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Introduction

Many terms have been used to describe approaches to incorporating mental health care in primary care settings including collaborative care, primary care behavioral health, embedded care, and shared care. This has created confusion over what constitutes integrated behavioral health care. To resolve this confusion, Peek and colleagues developed a lexicon that defines integrated behavioral health care (IBH) as “the care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population” [1]. In addition to addressing mental health needs of patients in primary care, many IBH approaches focus on intervening with stress-related physical illness, behaviors contributing to unhealthy lifestyles, adherence issues, and ineffective use of emergency and hospital-based health-care services. The authors of the lexicon also created a “family tree” of inter-related terms that are used when describing the integration of behavioral health and primary care (Fig. 29.1).

The IBH movement gained momentum in the late 1980s due to growing recognition that a fragmented system of care, where the care of the body and the mind are artificially separated, was not meeting the needs of patients, especially those with chronic conditions. While almost half of adults and more than a quarter of adolescents experience a mental illness or substance use concern [2, 3], the majority of individuals with behavioral health disorders do not receive treatment [4, 5]. The reasons for this are complex and include lack of identification of the disorder, stigma about receiving mental health treatment, and lack of access to care. Many individuals may not seek treatment from a behavioral health professional (BHP) but are comfortable visiting their medi-

cal provider, making primary care practices well poised to identify behavioral health treatment needs. Twenty percent of primary care visits are mental health related [6], 59% of psychotropic medications are prescribed by primary care clinicians [7], and most patients with depression who do seek treatment reach out to their primary care provider first.

Moving Toward Integrated Care

In addition to the desire to address unmet behavioral health treatment needs, there are other reasons that integrated behavioral health programs are being developed, tested, and disseminated.

Interplay of Emotional and Physical Health

Mental health disorders, specifically depression and anxiety, are among the top five chronic conditions contributing to overall health-care costs in the United States [8]. Individuals with mental illness have higher rates of chronic disease including cardiovascular disease, asthma, diabetes, and cancer resulting in a life expectancy up to 30 years less than adults without serious mental illness [9]. Many chronic conditions are impacted directly and indirectly by emotional well-being and behavioral issues. Integrating behavioral health care within a primary care setting allows for increased opportunity for patient engagement in his or her own health care and skill building with health behavior change.

Removing Barriers to Care

The stigma felt by individuals who seek mental health treatment is significant. A national survey showed that only 57% of adults without mental health concerns and 25% of adults who have mental health symptoms believe that people are sympathetic toward individuals who have mental illness [10].

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Illustration: A family tree of related terms used in behavioral health and primary care integration

See glossary for details and additional definitions

Integrated Care

Tightly integrated, on-site teamwork with unified care plan as a standard approach to care for designated populations. Connotes organizational integration involving social & other services. "Attitudes" of integration: 1) Integrated treatments, 2) integrated program structure; 3) integrated system of programs, and 4) integrated payments. (Based on SAMHSA)

Patient-Centered Care

"The experience (to the extent the informed, individual patient desires it) of transparency, individualization, recognition, respect, dignity, and choice in all matters, without exception, related to one's person, circumstances, and relationships in health care"—or "nothing about me without me" (Berwick, 2011).

Coordinated Care

The organization of patient care activities between two or more participants (including the patient) involved in care, to facilitate appropriate delivery of healthcare services. Organizing care involves the marshalling of personnel and other resources needed to carry out required care activities, and often managed by the exchange of information among participants responsible for different aspects of care" (AHRQ, 2007).

Shared Care

Predominately Canadian usage—PC & MH professionals (typically psychiatrists) working together in shared system and record, maintaining 1 treatment plan addressing all patient health needs. (Kates et al, 1996; Kelly et al, 2011)

Collaborative Care

A general term for ongoing working relationships between clinicians, rather than a specific product or service (Doherty, McDaniel & Baird, 1996). Providers combine perspectives and skills to understand and identify problems and treatments, continually revising as needed to hit goals, e.g. in collaborative care of depression (Unützer et al, 2002)

Co-located Care

BH and PC providers (i.e. physicians, NP's) delivering care in same practice. This denotes shared space to one extent or another, not a specific service or kind of collaboration. (adapted from Blount, 2003)

Integrated Primary Care or Primary Care Behavioral Health

Combines medical & BH services for problems patients bring to primary care, including stress-linked physical symptoms, health behaviors, MH or SA disorders. For any problem, they have come to the right place—"no wrong door" (Blount). BH professional used as a consultant to PC colleagues (Sabin & Borus, 2009; Haas & deGruy, 2004; Robinson & Reiter, 2007; Hunter et al, 2009).

Behavioral Health Care

An umbrella term for care that addresses any behavioral problems bearing on health, including MH and SA conditions, stress-linked physical symptoms, patient activation and health behaviors. The job of all kinds of care settings, and done by clinicians and health coaches of various disciplines or training.

Patient-Centered Medical Home

An approach to comprehensive primary care for children, youth and adults—a setting that facilitates partnerships between patients and their personal physicians, and when appropriate, the patient's family. Emphasizes care of populations, team care, whole person care—including behavioral health, care coordination, information tools and business models needed to sustain the work. The goal is health, patient experience, and reduced cost. (Joint Principles of PCMH, 2007).

Mental Health Care

Care to help people with mental illnesses (or at risk)—to suffer less emotional pain and disability—and live healthier, longer, more productive lives. Done by a variety of caregivers in diverse public and private settings such as specialty MH, general medical, human services, and voluntary support networks. (Adapted from SAMHSA)

Substance Abuse Care

Services, treatments, and supports to help people with addictions and substance abuse problems suffer less emotional pain, family and vocational disturbance, physical risks—and live healthier, longer, more productive lives. Done in specialty SA, general medical, human services, voluntary support networks, e.g. 12-step programs and peer counselors. (Adapted from SAMHSA)

Primary Care

Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community. (Institute of Medicine, 1994)

Thanks to Benjamin Miller and Jürgen Unützer for advice on organizing this illustration

Fig. 29.1 Family tree of related terms used in behavioral health and primary care integration (Permission from Peek CJ and the National Integration Academy Council [1]. Available at <http://integrationacademy.ahrq.gov/sites/default/files/Lexicon.pdf>)

Stigma toward individuals with mental illness is prevalent among medical students and other health-care providers [11]. Seventy percent of individuals with a behavioral health concern would not access services in a mental health treatment organization that is separate from their primary source of medical care [4]. When mental health treatment is integrated into primary care rather than separated, the stigma of receiving mental health care may be reduced.

Both adults and youth from ethnic minority populations receive less care for mental health concerns than Caucasians [12–14]. This is linked to less willingness to use mental health-care services as well as gaps in cultural awareness among mental health-care providers. Behavioral concerns among minority youth often result in disciplinary action from schools or incarceration rather than treatment [14]. Integrated behavioral health-care models, particularly collaborative care models, reduce these disparities [15].

Improving Access and Continuity

Patients often struggle to access mental health treatment due to lack of awareness or unavailability of resources within their community and payment barriers. A common access point to the complicated US health-care system is via pri-

mary care, making it strategically poised to facilitate both medical and mental health care. Individuals needing mental health care may be more likely to consider behavioral health services when provided in the context of a primary care practice where the setting and providers are familiar.

In traditional care settings, primary care clinicians and mental health providers may have different treatment goals for the same patient and may have limited communication with each other due to logistical issues and strict state confidentiality laws governing mental health care. Integrated care allows for continuity and collaboration on treatment plans for patients since communication within a team is not limited by state confidentiality laws in the same manner as between practitioners who are not in the same practice.

Improving Outcomes at Reduced Cost

A significant proportion of patients have chronic comorbid mental and physical health conditions with substantially higher total medical health-care costs than the general population [16]. Integrating care reduces total health-care costs and improves outcomes for patients and providers, which will be discussed later in this chapter. Given these and other benefits of IBH, the American Academy of Family Physicians

recommends co-location of mental health services in primary care settings [17] and has issued principles for integrating behavioral health into patient-centered medical homes (PCMH) [18]. The Institute of Medicine (IOM), Agency for Healthcare Research and Quality (AHRQ), Patient-Centered Primary Care Collaborative [19], and multiple other state agencies have also endorsed IBH as a critical element in the transformation of our current health-care system.

Models of Integrated Behavioral Health Care

There are a multitude of ways that practices integrate behavioral health care including co-located care, consultation models involving telepsychiatry or web-based services, and team-based collaborative care. The different models fall on a spectrum based on the level of integration (from co-location of care to fully integrated engagement of a team of providers), on program structure (from very loose to highly structured using treatment protocols and clinical measures to evaluate clinical effectiveness), and on intensity of behavioral health services offered (from screening and brief intervention to ongoing therapy and psychiatry services). On the most basic level, integrated care may involve co-locating a behavioral health professional in a primary care setting. This BHP may provide consultation to medical providers, conduct brief interventions following a “warm handoff” from a primary care clinician (PCC), and/or provide ongoing therapy services for a small proportion of practice patients. The level of integration of the care in the *co-located care model* can vary a great deal from practice to practice.

Telepsychiatry involves the delivery of mental health services via videoconferencing technology. This mode of care has been used to expand access to mental health services in rural areas, to locations where mental health treatment is not easily accessible, and to populations where language barriers may limit access to care. Telepsychiatry is also used directly in primary care settings and allows the PCC to conference directly with a mental health professional, usually a psychiatrist, for case review, diagnostic clarification, and pharmacological treatment recommendations. In some models the BHP performs a brief assessment and recommends interventions via videoconferencing while the patient is in the exam room at the primary care practice. The Veterans Administration is one large health-care organization that has utilized telepsychiatry to enhance access to care for patients.

Collaborative care is the most widely studied and distributed integrated care model and is based on the principles of Wagner and colleagues’ chronic care model [20]. Well-known depression collaborative care programs include the Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) [21] developed at the AIMS Center of the University of Washington, the Depression Improvement

Across Minnesota, Offering a New Direction (DIAMOND) program [22], and the Veterans Affairs system [23].

Expert consensus has identified four essential elements of the collaborative care model including care that is (1) team-driven, (2) population-focused, (3) measurement-guided, and (4) evidence-based [24]. Team-based care includes primary care physicians/clinicians (PCP/PCC), care managers, a consulting psychiatrist, nurses, and office staff. Most research has been conducted on programs where the team focus is on the PCC, care manager, and consulting psychiatrist. The care manager role may be fulfilled by a social worker, nurse, psychologist, or other mental health professional. The PCC typically identifies the mental health need in a patient and continues to oversee the care. The care manager conducts comprehensive assessment, provides brief evidence-based interventions (motivational interviewing, problem-solving therapy, brief cognitive behavioral therapy, behavioral activation, etc.), actively engages the patient through frequent phone outreach, and coordinates care among team members.

In collaborative care models, the focus is on provision of care for a defined population, and registries are used to track patient progress and outreach efforts to ensure that no one “falls through the cracks.” Treatment progress and response is closely measured through the use of standardized illness-specific measures such as the Patient Health Questionnaire-9 (PHQ-9) for depression and the Generalized Anxiety Disorder-7 (GAD-7) score. The care manager facilitates any needed referrals and treatment with other resources such as community mental health centers and substance use treatment centers. When patients do not respond to treatment, a psychiatrist may be consulted by the team and may meet with the patient. The psychiatrist may also regularly review the team caseload and make recommendations regarding treatment plans. Figure 29.2 illustrates the roles of various members of a collaborative care team.

The goal of treatment in a collaborative care model is to “treat-to-target,” meaning that treatment is continuously modified until specific treatment outcome measures are achieved (typically measured with standardized tools such as the PHQ-9 and GAD-7) [25]. The DIAMOND model, for example, considers a “response” as a 50% or greater decrease in PHQ-9 score from baseline at 6 months, and remission is defined as a PHQ-9 score of less than 5 at 6 months. Under the IMPACT model, if the patient has not had at least a 50% improvement in symptoms using a validated measure, the treatment plan is modified every 10–12 weeks.

In addition to treatment response, other metrics are often monitored in collaborative care models including process measures such as access times, cost savings factors (e.g., emergency room visits and hospitalizations), and caregiver and patient satisfaction.

Collaborative Care Team Structure

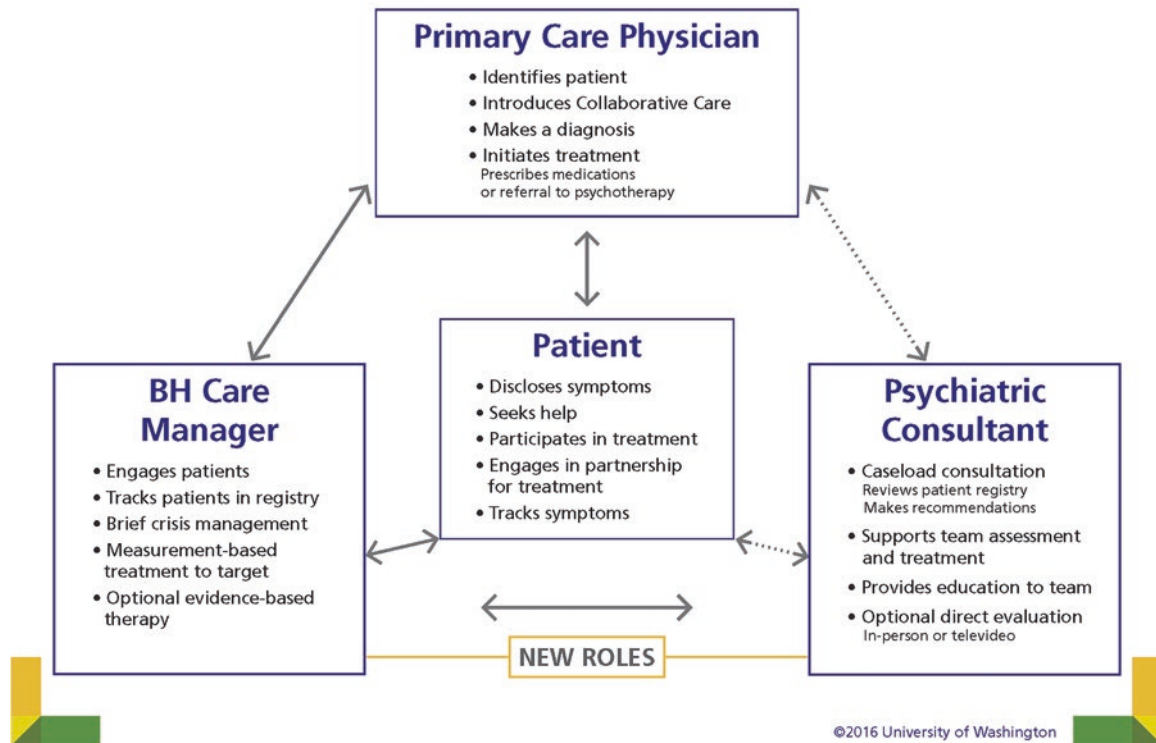


Fig. 29.2 Collaborative care model (Reprinted with permission from The University of Washington)

Historically, collaborative care models for mental health concerns were disease specific, focusing commonly on depression and anxiety. With strong evidence for improved outcomes, additional models have been developed. Re-Engineering Systems of Primary Care Treatment of PTSD and Depression in the Military (RESPECT-MIL) is an initiative within the US Army to improve identification and treatment of service members with depression and post-traumatic stress disorder (PTSD) [26]. The Screening, Brief Intervention, and Referral to Treatment (SBIRT) model is an evidence-based intervention to identify patients with substance use concerns. Identified patients are offered brief interventions, usually by the PCC, and referred for treatment depending on the severity of the substance use concern [27]. Another model, Primary Care Research in Substance Abuse and Mental Health for Elderly (PRISM-E), targets older adults with at-risk alcohol use [28]. Integrated behavioral health is also expanding to pediatric populations [29] and higher risk patients with substantial disease burden. The Care of Mental, Physical and Substance Use Syndromes (COMPASS) program, for example, uses an evidence-based collaborative

care management model for patients with depression and diabetes and/or cardiovascular disease [30].

Implementation Strategies and Considerations

Developing and implementing an integrated behavioral health program within primary care can be daunting, but several resources can facilitate the process:

- The “Integration Playbook” – an online, interactive guide for integrating behavioral health in ambulatory care developed by the Academy for Integrating Behavioral Health and Primary Care (AHRQ) (<https://integrationacademy.ahrq.gov/playbook/about-playbook>).
- *The Organized, Evidence-Based Care: Behavioral Health Integration Guide* and the *GROW Pathway Planning Worksheet* [31] developed by the Safety Net Medical Home Initiative are available online at <http://www.safetynetmedicalhome.org/change-concepts/organized-evidence-based-care/behavioral-health>.

- *Quick Start Guide to Behavioral Health Integration* developed by SAMHSA-HRSA Center for Integrated Health Solutions (<https://www.thinglink.com/channel/622854013355819009/slideshow>).
- SAMHSA also has a general listing of other integration tools available on their integrated behavioral health-care website <http://www.samhsa.gov/children/behavioral-health-care-integration-resources>.

Understanding how to translate IBH models, developed and evaluated as part of randomized controlled trials, to community primary care practices has been a challenge in expanding integrated care nationally. The Advancing Care Together (ACT) program examined methods for integrating care within “real-world” primary care settings [32]. By longitudinally studying the implementation approaches within 11 practices (9 were primary care practices and 2 were behavioral health agencies) over the course of 3 years, ACT identified key strategies and challenges that impact the success of the implementation of IBH. The results of ACT showed that successful integration involves more than adding BHPs and establishing screening protocols and must address critical changes in organizational process and interprofessional relationships. Challenges common among the practices were linked to three common themes – engaging leadership and culture change, workflow and access, and tracking and using data in meaningful ways. The ACT study has been expanded to include eight additional practices [the Integration Workforce Study (IWS)], and the lessons learned from the implementation processes across these practices have been published by the *Journal of the American Board of Family Medicine* [32–39]. Another study of organizations that have successfully integrated behavioral health and primary care identified common key characteristics including support and vision from influential leadership, a focus on vulnerable populations, community-wide collaborations, team-based care including the patient and family, data-driven decisions, and diverse funding streams [40]. The following sections outline some of these basic considerations for developing an integrated behavioral health-care program.

Mission and Vision

In order to guide the transformation process, it is critical that practices develop a shared mission and clear vision for the integration of care. This provides focus and a shared understanding of the goals and enhances commitment among all involved. The mission and vision need to specify the scope of the population that the program is designed to address. For example, will all adult patients be screened for depression, or will the program prioritize screening and intervention among high-risk/high-utilizing patients? The mission and vision also need to address the scope of care that will be offered within the practice.

Staffing and Training

Another critical component in the successful transformation to an integrated care system is building strong interdisciplinary teams. Mutual respect, collaboration, and a willingness to modify traditional care roles, including a shift from the traditional hierarchy of medical practice, are necessary for the success of IBH. Strong interdisciplinary teams require flexibility and an appreciation of the roles and skills that each team member brings to patient care. Given that primary care clinicians and behavioral health professionals have traditionally trained in silos with different languages, culture, and ways of conceptualizing patient care, special attention needs to be given to orienting and training all care team members to work in integrated care settings.

Behavioral health professionals need to learn to adapt traditional assessment and therapy models to brief, solution-focused interventions with limited time spent on assessment. BHPs also need to function outside of the traditional 50 min hour and consider intervention strategies that work within the busy pace and workflow of a medical practice. This can be a substantial cultural shift for mental health providers. A foundation in the interplay of physical illness and emotional well-being, knowledge of common chronic health-care conditions, and knowledge of medical culture is also essential for BHPs to be successful in primary care settings [41]. The American Psychological Association Interorganizational Work Group on Competencies for Primary Care Psychology Practice has delineated six competency domains with associated essential components for behavioral scientists practicing in primary care [42]. These include competency in science related to the biopsychosocial approach, research and evaluation, leadership and administration, interdisciplinary systems, advocacy, and practice management. Additional clinical skills in assessment, intervention, clinical consultation, as well as supervision and teaching are also included. Although more training is now available for BHPs in integrated care models, finding providers able and eager to work in primary care settings continues to be a challenge [35].

Primary care clinicians need to be able to screen patients for common mental health concerns (i.e., depression, anxiety, substance use issues) and recognize variations in signs and symptoms of mental health concerns across the life spectrum. Without standardized screening processes, depression, for example, goes undetected in greater than 50% of primary care patients [43]. Also, PCCs need to be able to consider when and how best to involve a BHP in a patient’s care. This includes developing strategies for effectively introducing the BHP to the patient and communicating needs efficiently to the BHP. Nine shared competency domains for PCCs and BHPs working in integrated systems are described in Table 29.1 [44].

Table 29.1 Specific competencies by category [44]

I. Interpersonal communication
<i>The ability to establish rapport quickly and to communicate effectively with consumers of health care, their family members, and other providers</i>
Examples include active listening; conveying information in a jargon-free, nonjudgmental manner; using terminology common to the setting in which care is delivered; and adapting to the preferred mode of communication of the consumers and families served
II. Collaboration and teamwork
<i>The ability to function effectively as a member of an interprofessional team that includes behavioral health and primary care providers, consumers, and family members</i>
Examples include understanding and valuing the roles and responsibilities of other team members, expressing professional opinions and resolving differences of opinion quickly, providing and seeking consultation, and fostering shared decision-making
III. Screening and assessment
<i>The ability to conduct brief, evidence-based, and developmentally appropriate screening and to conduct or arrange for more detailed assessments when indicated</i>
Examples include screening and assessment for risky, harmful, or dependent use of substances; cognitive impairment; mental health problems; behaviors that compromise health; harm to self or others; and abuse, neglect, and domestic violence
IV. Care planning and care coordination
<i>The ability to create and implement integrated care plans, ensuring access to an array of linked services, and the exchange of information among consumers, family members, and providers</i>
Examples include assisting in the development of care plans, whole health, and wellness recovery plans; matching the type and intensity of services to consumers' needs; providing patient navigation services; and implementing disease management programs
V. Intervention
<i>The ability to provide a range of brief, focused prevention, treatment and recovery services, as well as longer-term treatment and support for consumers with persistent illnesses</i>
Examples include motivational interventions, health promotion and wellness services, health education, crisis intervention, brief treatments for mental health and substance use problems, and medication-assisted treatments
VI. Cultural competence and adaptation
<i>The ability to provide services that are relevant to the culture of the consumer and their family</i>
Examples include identifying and addressing disparities in health-care access and quality, adapting services to language preferences and cultural norms, and promoting diversity among the providers working in interprofessional teams
VII. Systems-oriented practice
<i>The ability to function effectively within the organizational and financial structures of the local system of health care</i>
Examples include understanding and educating consumers about health-care benefits, navigating utilization management processes, and adjusting the delivery of care to emerging health-care reforms
VIII. Practice-based learning and quality improvement
<i>The ability to assess and continually improve the services delivered as an individual provider and as an interprofessional team</i>
Examples include identifying and implementing evidence-based practices, assessing treatment fidelity, measuring consumer satisfaction and health-care outcomes, recognizing and rapidly addressing errors in care, and collaborating with other team members on service improvement
IX. Informatics
<i>The ability to use information technology to support and improve integrated health care</i>
Examples include using electronic health records efficiently and effectively; employing computer and web-based screening, assessment, and intervention tools; utilizing telehealth applications; and safeguarding privacy and confidentiality

Practice staff (nurses, medical assistants, etc.) need to have skills in facilitating screening for mental health concerns, interpersonal skills to respond effectively when emotional issues are discussed, and communication skills to facilitate warm handoffs to the providers.

As new staff join the team, orientation and training should help them understand the goals, processes, and cultural expectations involved in integrated care. This can involve shadowing different members of the team, reviewing training manuals that describe the mission and vision, and reviewing the standardized protocols and workflows that support IBH. These efforts solidify an organization's conceptualiza-

tion and commitment to IBH. Ongoing education and mentoring further facilitates the maturation of a truly integrated care system [35].

The actual staffing model varies depending on the size of the practice and the agreed-upon role of the BHP. In the ACT and IWS practices, staffing ratios varied from one BHP working with anywhere from 1 to 36 PCCs. In practices where the IBH model involved warm handoffs and immediate brief interventions, the staffing ratios were one BHP to two to six PCCs. These practices also employed multiple BHPs so that coverage was available during high demand times and vacations. In practices where IBH followed a

model of internal referral for scheduled brief therapy interventions, the staffing ratio was one BHP to three to five PCCs, but this did not allow for much flexibility for same day care handoffs between providers.

Workflow

Successful IBH practices create processes that meet the patient care needs at the time of care. A model of *consulting, coordinating, and collaborating* has been described as a flexible approach toward IBH in a team setting [34]. *Consulting* is defined as “a care team member with specific professional expertise or experience seeking advice or input from another clinician with different professional expertise or experience in the context of providing patient care.” This involves corroborating perceptions of patient needs and validating care plans. *Coordinating* involves “two or more clinicians working in a parallel back-and-forth fashion to care for the same patient, delivering care to the patient in a manner that has the same goal yet is accomplished independent of the other clinician.” Practical issues such as finding the BHP in the building, the briefing process regarding patient needs, timing of treatment suggestions, debriefing following any interventions, and planning next steps are needed to successfully implement the coordination of care. *Collaborating* means “two or more professionals interacting in real time to discuss a patient’s presenting symptoms, describe their views on treatment, and jointly developing a care plan.” This may involve the care professionals meeting at the same time with the patient. Collaborating is distinguished from coordinating when both care professionals share their understanding to come to an agreement of the patient’s needs and treatment plan.

As practices develop their model for IBH, attention needs to be paid to workflow. Developing standardized practice protocols facilitate clarity and process consistency. These protocols should cover screening, communication expectations, treatment guidelines, and referral considerations. Practices need to consider what behavioral health screening to use, the frequency of use, who will be screened, and which staff will administer and score the screening tools. Having a systematic approach to screening helps to identify patients needing service as well as inform the practice on population-based mental health needs. Practices will need to decide on the mental health needs that are feasible to address, however. Full population-based screening for many mental health problems could easily overwhelm the resources available to respond to the identified needs.

Commonly used screening tools in primary care settings include the Patient Health Questionnaire (PHQ-2, PHQ-9) and Edinburgh Postnatal Depression Scale (EPDS) to screen

for depression. The Generalized Anxiety Disorder-7 (GAD-7) scale is often used to screen for anxiety disorders, and the Alcohol Use Disorders Identification Test (AUDIT), CAGE questions, and Drug Abuse Screening Test (DAST) are used to screen for substance use concerns. Many of these tools have modified versions appropriate for use with adolescents. The Modified Checklist for Autism in Toddlers-Revised (M-CHAT-R) is used for screening for autism spectrum disorders. Tools such as the Ages and Stages Questionnaire and Parents’ Evaluation of Developmental Status (PEDS) Milestone questionnaires are used to assess achievement of expected developmental milestones. These tools are designed for the patient or a parent to complete rather than the provider. This is an important consideration, given that provider ratings can be biased and may miss worsening of symptoms [45]. Tools need to be reliable and sensitive for the population, easy for patients to complete, and simple for staff to score and interpret. These tools must be available in the moment and useful in clinical decision-making. Protocols should be developed regarding how often the measure is administered and what results indicate that treatment is effective versus needing to be modified.

Care Pathways

Practices need to develop care pathways that include coordination of care that take into account the level of care needed to address the behavioral health of the patient. Practices with in-house BHP may use “warm handoffs” where the PCC introduces the patient to the BHP at the time of the visit with the resultant provision of an immediate brief intervention and introduction to IBH services. The care pathways may also involve referral for longer-term or more intense mental health and/or substance use treatment. Developing relationships with community providers, mental health centers, crisis centers, and inpatient psychiatric facilities helps to create a continuity of care for the patient, particularly if the relationships with these external providers include clear expectations about coordination of care and communication of treatment plans and progress.

Workspace Design

Practices need to consider the logistics of workflow and usage of space. Having workspace for behavioral health team members centralized so that the BHP is visible and easily accessed by all practice members facilitates real-time communication and the integration of behavioral health care. Shared or centralized workspace also increases the likelihood of “curbside” consultations and the development of

robust interpersonal working relationships. The advantages of the centralization of workspace must be balanced with the need for privacy at times. Practices should consider if the BHPs will see the patient in the exam room or transition to another space to minimize disruption to the clinician's work flow. There are advantages and disadvantages of different practices regarding space in the clinic. When the BHP meets the patient in the exam room, this can normalize the process for the patient, make it feel like a regular part of patient care, and facilitate follow-up with the PCC who may have moved on to see another patient. However, seeing the patient in the exam room means the room is in use for a longer duration of time, delaying staff's ability to room additional patients. If the BHP is not located in the same area as the medical team, there must be reliable communication between the providers, typically via an electronic health record (EHR).

Schedules

The design of the schedule for the behavioral health professional will influence his or her availability and flexibility regarding patient needs. The ability to quickly access the BHP at the time of need greatly impacts the success and level of integration. In some models, the BHP has no scheduled follow-up visits outside of a return visit with the PCC. In other models, the schedule has a mix of available consultation times interspersed with brief scheduled follow-up appointments, usually 20–30 min, which are aligned with the clinic schedule. Time for making follow-up phone calls for outreach and treatment monitoring is needed for practices that implement a population management approach.

Communication

Clear communication processes are essential for the success of IBH. Communicating impressions and treatment plans through the shared EHR has the advantage of being easy, reducing duplication of documentation, and data consolidation. It should be clear where within the EHR the BHP will document, i.e., within the same note as a physician or a separate note. There should be strategies on how to communicate and collaborate on shared treatment plans. Standardized templates for documenting care can facilitate communication among team members. There are some challenges with shared EHRs, and most EHR systems are not designed with behavioral health-care documentation standards and regulations in mind. Practices may need to create processes that ensure clear communication within the HER that is accessible, meaningfully enhances patient care, and meets regulatory and billing requirements for medical and behavioral

health care. An additional consideration for documentation of behavioral health care within an integrated and shared EHR is how to maintain standards of confidentiality and privacy that in some states are stricter than federal HIPPA privacy rules.

A standard process that defines the triggers for a provider to provider "warm handoff" and what should be communicated during that time facilitates integrated care for the patient. Interdisciplinary preclinic huddles, where the team meets to review the clinic schedule and identify possible patient care needs in advance, and complex care team meetings also improve care for the patient and foster collaboration and ongoing training for team members. Finally, it helps to have an understanding among team members regarding the practice of care professionals interrupting each other, particularly when care team members are providing service to other patients.

Practice Improvement

Registries to track patients and monitor program metrics are a critical element in collaborative care models. Successful programs use data and quality metrics to respond to patient needs and enhance the overall program. As practices systematically collect patient-level data tied to behavioral health and other outcomes, they must consider how to use and manage the information. Some EHR systems have the ability to access data over time (i.e., PHQ-9 scores, GAD-7, HbA1c, blood pressure, etc.) and can collate this into reports that measure and track patient-specific health targets. This data can be used to monitor individual treatment response, identify patients who have not been engaged in care for a specified period of time, and inform and evaluate practice change efforts. Data can be powerful and it is important to have adequate infrastructure to use the data. The practice must decide what data to track, both at the individual and population level, what information should be aggregated, and who will run, interpret, and act on the reports. In practices without EHR systems that can access and report data, tracking patient data is challenging.

An important step in designing an integrated behavioral health-care program is the determination of metrics that show whether the program is effective and valuable. These measures should include patient-oriented outcomes, patient and staff satisfaction scales, and costs. While definitions of effectiveness and value may vary from practice to practice, standardized measures allow comparisons across practices which facilitate the process of continuous quality improvement. Practices or programs that perform well on outcome measures can inform other practices. In addition, having a structured continuous quality improvement plan protects against the natural process whereby systems slowly revert to old patterns of care.

Costs and Billing

Data on implementation costs tied to IBH are limited and tend to focus on collaborative care models. An analysis which took into account start-up, program planning, and ongoing implementation costs estimated that expenditures range from \$3 to \$22 per patient per month [46]. Another study that examined ten practices from the ACT program found that start-up expenses averaged around \$44,000 per practice with substantial variation among the programs depending on the duration of the start-up and direct non-staff expenses (which ranged from \$914 to \$185,949). Direct non-staff expenses included items such as computers, software, and license fees. Ongoing costs averaged \$40 per patient per month which also varied considerably among the practices (range \$15–\$123) [39]. These expenses may present a significant barrier for small practices interested in developing IBH services.

While the Mental Health Parity and Addiction Equity Act of 2008 expanded mental health coverage for Americans and behavioral health care is identified as an “essential health benefit” in the Patient Protection and Affordable Care Act (2010), most current payment models make billing for integrated behavioral health services challenging. Mental health treatment and medical care are often covered by different insurance plans. The mental health plans vary substantially on the types and frequency of services covered. Most mental health coverage is based on a fee-for-service model, and a patient’s copay is likely the same whether they receive a traditional 50–60-min therapy service or a 20–30-min brief intervention [41]. While health and behavior CPT codes were introduced in 2002 and allow for billing of shorter visits tied to a particular medical condition, many insurance companies still do not reimburse for these codes and limit the providers able to use them to only those with certain licenses (i.e., psychologist). This varies a great deal by state. The Center for Integrated Health Solutions (SAMHSA-HRSA) has published state-by-state billing guides for integrated care which are available online at <http://www.integration.samhsa.gov/financing/billing-tools>.

A movement toward accountable care organizations (ACO) may address these direct billing concerns. Under the ACO model, fees are paid for chronic care management for a population of patients rather than traditional fee-for-service payment structure. Moving to value-based reimbursement contracts that include shared saving may encourage the expansion of IBH [46]. Effective integrated behavioral health programs add value and reduced cost by reducing emergency department visits, hospitalizations, and unnecessary testing [47].

Evidence for Integrated Behavioral Health

Integrated behavioral health interventions can be differentiated based on the value they add. For integrated care to be considered a “value-added” service, it must improve patient outcomes and patient experience while conserving health-care resources [48]. Services that do not meet all three of these outcome domains are described as “clinical enhancements.”

One systematic review of basic level integration (co-locating a BHP in a primary care setting to provide counseling services) found that integrated counseling services did yield significantly greater clinical improvement in the short term, but not in the long term when compared to usual treatment within primary care [49]. This review found high levels of patient satisfaction with integrated counseling services, but no cost savings compared to usual care. Another systematic review of behavioral interventions for depression, substance use, and/or chronic pain in primary care settings found small to moderate effects for mindfulness-based and cognitive-behavioral interventions in moderating the impact of comorbid chronic medical conditions [50]. Basic co-located counseling may be a “clinical enhancement,” but has not demonstrated “added value” based on currently available outcome research.

A systematic review of telepsychiatry studies examined outcomes for patient and provider satisfaction, treatment outcomes, and cost-effectiveness [51]. While this review did not focus solely on the use of telepsychiatry in primary care settings, it does suggest that telepsychiatry is comparable to face-to-face service in terms of treatment outcomes. Patients and providers were satisfied with services, although providers had concerns about the impact of videoconferencing on the therapeutic rapport with the patient. Telepsychiatry was more cost-effective than traditional face-to-face services in the majority of studies reviewed and has the potential to be a “value-added” method to integrate behavioral health and primary care.

There is substantially more research available on collaborative care models. Multiple systematic reviews and meta-analyses have demonstrated that these types of IBH models add value. In a systematic review of controlled trials, collaborative care models improved antidepressant adherence and depression outcomes for 2–5 years with improved patient experience and provider satisfaction [52]. A review of 79 randomized controlled trials with over 24,000 patients with depression or anxiety compared collaborative care to usual care by a primary care clinician alone or other treatments (i.e., cognitive behavioral treatment, consultation-liaison models) [53]. Collaborative care was associated with significant improvement in depression and anxiety outcomes over the course of 2 years compared with usual care. They also

found improvements in mental and physical health quality of life outcomes, and that patients who received collaborative care were more satisfied with their care.

There is also evidence supporting the clinical effectiveness of integrated care for children and adolescents. A recent meta-analysis of 31 randomized controlled trials compared behavioral health outcomes for children and adolescents receiving usual primary care versus integrated medical-behavioral health care [54]. These studies targeted diverse mental health concerns including depression, anxiety, and behavior problems and found a small but significant advantage for integrated care relative to usual care. The strongest effects were found in trials that focused on treatment rather than prevention and involved collaborative care models.

Collaborative care for depression is associated with improvement in other health-care conditions. Collaborative depression care (IMPACT model) for older depressed patients was associated with substantially fewer cardiovascular events (including fatal events) than usual depression care when these patients were followed for an 8-year period after the intervention [55]. Collaborative care interventions for cancer patients with depression were significantly more effective than usual care, and the reduction in depression was maintained at 12 months [56]. Additional meta-analyses have found benefit for collaborative care in depressed patients with diabetes (improvements in depression symptoms and HbA1c) [57], cardiovascular disease [58], and anxiety [53].

A recent naturalistic retrospective cohort study compared traditional practice management (TPM) to integrated team-based care (TBC) in the Intermountain Healthcare System in Utah [59]. This study examined outcomes in a large health-care system (102 primary care practices) involving more than 113,000 adults. TBC was defined as care aligned with the PCMH standards and included the integration of BHPs in the practices. This study focused on chronic disease and health-care utilization outcomes rather than mental health outcomes. TBC was associated with significantly higher levels of screening for depression, documentation of self-care plans, and adherence to quality metrics for diabetes care, whereas TPM was associated with better blood pressure control. TBC was associated with lower utilization of emergency departments, hospital admissions, and primary care visits. There was no significant difference in visits to urgent care or specialty care physicians. This study also examined financial outcomes, finding that the cost was \$10 per patient annually. Within a traditional fee-for-service payment model, the reimbursement received for TBC was \$115 less per patient annually when compared to TPM, however. Thus, cost savings for the insurers were demonstrated, but within the context of a fee-for-service payment model, this makes IBH more difficult for practices to sustain financially. Another

study using the IMPACT model for older Medicare patients with depression demonstrated a 10% savings in total health-care costs (average savings were \$3365 per patient) over a 4-year period [60]. Collaborative care models save between \$15,000 and \$80,000 per quality-adjusted life-year gained when compared to usual care especially when considering savings from reduced work absenteeism and hospitalization [46]. The growing literature on health-care cost outcomes for IBH highlights the importance of continuing to assess the value that IBH adds from a systems perspective as well as the need to continue to advocate for alternative payment models that incentivize improved clinical outcomes and cost savings.

Future Directions

No one IBH model is likely to address every local population's needs and ongoing innovation, and creativity is needed. While the data supporting the effectiveness of IBH continue to grow, one of the limitations with much of the literature is that the outcome studies have focused on specific diseases (depression and anxiety) in certain populations (e.g., elderly populations). Future research must examine IBH models that address multiple comorbidities, childhood problems, and disorders that fall on the more debilitating end of the spectrum such as schizophrenia and substance dependence. Reverse co-location models (primary medical care offered in the setting of a mental health practice) may be another way to address the complex comorbidities found in adults with severe and persistent mental illness and substance dependence.

High-quality research is also needed concerning non-collaborative care IBH models and how IBH outcomes translate in real-world practices. In addition, we need to expand our understanding of how IBH models can be adapted to meet the needs of culturally diverse populations and families. Family consultations, family therapy, and parenting training are rarely described in studies on integrated primary care programs [61]. Given that the discipline of family medicine represents a substantial portion of primary care practices, future IBH models should consider how we can keep the "family" in IBH family medicine.

Future studies should examine how enhanced resiliency and self-engagement in chronic disease management may improve outcomes and satisfaction while reducing overall health-care costs. Most IBH models focus on moderating the impact of emotional distress that is already present. Integrating resiliency models such as mindfulness-based stress reduction, peer support, and chronic disease self-management may help to improve outcomes for an even broader array of patients.

Summary

The integration of behavioral health and primary care represents a significant transformation in the way that health care is conceptualized and delivered. The current evidence base has demonstrated that integrated care can help achieve the quadruple aim of better health, better patient experience, lower costs, and improved physician experience [62, 63].

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