participate in didactic teaching is essential, other disciplines can significantly contribute. For example, many librarians are trained to teach evidence-based medicine, psychologists and other mental health practitioners can teach psychotherapy, and those trained in public health can assist with topics relevant to

that field. Videoconferencing is a resource to facilitate distance learning, especially in hybrid didactic programs. For example, there are individuals willing to teach lectures or courses long distance. Some programs have been able to share didactics and other programs have been able to participate in other institutions' educational programs, such as grand rounds. Online resources are expanding with many now easily accessible and can be used as the foundation for, or instead of, local in-person courses. It is helpful to have the perspective that most competent, motivated general psychiatrists can teach residents effectively on a range of topics, particularly with the wealth of material available online[64]. Often the main benefit of faculty development on education with community faculty is demonstrating to them that they have enough knowledge and skill to teach trainees. Developing relationships with academic entities, both medical schools and other types of institutions, can be beneficial in terms of providing access to individuals and resources that can contribute to both the clinical and didactic curricula [65].

Scholarly Activity

All physicians are expected to be scholars, engage in lifelong learning to improve their knowledge and skills, and apply new learning to clinical care and other aspects of physician practice. There is a tendency to consider a narrow type and scale of activities (e.g., grant-funded original research and peer-reviewed publications) as scholarly. However, scholarship in most residencies, especially community-based programs, is primarily about teaching residents how to understand, utilize, and engage in a variety of scholarly activities with faculty. These accomplishments can include quality improvement projects, journal clubs, presentations, and curriculum development. Obtaining meaningful participation in scholarship by physician faculty and residents in community-oriented training programs requires a program structure that provides clear and reasonable expectations, mechanisms to support learning the necessary skills, and the

time to work on scholarly projects. Considering the need for support of scholarly activities when obtaining initial and ongoing program funding is important. Developing scholarship opportunities for faculty and residents in a community-based program with a limited number of physicians requires protected time, resources, and must have a broad concept of scholarship to be successful [66–68].

To have faculty participate in scholarly activities, it is best to incorporate these endeavors into their clinical practices and interests. While there are many components to physician scholarship, a particular emphasis for practitioners is on individual and systems quality improvement to ensure high quality patient care. Physicians routinely participate in quality improvement, education of others, and self-improvement; these activities are a form of scholarship. Helping faculty members be inquisitive, curious, and investigative can be achieved by providing them a structure to explain activities that qualify as scholarly as well as facilitating their involvement in relevant program activities. One approach is focusing on resident-driven scholarship with direction from core program faculty and involvement of community physicians to a degree that is compatible with their other activities. Core program faculty tend to have more time, resources, and applicable expertise for mentoring and guidance. Additional options include developing relationships with other institutions with expertise and resources such as larger medical schools, other academic institutions, healthcare facilities, and governmental entities with relevant projects that residents can participate in.

Faculty development can be considered a component of scholarship with the goal of physician self-improvement in all realms of physician practice, including clinical care, administration, outreach, and education. Generally, faculty are more motivated and participatory if faculty development activities are directly connected and relevant to the faculty member's practice and if they can be incorporated relatively easily into the faculty's schedule and time commitments. Many useful and easily adapted models have been developed that focus on clinical teaching such as

The Triangle Method, MiPLAN, One Minute Preceptor, apprenticeship, narrative medicine, and storytelling [69–73]. It also is helpful to identify desired topics for which residency-related training can be incorporated, for example, providing continuing medical education (CME) activities on a clinical topic and adding a brief overview on how to teach the subject to a resident. Taking advantage of digital resources and the ability to provide educational activities online and long distance is essential given the easy accessibility for participants as well as the much broader scope of expertise and topics available virtually [74].

Technology

As the COVID-19 pandemic has revealed, technology can be vital in providing health care as well as providing a forum for educational activities. While the debate continues about the degree to which technology should be used for patient care and residency training along with the impact, if any, on the quality of care and training, technology clearly can be used effectively and efficiently. Prior to the pandemic, technology was used for rural patient care and education, though in a more circumscribed fashion. With resource limitations and constraints in most rural communities, the use of technology for a portion of rural training activities is commonplace, particularly if the faculty and residents are not based in the community. A key consideration when planning for the use of technology for education and patient care is how its use fits with the overall program aims and organization. Much of patient care, particularly in psychiatry, can be provided with a synchronized audio and visual connection online. While there are numerous benefits, technology has the potential of complicating the achievement of certain program goals, such as integration and involvement in the community. Most residency programs provide telepsychiatry services, often to rural communities, some as a rural training track [75]. While providing these services certainly improves access to care, it does not help with program goals relating to physician

integration into the community. Given the increasing ease of using telepsychiatry to provide care, it is vital for program leadership to recognize and be able to communicate the criteria that should be used to determine which patient care activities trainees must do in person and which can be accomplished online [76]. In-person activities, especially in rural settings, are more expensive and labor intensive so the rationale for doing them needs to be solid and convincing for all involved. Hybrid models can be effective in which the format varies depending on the resident's level of training, the setting, and the service being provided. However, given the multiple goals related to rural residencies, especially as related to physician retention and community involvement, the use of technology to provide care should be carefully reviewed and integrated.

Similar issues exist for the use of technology to support didactic teaching. In addition to the acquisition of knowledge, many didactic and non-clinical teaching sessions are structured to provide opportunities for the residents to interact interpersonally, in less pressured situations, and form an identity as a member of the resident group. Using too many long-distance experts or online materials for self-study may convey the message that the program faculty are inadequate or that this aspect of the program does not have to be provided by the program faculty. By viewing residents as individuals who should be motivated, self-driven learners, the faculty function as facilitators of resident learning rather than being responsible for determining and delivering all necessary content and information. Online materials and curriculum can be employed to provide a foundation for self-study or a course which then can be built upon with in-person activities. A productive approach is to view the faculty as professionals who can help the residents learn the relevant psychiatric topics throughout the residency and consider the distant individuals as experts who can be used to supplement the clinical and didactic curriculum by providing specialized knowledge and experience. The best use of technology may be as a supplemental medium, enhancing other components of the program.

Case Example

In 2017, a new psychiatry residency was started at the University of Texas Rio Grande Valley School of Medicine (UTRGV SOM) [77]. The program goals were to develop training specifically targeting the unique needs of the Rio Grande Valley Texas border community as well as to systematically integrate the biological, psychological, and social elements of psychiatry throughout the residency in close collaboration with other disciplines. The Rio Grande Valley (RGV) is a region characterized by a long history of a neighboring and interdependent relationship with Mexico with shared families, traditions, values, activities, and businesses. Most of the population are immigrants, both documented and undocumented. It also is one of the most economically disadvantaged regions of the country and has a population with significant chronic disease burdens. It is designated as rural/partially rural, a High Needs Geographic Health Professional Shortage Area for mental health, and resident physicians are eligible for federal and state loan repayment [78]. Prior to this program, no psychiatry residencies existed in the RGV. Regional hospitals are primarily private, for-profit; and a select few have inpatient psychiatric units. Public institutions include a state psychiatric hospital, a community mental health system, and Veterans Affairs (VA) outpatient centers. A small number of psychiatrists and other mental health practitioners in the area are in private practice. UT Health Sciences Center at Houston School of Public Health (UTHSPH) runs outreach programs emphasizing community research, prevention, and early intervention for chronic disorders, including mental health conditions.

To map community needs, assets, and resources, the program director (PD) reached out to RGV providers, institutions, and leaders. A planning group with broad community representation developed program structure and content with a mission to create an educationally sound training that utilizes community strengths, addresses community needs, prioritizes collaboration, and produces competent psychiatrists focused on underserved areas within border

communities and providing care for individuals not qualifying for existing services. Design principles included (1) integration: physicians should learn from and work closely with a range of disciplines and specialties; (2) teamwork: medicine is a team activity; (3) continuity: trainees learn best from longitudinal experiences; (4) primary care: psychiatrists should be competent in basic outpatient medicine; (5) psychotherapy: psychiatrists should be skilled at psychotherapy; (6) advocacy: physicians should understand and navigate systems of care; (7) service: physicians should understand and be a part of the community they practice in; (8) academics: physicians should incorporate scholarship into practice; (9) core skills: physicians need to be competent in communication and technology use; and (10) prevention: physicians should be knowledgeable and skilled at prevention/early intervention. A priority was creating psychiatrists who are comfortable and effective working with a population significantly characterized by its rural, agricultural roots and proximity to the border with complicated cultural and socioeconomic influences.

CMS funding was not obtained because the eligible facilities had inadequate educational infrastructure and faculty with limited flexibility to alter their traditional model of care. By choosing to support educational experiences with non-federal funding, the program was freed to focus on developing and implementing mission-consistent experiences with the ability to incorporate non-income generating, non-hospital-based activities which were educationally sound and community relevant. Funding was obtained through Texas residency initiatives, Medicaid waiver program, legislative funding, state stipends, and private grants. Texas has developed significant state-based funding resources for new residency training through Medicaid Waiver programming in collaboration with the federal government as well as providing added funding through the state educational oversight agency. The psychiatry departmental chair was awarded a private foundation grant that included support for educational activities, and the PD received funding from the state office of mental health to support greater resident involvement in public mental health facilities. There was a

deliberate decision to locate all program clinical activities within existing community institutions with modifications as necessary to provide the desired educational experiences. This approach ensured that program personnel, finances, and other resources were focused on education; only activities which could not be provided by these agencies (e.g., didactics) were run by the residency/department. Unless funding for residents was already in place (i.e., VA), sites were not asked to pay for resident time and effort since other financing was available; there was a systematic accounting of the in-kind contributions being made which clearly demonstrated the monetary resources the clinical sites were providing. Based on early results with the program, additional state and private funding was acquired.

Key program components included are as follows:

- All rotations were in part-time, half-day longitudinal blocks with independent morning and afternoon assignments during all years of training. The goal was to maximize continuity and length of exposure as well as to acclimatize residents early to the multidimensional complexities of practicing psychiatry. In general, inpatient rotations occurred in the mornings with outpatient activities in the afternoons. Other than the training clinics, the services did not require the residents to run effectively.
- Inpatient services were organized so that all activities that the residents should participate in such as the morning report, patient staffing, and relevant group activities occurred when the residents were present.
- All outpatient primary care occurred within 12-month weekly clinics to foster competency in common medical disease management, with one weekly clinic providing medical care for severely psychiatrically ill adults.
- A four-year weekly psychotherapy training clinic was created with an accompanying hour of weekly off-site educational supervision and a four-year weekly psychotherapy didactic curriculum.
- A three-year weekly psychopharmacology training clinic was coordinated with a four-

year weekly somatic therapy didactic curriculum.

- Psychiatric and primary care clinics were co-located to promote collaboration during all years of training with systematic, embedded opportunities for informal and formal consultation across specialties.
- Public health rotation was created imbedding residents in community outreach/research activities with prevention focus.
- Electives were during the second year through fourth year with the opportunity for residents to develop a multiple year elective with their chosen focus.
- Videoconferencing was utilized to provide content experts to teach certain didactics.
- Telepsychiatry was used to provide services to remote rural populations.

Selection criteria for resident applicants emphasized interest in working within the community and with underserved populations in various collaborative, multidisciplinary settings. Applicants completed a secondary application describing their interest in the program and region. Much of the interview day was spent discussing the program philosophy and approach, as well as showing the residents the community and several of the participating institutions. While the population has many Spanish-speaking individuals, with most bilingual, fluency in Spanish was not screened for. The program's emphasis was on finding trainees who were motivated to learn how to work with individuals from different cultures and socioeconomic classes, possibly speaking different languages. There also was a priority of selecting applicants who were interested in program improvement, systems of care, and underserved populations. The program was filled with highly ranked applicants who performed well. Some major draws of the program were the longitudinal outpatient experiences in medicine, psychotherapy, and psychiatric practice; the community outreach public health activities; early electives; telepsychiatry; participation with the community in multiple forums; and the opportunity to systematically participate in program development. Feedback from the residents, fac-

ulty, educational partners, and the community was consistently positive with all viewing the residency as a valuable addition to the region.

The UTRGV psychiatry residency program had some significant advantages such as being based at a new medical school, having considerable support from the medical school leadership, being in a community eager to improve available psychiatric care, able to obtain significant state funding, and able to use existing mental health facilities within the community. These elements were used as a foundation to build the residency. Several components of the planning and implementation were key. The program had a mission that resonated with the community and fit with their priorities while focusing on education. Program leadership was able to describe how program needs and activities were necessary to produce a psychiatrist with attitude and practice characteristics that would benefit the community, contributing to improving the physical and mental health of the local citizens. The program developed the residency framework and activities utilizing existing resources and collaborated with local agencies to identify and advocate for additional ones that would benefit all. They sought out and interviewed multiple members of the community, both within and outside of the health-care systems. Having this vision facilitated the recruitment of faculty and residents who had interests and goals that were compatible. Being very clear and deliberate during recruitment about the importance of being part of the community and that the program was in the early stages of development selected for faculty, residents, and community partners who were interested in these types of activities. Faculty and residents valued being ambassadors for the program and contributing to improving the psychiatric case being provided.

Summary

Building and maintaining rural residencies is challenging yet nonetheless achievable. Key attitudinal factors are (1) not being constrained by what resources are already available; (2) priori-

tizing and being able to explain educational priorities; (3) systematically exploring all resources; (4) having a vision beyond the program that encompasses and enriches the involved community and includes future development; and (5) having a broad perspective on who can be involved and how they can participate in the program. Identifying current and potential resources, then connecting them with educational and community priorities is necessary to integrate the goals of physician retention and population health improvement in a rural area.

References

1. United States Census Bureau: Rural America. <https://arcg.is/OieX00>. 2017. Accessed 25 Aug 2021.
2. Ratcliffe M, Burd C, Holder K, Fields A. Defining rural at the US Census Bureau. American community survey and geography brief (ACSGEO-1), US Census Bureau, Washington DC. 2016;1(8).
3. Andrilla CHA, Patterson DG, Garberson LA, Coulthard C, Larson EH. Geographic variation in the supply of selected behavioral health providers. *Am J Prev Med*. 2018;54(6):S199–207.
4. Covino NA. Developing the behavioral health workforce: lessons from the states. *Adm Policy Ment Health Ment Health Serv Res*. 2019;46(6):689–95.
5. Gale J, Janis J, Coburn AF, Rochford H. Behavioral health in rural America: Challenges and Opportunities. Iowa City: Rural Policy Research Institute; 2019.
6. Olsen S, Anderson KM. Achieving rural health equity and well-being: proceedings of a workshop. Washington, D. C.: National academies press; 2018.
7. Beck AJ, Page C, Buche J, Rittman D, Gaiser M. Estimating the distribution of the US psychiatric subspecialist workforce. *Population*. 2018;600:47–6.
8. Weinhold I, Gurtner S. Understanding shortages of sufficient health care in rural areas. *Health Policy (Amsterdam)*. 2014;118(2):201–14. <https://doi.org/10.1016/j.healthpol.2014.07.018>.
9. Johnson GE, Wright FC, Foster K. The impact of rural outreach programs on medical students' future rural intentions and working locations: a systematic review. *BMC Med Educ*. 2018;18(1):196. <https://doi.org/10.1186/s12909-018-1287-y>.
10. Goodfellow GA, Ulloa TJ, Dowling TP, Talamantes TE, Chheda TS, Bone TC, et al. Predictors of primary care physician practice location in underserved urban or rural areas in the United States: a systematic literature review. *Acad Med*. 2016;91(9):1313–21. <https://doi.org/10.1097/ACM.0000000000001203>.
11. Baum N, King J. The behavioral health workforce in rural America: developing a National Recruitment Strategy. Ann Arbor: Center for Health Research Transformation, University of Michigan; 2020.
12. Blanchard J, Petterson S, Bazemore A, Watkins K, Mullan F. Characteristics and distribution of graduate medical education training sites: are we missing opportunities to meet U.S. Health Workforce Needs? *Acad Med*. 2016;91(10):1416–22. <https://doi.org/10.1097/ACM.0000000000001184>.
13. Parlier BA, Galvin LS, Thach BS, Kruidenier BD, Fagan BE. The road to rural primary care: a narrative review of factors that help develop, recruit, and retain rural primary care physicians. *Acad Med*. 2018;93(1):130–40. <https://doi.org/10.1097/ACM.0000000000001839>.
14. MacQueen IT, Maggard-Gibbons M, Capra G, Raen L, Ulloa JG, Shekelle PG, et al. Recruiting rural healthcare providers today: a systematic review of training program success and determinants of geographic choices. *J Gen Intern Med*. 2018;33(2):191–9.
15. Cuff PA, Hammers Forstg E, Rapporteurs, Education GFoliHP, Health BoG, Division HaM, et al. Health professions faculty for the future: proceedings of a workshop. The National Academies Press. Washington DC, 2021.
16. O'Sullivan BG, McGrail MR. Effective dimensions of rural undergraduate training and the value of training policies for encouraging rural work. *Med Educ*. 2020;54(4):364–74. <https://doi.org/10.1111/medu.14069>.
17. Asghari S, Kirkland MC, Blackmore J, Boyd SE, Farrell A, Rourke J, et al. A systematic review of reviews: recruitment and retention of rural family physicians. *Can J Rural Med*. 2019;25(1):20–30.
18. Holst J. Increasing rural recruitment and retention through rural exposure during undergraduate training: an integrative review. *Int J Environ Res Public Health*. 2020;17(17):6423. <https://doi.org/10.3390/ijerph17176423>.
19. Nelson W, Pomerantz A, Schwartz J. Putting “rural” into psychiatry residency training programs. *Acad Psychiatry*. 2007:423–9.
20. Ng B, Camacho A, Dimsdale J. Rural psychiatrists creating value for academic institutions. *Psychiatr Serv*. 2013;64(11):1177–8.
21. Hawes EM, Fraher E, Crane S, Weidner A, Wittenberg H, Pauwels J, et al. Rural residency training as a strategy to address rural health disparities: barriers to expansion and possible solutions. *J Grad Med Educ*. 2021;13(4):461–5. <https://doi.org/10.4300/jgme-d-21-00274.1>.
22. Gillig PM, Comer EA. A residency training in rural psychiatry. *Acad Psychiatry*. 2009;33(5):410–2. <https://doi.org/10.1176/appi.ap.33.5.410>.
23. Dewan M, Meszaros ZS, Manring J. Addressing the shortage of psychiatrists in rural areas. *Psychiatr Serv (Washington, DC)*. 2014;65(12):1508. <https://doi.org/10.1176/appi.ps.201400142>.
24. Cowley DS, Keeble T, Jones J, Layton M, Murray SB, Williams K, et al. Educating psychiatry residents to

- practice in smaller communities: a regional residency track model. *Acad Psychiatry*. 2016;40(5):846–9. <https://doi.org/10.1007/s40596-016-0558-3>.
25. Hawes EM, Weidner A, Page C, Longenecker R, Pauwels J, Crane S, et al. A roadmap to rural residency program development. *J Grad Med Educ*. 2020;12(4):384–7. <https://doi.org/10.4300/JGME-D-19-00932.1>.
 26. Chan CH, Gouthro R, Krall E, Lehrmann J. Starting rural psychiatric residencies: a case report and lessons learned. *Acad Psychiatry*. 2020;44(4):446–50. <https://doi.org/10.1007/s40596-020-01229-6>.
 27. Cook AF, Hoas H. Hide and Seek: the elusive rural psychiatrist. *Acad Psychiatry*. 2007;31(6):419–22. <https://doi.org/10.1176/appi.ap.31.6.419>.
 28. Nuss AM, Robinson FB, Buckley FP. A statewide strategy for expanding graduate medical education by establishing new teaching hospitals and residency programs. *Acad Med*. 2015;90(9):1264–8. <https://doi.org/10.1097/ACM.0000000000000803>.
 29. Guerrero AP, Balon R, Beresin EV, Louie AK, Coverdale JH, Brenner A, et al. Rural mental health training: an emerging imperative to address health disparities. *Acad Psychiatry*. 2019;43:1–5.
 30. U.S. Department of Health and Human Services HRaSA. A guide for rural health care collaboration. Rockville: U.S. Department of Health and Human Services; 2019.
 31. Lee M, Newton H, Smith T, Crawford M, Kopley H, Regenstein M, et al. The benefits of physician training programs for rural communities: lessons learned from the teaching health center graduate medical education program. *J Health Care Poor Underserved*. 2016;27(4):83–90. <https://doi.org/10.1353/hpu.2016.0184>.
 32. Longenecker R, Hawes EM, Page CP. Cultivating healthy governance in rural programs. *J Grad Med Educ*. 2021;13(2):174–6. <https://doi.org/10.4300/JGME-D-20-00825.1>.
 33. Alonso M, Jardon M, Pizarro M, Castellanos D, Aponte X, Esposito K, et al. The community value of academic psychiatry: the development of a psychiatry residency program in a federally qualified health center. *Acad Psychiatry*. 2018;42(4):572–7. <https://doi.org/10.1007/s40596-017-0724-2>.
 34. Arnett PK, Stratton TD, Weaver AD, Elam CL. University of Kentucky rural physician leadership program: a programmatic review. *J Reg Med Camp*. 2018;1(3)
 35. Liskowich S, Walker K, Beatty N, Kapusta P, McKay S, Ramsden VR. Rural family medicine training site proposed framework. *Can Fam Physician*. 2015;61(7):E324–E30.
 36. Mercier PJ, Skube SJ, Leonard SL, McElroy AN, Goettl TG, Najarian MM, et al. Creating a rural surgery track and a review of rural surgery training programs. *J Surg Educ*. 2019;76(2):459–68. <https://doi.org/10.1016/j.jsurg.2018.09.004>.
 37. Reardon CL, Factor RM, Brenner CJ, Singh P, Spurgeon JA. Community psychiatry tracks for residents: a review of four programs. *Commun Mental Health J*. 2014;50(1):10–6. <https://doi.org/10.1007/s10597-013-9661-z>.
 38. Donald S, Gale JA, Lambert D. Rural and frontier mental and behavioral health care: barriers, effective policy strategies, best practices. National Association of Rural Health. 2006.
 39. Maley M, Worley P, Dent J. Using rural and remote settings in the undergraduate medical curriculum: AMEE guide no. 47. *Med Teach*. 2009;31(11):969–83. <https://doi.org/10.3109/01421590903111234>.
 40. Worley PS, O'Sullivan B, Ellis R. From locum-led outposts to locally led continuous rural training networks: the National Rural Generalist Pathway. *Med J Aust*. 2019;211(2):57–9.e1. <https://doi.org/10.5694/mja2.50225>.
 41. Berntson A, Goldner E, Leverette J, Moss P, Tapper M, Hodges B. Psychiatric training in rural and remote areas: increasing skills and building partnerships. *Can J Psychiatry*. 2005;50(9):1.
 42. Association CM. Rural and remote practice issues. *Can Med Assoc J*. 2000;163(8):1047.
 43. Hustedde C, Paladine H, Wendling A, Prasad R, Sola O, Bjorkman S, et al. Women in rural family medicine; a qualitative exploration of practice attributes that promote physician satisfaction. *Rural Remote Health*. 2018;18(2):4355. <https://doi.org/10.22605/RRH4355>.
 44. Paladine HL, Hustedde C, Wendling A, Sola O, Prasad R, Bjorkman S, et al. The role of rural communities in the recruitment and retention of women physicians. *Women Health*. 2020;60(1):113–22.
 45. Phillips J, Hustedde C, Bjorkman S, Prasad R, Sola O, Wendling A, et al. Rural women family physicians: strategies for successful work-life balance. *Ann Fam Med*. 2016;14(3):244–51. <https://doi.org/10.1370/afm.1931>.
 46. Patterson D, Schmitz D, Longenecker R. Family medicine rural training track residencies: risks and resilience. *Fam Med*. 2019;51(8):649–56.
 47. Albanese AP, Bope ET, Sanders KM, Bowman M. The VA MISSION act of 2018: a potential game changer for rural GME expansion and veteran health care. *J Rural Health*. 2020;36(1):133–6. <https://doi.org/10.1111/jrh.12360>.
 48. AAMC. 2017 state physician workforce data report. Association of American Medical Colleges; 2017.
 49. Mui P, Gonzalez M, Eitz R. What is the impact on rural area residents when the local physician leaves? *Fam Med*. 2020;52(5):352–6.
 50. Haggerty TS, Fields SA, Selby-Nelson EM, Foley KP, Shrader CD. Physician wellness in rural America: a review. *Int J Psychiatry Med*. 2013;46(3):303–13. <https://doi.org/10.2190/PM.46.3.e>.
 51. Gardiner M, Sexton R, Kearns H, Marshall K. Impact of support initiatives on retaining rural general practitioners. *Aust J Rural Health*. 2006;14(5):196–201. <https://doi.org/10.1111/j.1440-1584.2006.00808.x>.
 52. Roberts LW, Battaglia J, Epstein RS. Frontier ethics: mental health care needs and ethical dilemmas in

- rural communities. *Psychiatric services* (Washington, DC). 1999;50(4):497–503. <https://doi.org/10.1176/ps.50.4.497>.
53. Walters L, Laurence CO, Dollard J, Elliott T, Eley DS. Exploring resilience in rural GP registrars—implications for training. *BMC Med Educ*. 2015;15(1):110. <https://doi.org/10.1186/s12909-015-0399-x>.
 54. Cohn TJ, Hastings SL. Building a practice in rural settings: special considerations. *J Ment Health Couns*. 2013;35(3):228–44. <https://doi.org/10.17744/mehc.35.3.12171572424wxhll>.
 55. Terry DL, Woo MJ. Burnout, job satisfaction, and work-family conflict among rural medical providers. *Psychol Health Med*. 2021;26(2):196–203. <https://doi.org/10.1080/13548506.2020.1750663>.
 56. Hayashi AS, Selia E, McDonnell K. Stress and provider retention in underserved communities. *J Health Care Poor Underserved*. 2009;20(3):597–604. <https://doi.org/10.1353/hpu.0.0163>.
 57. Malone JL. Challenges and rewards: the role of psychologists in rural and remote areas. In: Carey TA, Gullifer J, editors. *Handbook of rural, remote, and very remote mental health*. Singapore: Springer Singapore; 2020. p. 1–21.
 58. Marquez-Cunningham D, Lenherr E, Flynn E, Warner J, Zackula R, Cathcart-Rake W. Physician burnout in a rural Kansas community. *Kansas J Med*. 2019;12(4):109–16. <https://doi.org/10.17161/kjm.v12i4.13256>.
 59. Roberts LW, Battaglia J, Smithpeter M, Epstein RS. An office on main street: health care dilemmas in small communities. *Hast Cent Rep*. 1999;29(4):28–37. <https://doi.org/10.2307/3528064>.
 60. Waddimba AC, Scribani M, Krupa N, May JJ, Jenkins P. Frequency of satisfaction and dissatisfaction with practice among rural-based, group-employed physicians and non-physician practitioners. *BMC Health Serv Res*. 2016;16(1):613. <https://doi.org/10.1186/s12913-016-1777-8>.
 61. Warner TD, Monaghan-Geernaert P, Battaglia J, Brems C, Johnson ME, Roberts LW. Ethical considerations in rural health care: a pilot study of clinicians in Alaska and New Mexico. *Community Ment Health J*. 2005;41(1):21–33.
 62. Holloway P, Bain-Donohue S, Moore M. Why do doctors work in rural areas in high-income countries? A qualitative systematic review of recruitment and retention. *Aust J Rural Health*. 2020;28(6):543–54. <https://doi.org/10.1111/ajr.12675>.
 63. Mohammadiaghdam N, Doshmangir L, Babaie J, Khabiri R, Ponnet K. Determining factors in the retention of physicians in rural and underdeveloped areas: a systematic review. *BMC Fam Pract*. 2020;21(1):1–23.
 64. Warren N, Parker S, Khoo T, Cabral S, Turner J. Challenges and solutions when developing online interactive psychiatric education. *Australas Psychiatry*. 2020;28(3):359–62.
 65. Pond BR, Dalton LG, Disher GJ, Cousins MJ. Helping medical specialists working in rural and remote Australia deal with professional isolation: the support scheme for rural specialists. *Med J Aust*. 2009;190(1):24–7. <https://doi.org/10.5694/j.1326-5377.2009.tb02257.x>.
 66. Longenecker RL, Schmitz D, Pollack SW, Patterson DG. A design and dissemination studio: building a scholarly Community of Practice in rural health professions education and training. *J Health Care Poor Underserved*. 2020;31(4):9–17. <https://doi.org/10.1353/hpu.2020.0134>.
 67. Longenecker R, Schmitz D. Building a community of practice in rural medical education: growing our own together. *Rural Remote Health*. 2017;17:4195.
 68. Walsh A, Heeley T, Furlong B, Bethune C, Graham W, Asghari S. Rural health research capacity building: an anchored solution. *Rural Remote Health*. 2021;21(2):6162. <https://doi.org/10.22605/RRH6162>.
 69. Spencer J. Learning and teaching in the clinical environment. *BMJ*. 2003;326(7389):591–4.
 70. Erlich DR. Triangle method: teaching the student in front of the patient. *Acad Med*. 2019;94(4):605.
 71. El-Farargy N, Walker G. A line of defence: using stories in healthcare education. *Med Sci Educator*. 2017;27(4):805–14. <https://doi.org/10.1007/s40670-017-0482-5>.
 72. Stickrath C, Aagaard E, Anderson M. MiPLAN: a learner-centered model for bedside teaching in today's academic medical centers. *Acad Med*. 2013;88(3):322–7. <https://doi.org/10.1097/ACM.0b013e318280d8f7>.
 73. Hunt JI, Brannan EH, Hudziak VB. Adapting teaching to the clinical setting. *Psychiatr Clin North Am*. 2021;44(2):197–205. <https://doi.org/10.1016/j.psc.2020.12.003>.
 74. McGrail MR, O'Sullivan BG. Faculties to support general practitioners working rurally at broader scope: a National Cross-Sectional Study of their value. *Int J Environ Res Public Health*. 2020;17(13):4652. <https://doi.org/10.3390/ijerph17134652>.
 75. Shore JH, Thurman MT, Fujinami L, Brooks E, Nagamoto H. A resident, rural telepsychiatry service: training and improving care for rural populations. *Acad Psychiatry*. 2011;35(4):252–5. <https://doi.org/10.1176/appi.ap.35.4.252>.
 76. Sunderji N, Crawford A, Jovanovic M. Telepsychiatry in graduate medical education: a narrative review. *Acad Psychiatry*. 2015;39(1):55–62.
 77. Dingle AD, Fernandez F, de Erausquin GA. Developing a rural psychiatry training program on the Texas-Mexico border: a chance for innovation. *Community Ment Health J*. 2021; <https://doi.org/10.1007/s10597-021-00914-6>.
 78. Health Resources & Services Administration, HRSA Data Warehouse. <https://data.hrsa.gov/tools/shortage-area/hpsa-find>. Accessed 5 Jan 2019.



Concluding Remarks

28

Matthew Macaluso, L. Joy Houston, J. Mark Kinzie,
and Deborah S. Cowley

The field of psychiatry and thus graduate medical education (GME) in psychiatry are continually evolving. In this book, we have sought to provide an overview and practical guidance about core aspects of establishing, managing, and improving psychiatry GME programs from the perspective of experienced education leaders. Chapters have focused on basic processes such as accreditation, building an effective leadership team, recruitment, onboarding, curriculum, evaluation, managing performance issues, and on innovations, for example in competency-based assessment, enhancing diversity, equity, and inclusion, and also approaches to trainee and faculty well-being, mentoring, and professional development. In addition, several chapters have discussed leadership skills needed to innovate and respond to

change over time, such as negotiation, advocacy, and quality improvement skills.

As the editors, we have had the privilege of reviewing all the chapters and reflecting on the current state and future of graduate medical education in our field. What future challenges and opportunities do we see for psychiatry GME?

The United States faces an ongoing shortage of psychiatrists. We must educate enough psychiatrist clinicians, educators, and researchers to meet the nation's mental health needs, ensure sufficient faculty to train future generations, and develop the new treatments of the future. This requires funding for more GME positions, funding that is long-term and stable, and time and compensation for faculty to teach. Achieving these goals is a considerable challenge and will require advocacy and negotiation skills, as described by Drs. Oakman, Bassey, Sudak, and their colleagues in this book. As part of such advocacy, we need to demonstrate the value of psychiatry, for example, by measuring patient care outcomes and by defining the unique contributions of psychiatrists.

Educating a diverse psychiatrist workforce is crucial to meet the needs of our patients and communities. This includes training residents and fellows from underrepresented groups as well as those with a commitment to working with underserved populations, for example, those in lower socioeconomic, rural, community mental health, and correctional settings. The chapters in this

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book by Drs. Adams, Dingle, Khan, and their colleagues discuss ways to recruit such trainees and help them thrive. Enhancing the diversity of our workforce also requires strong pipeline programs beginning at the undergraduate level or earlier.

Over the past 20 years, there has been growing recognition of the importance of the well-being of residents and fellows, with development of ACGME requirements about duty hours, supervision, and, more recently, individual well-being and support. In addition, trainees and faculty increasingly seek a sustainable career with a balance between their professional and personal lives. The chapters by Drs. Anzia, Gray, Soller, Pellegrino, and Czelusta and their colleagues discuss ways to promote a positive learning environment, well-being of trainees and faculty, mentoring to help trainees find meaning and progress in their careers, faculty development, and a positive, growth-oriented approach to managing performance problems. In addition, turnover of program directors (PDs) is frequent, with the average time as a psychiatry PD being about 4 years. There is a small, nascent literature about reasons for the high rate of PD turnover across specialties and a need for increased focus on the role and well-being of psychiatry PDs.

Psychiatry GME programs need to prepare residents and fellows for evolving forms of psychiatric practice. The shortage of psychiatrists and increasing numbers of advanced practice providers (APPs) make it essential that trainees gain robust interprofessional education to prepare them to work in and lead multidisciplinary teams. Interprofessional education and teamwork are discussed in the chapter by Dr. Lundquist and colleagues and promise to be increasingly important in psychiatry GME in the future. Psychiatry residents and fellows also need collaborative care, integrated care, and telepsychiatry training. Skills in collaborative or other forms of integrated care allow psychiatrists to leverage their time and expertise, helping primary care clinicians care for the many people with mental health problems who see them rather than a psychiatrist.

We have seen a dramatic rise in the use of telepsychiatry with the COVID-19 pandemic. This form of care allows us to reach people who otherwise cannot access care, for example, people in remote or rural areas. Advances in technology offer much promise for the future, and it is unclear what the future may hold. The use of online asynchronous learning, treatment apps, texting support, virtual reality, artificial intelligence, and machine learning for diagnostic, treatment, and training purposes has the potential for rapid growth. Programs will need to keep abreast of developments in how psychiatry is practiced and will need to build didactic and clinical experiences to prepare residents and fellows to utilize these new tools best.

Programs will continue to teach trainees research literacy and how to teach, while preparing some to be career researchers and educators. These important topics are addressed in the chapters by Drs. Kraguljac et al. and Dr. Broquet. An ongoing and future challenge for GME programs is incorporating evidence-based educational methods, constantly adapting to the needs of new generations of learners. This requires continual program-level quality improvement and periodic curriculum revision to ensure the use of evidence-based pedagogy, assessment methods, and faculty development. In addition, curricula need to keep up with advances in the field, for example, in neuroscience, genetics, drug development, diagnostic tools, and evidence-based psychotherapies. Many of the chapters in this book have emphasized the national curriculum resources available through psychiatric education and specialty organizations. Curriculum sharing between programs and on a national level is likely to be increasingly important in ensuring an up-to-date curriculum.

Drs. Klisz-Hulbert and Kumar address the crucial topic of preparing psychiatry residents for fellowships. There has been much discussion about challenges in recruitment to subspecialty fellowships and the mismatch between the growing needs of the U.S. population versus the number of fellows, especially in addiction, child and

adolescent, and geriatric psychiatry. This is an ongoing and important dilemma for our field and one that is likely to grow more pressing in the future. There have been proposals to accelerate entry into fellowships (e.g., during the PGY-4 year). It seems clear that we will need to assess how to ensure that psychiatry graduates have sufficient training in these areas to address population needs, while also maintaining training of subspecialty experts to serve as consultants, educators, and researchers. In addition, there may be areas of sub-specialization in psychiatry that

will merit more emphasis in general psychiatry programs or as independent fellowships.

In conclusion, GME programs are crucial in preparing psychiatrists to deliver high-quality clinical care, educate the next generation of practitioners, and conduct research to further the field. We hope that this book has helped by describing foundational elements of starting and managing a psychiatry GME program and by pointing to areas of innovation and potential future growth.

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