

Toward a Unified Integration Approach: Uniting Diverse Primary Care Strategies Under the Primary Care Behavioral Health (PCBH) Model

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Abstract

Primary care continues to be at the center of health care transformation. The Primary Care Behavioral Health (PCBH) model of service delivery includes patient-centered care delivery strategies that can improve clinical outcomes, cost, and patient and primary care provider satisfaction with services. This article reviews the link between the PCBH model of service delivery and health care services quality improvement, and provides guidance for initiating PCBH model clinical pathways for patients facing depression, chronic pain, alcohol misuse, obesity, insomnia, and social barriers to health.

Keywords Primary Care Behavioral Health (PCBH) \cdot Behavioral health integration \cdot Behavioral health consultant (BHC) \cdot Clinical pathways \cdot Patient-centered medical home (PCMH) \cdot Quality improvement

Primary Health: Unique Challenges and Opportunities

The provision of primary health care is unlike many other medical specialties. It requires practices to manage a large segment of the population for preventative, routine, and chronic health needs (Shi, 2012). Often times, individuals in primary care have a complex array of physical, emotional, and social concerns that may or may not be explicitly stated in the presenting problem (Haas, Leiser, Magill, & Sanyer, 2005). Thus, delivering effective primary care can be a daunting task; health care providers must attend to myriad concerns both in a brief context and at a high volume. Given the influence of health behaviors and mental health conditions on health care costs and outcomes, primary care behavioral health integration strategies have become an area of

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emphasis for practices across the United States (Gerrity, 2016; Jolly et al., 2016).

This article reviews the Primary Care Behavioral Health (PCBH) model of integration, a platform for providing effective, holistic care to a large proportion of the population. The PCBH model includes delivery of brief interventions to patients of any age for any biopsychosocially related problem at the time of need by a behavioral health consultant (BHC). Additionally, the BHC partners with team members to create routine clinical pathways of care for patients with high-frequency biopsychosocial problems. PCBH model clinical pathways typically intersect closely with a clinic's efforts to more efficiently and effectively deliver evidencebased care. In this article, we offer guidance for development of six clinical pathways for PCBH model service delivery: depression, persistent pain, alcohol misuse, obesity, insomnia, and social determinants of health.

The Evolution of Primary Care

The culture of primary care has evolved significantly over the last decade with an increased emphasis on activities that occur outside of a routine exam room visit (Rao et al., 2017). Quality incentive metrics, clinical benchmarks, and chronic disease registries have become part of the nomenclature of primary care as the United States moves toward a pay-for-performance approach (Eidus, Pace, & Staton, 2012). The advent of the Patient-Centered Medical Home (PCMH) approach has been a primary driver in this care transformation. The PCMH joint principles were published and endorsed by four primary care professional societies in 2007 (American Academy of Family Physicians [AAFP], American Academy of Pediatrics [AAP], American College of Physicians [ACP], American Osteopathic Association [AOA], 2007). The defining features of the PCMH are that care is delivered in a manner that is patient-centered (i.e., a partnership among practitioners, patients, and families); comprehensive (i.e., care provided by a multidisciplinary team); coordinated (i.e., care that is organized across the broad health system); accessible (i.e., care is available after hours or via alternative means); and committed to safety and quality (i.e., care that is effective and outcome-focused; AAFP et al., 2007). The PCMH is the method by which practices have sought to achieve the Triple Aim: improving health system outcomes through better population health, reducing costs, and enhancing the individual experience of care (Berwick, Nolan, & Wittington, 2008). As part of this change, many practices are seeking PCMH recognition by one of the several recognition agencies (e.g., National Committee for Quality Assurance [NCQA], Accreditation Association for Ambulatory Health Care [AAAHC], The Joint Commission [TJC], and Utilization Review Accreditation Commission [URAC]) as a way to demonstrate to patients and payers that they meet a given PCMH quality standard (National Association Medical Staff Services [NAMSS], 2017). There is also a growing movement for payers to offer financial incentives to practices meeting higher levels of PCMH recognition (Edwards, Bitton, Hong, & Landon, 2014).

PCMH recognition, while a well-intentioned strategy for transparent quality standards, has also placed significant demands (both perceived and realized) on primary care practices (Wise, Alexander, Green, Cohen, & Koster, 2011). For example, the NCQA's PCMH standards (2014) often require a complete overhaul of administrative and clinical practices that begins with front office staff and extends to various health team members, including the primary care provider (PCP). Many health systems now have reporting requirements that must be satisfied both locally (through state Medicaid) and nationally (through the Health Resources and Services Administration [HRSA]) to receive funding (HRSA, 2016). Additional regulatory demands (Webster & Grabois, 2015) have put added pressure on primary care practices to reduce opioid prescription and offer alternatives for chronic pain management. The complexity and scope of these changes in primary care pose significant organizational and practice level challenges.

This changing climate of health care is having an impact on PCPs' service delivery. Their panels are expanding in an attempt to meet the demands of the Affordable Care Act, especially in many large health networks or large group practices which have experienced about a 14% increase in patient volume ("Impact of the Affordable Care Act", 2015). In addition, the rise of Medicaid enrollment has resulted in patient panels with higher rates of chronic disease, mental health comorbidities, tobacco use, and substance use (Blumenthal, Rasmussen, Collins, & Doty, 2015). It is this segment of the population that causes strain on the system and takes significantly more time to manage in a primary care visit (Miller, Teevan, Phillips, Petterson, & Bazemore, 2011). Unfortunately, there is not enough time in the clinic day for PCPs alone to effectively address all needs. For example, Yarnall et al., (2009) point out PCPs would need to spend 21.7 h each day to provide all recommended preventative, acute, and chronic care for a panel of 2500 patients. Thus, it is no surprise that PCP burnout is currently at an alltime high (Peckham, 2015) as medical professionals experience greater dissatisfaction with work-life balance when compared to other working Americans (Shanafelt et al., 2012). The increasing evidence mounting toward PCP (and staff) burnout has led to the recent adoption of the Quadruple Aim approach which extends the elements of Triple Aim (i.e., quality, cost, patient experience) to also include improving the work environment for those individuals who deliver care (Bodenheimer & Sinsky, 2014). While some systems have found creative ways to spread administrative tasks across team members, in our experience there are many practices that continue to struggle with the division and delegation of clinical responsibilities, with PCPs becoming the default "owner" of several clinically oriented tasks that might be better assumed by other team members. As the PCMH expands and advances, appropriate task delegation is paramount to keeping PCPs engaged in their work as well as providing quality health care to a growing insured population (Altschuler, Margolius, Bodenheimer, & Grumbach, 2012).

PCBH Model Service Delivery

The PCBH model of service delivery was developed as a clinician-driven effort to fill a need for effective behavioral health services in primary care (Strosahl, 1996, 1998; Strosahl & Robinson, 2008). Reiter, Dobmeyer, and Hunter (2017) describe the PCBH model as:

... a team-based primary care approach to managing behavioral health problems and biopsychosociallyinfluenced health conditions. The model's main goal is to enhance the primary care team's ability to manage and treat such problems/conditions, with resulting improvements in primary care services for the entire clinic population. The model incorporates into the primary care team a behavioral health consultant (BHC), sometimes referred to as a behavioral health clinician, to extend and support the primary care provider (PCP) and team. The BHC works as a generalist and an educator who provides high volume services that are accessible, team-based, and a routine part of primary care. Specifically, the BHC assists in the care of patients of any age and with any health condition (generalist); strives to intervene with all patients on the day they are referred (accessible); shares clinic space and resources and assists the team in various ways (team-based); engages with a large percentage of the clinic population (high volume); helps improve the team's biopsychosocial assessment and intervention skills and processes (educator); and is a routine part of biopsychosocial care (routine). To accomplish these goals, BHCs use focused (15-30 min) visits to assist with specific symptoms or functional improvement. Follow-up is based in a consultant approach in which patients are followed by the BHC and PCP until functioning or symptoms begin improving; at that point, the PCP resumes sole oversight of care but reengages the BHC at any time, as needed. Patients not improving are referred to a higher intensity of care, though if that is not possible the BHC may continue to assist until improvements are noted. This consultant approach also aims to improve the PCP's biopsychosocial management of health conditions in general (this issue).

The PCBH model allows behavioral health care to be a normal and expected part of service delivery, intentionally structured to provide patients with access to appropriate care the moment they need it. When PCBH model services are well organized and routine in primary care delivery, the model's unique facets of immediate access and "curbside" consultation allow patient care to be shared seamlessly among PCPs and health care team members. Thus, the PCBH model aligns with NCQA's intentions of creating a care delivery structure with individuals working at the top of their license.

The Needs of Primary Care and the Value of PCBH Model Services

A primary care system that blends usual care with a BHC's focused biopsychosocial intervention is able to better manage the needs of its population with more comprehensive preventive care, early intervention, and treatment (Balasubramanian et al., 2017; Burt, Garbacz, Kupzyk, Frerichs, & Gathje, 2012). The proportion of primary care patients who could benefit from PCBH model services is enormous,

including an estimated 83% of US adults who are in a state of less-than-optimal mental health (Centers for Disease Control and Prevention [CDC], 2013] and the majority of adults who have one or more modifiable causes of disease, death, and loss of functioning (CDC, 2013, 2014b; Ogden, Carroll, Kit, & Flegal, 2014). Given the high prevalence of psychosocial issues that regularly present in primary care (in one study, for example, patients reported an average of five psychosocial problems; Bikson, McGuire, Blue-Howells, & Seldin-Sommer, 2009), implementing the PCBH model can assist primary care practices in meeting their overarching health care services quality goals.

As noted above, the scope, demands, and expectations of PCPs and health care delivery systems have increased considerably. As such, the impact of BHC services can and should be greater than the provision of direct patient care. Improving health at the population level will require a calculated synergy between clinical practice and organizational administration. The framework of the PCBH model is designed to enhance primary care by optimizing its efficacy in multiple operational, clinical, and financial domains. For example, many states have quality incentive metrics tied to payment that are directly related to a behavioral health concern (e.g., depression screening and documented follow-up plan; Screening, Brief Intervention, and Referral to Treatment [SBIRT] for substance use, follow-up after mental health-related hospitalization) or indirectly tied to management of conditions that have significant health behavior components (e.g., tobacco cessation, diabetes control). In our experience BHCs can play a vital role in helping the team better meet these types of metrics as well as effectively assist with ongoing health service quality goals. Thus, having a BHC with competencies in leadership, teaching, workflow management, and program development and evaluation can provide significant value beyond direct patient care.

BHCs as Clinicians and Integrated Team Members

An organization's health service quality goals are typically organized around patient groups identified for enhanced interventions. While these quality goals may arise in an organic fashion within a clinic, funders have increasingly provided incentives for clinics to adopt and pursue specific health service quality targets (e.g., increase the percentage of patients with blood pressure readings less than 140/90 to 85%). Clinics implementing the PCBH model are at a definite advantage in pursuing quality-based initiatives, as change in psychological functioning can facilitate improvements in physical health outcomes and reduce further risks (Rozanski & Kubzanski, 2005). Having a BHC available to support PCPs and the health team can enhance a clinic's ability to provide care that is holistic, accessible, and affordable (World Health Organization [WHO] & World Organization of Family Doctors [WONCA], 2008). Although improving a PCMH's health service quality metrics without a BHC on the team is possible, it is our experience that services may not be as diverse or as effective. Organizational priorities that can be supported by BHC activities include several examples below.

Increased Access and Optimization of Behavioral Health

Screening for depression is a common criterion for NCQA's PCMH recognition as well as a core measure for the Uniform Data System that is required for all Federally Qualified Health Centers (FQHCs). The United States Preventive Services Task Force (USPSTF) recommends screening be implemented with adequate systems in place to ensure an accurate diagnosis, effective treatment, and appropriate follow-up (Siu et al., 2016; USPSTF, 2016). The lack of timely access to quality behavioral health services has been highlighted as a major public health concern nationally and has prompted the inclusion of access to behavioral health services as an important requirement by HRSA, Veteran's Health Administration, NCOA, regulatory, and licensing entities at the state level, as well as many payers such as Anthem, Beacon Health Options, and Blue Cross Blue Shield (America's Health Insurance Plans Center for Policy and Research [AHIP], 2016). While a BHC can provide access to behavioral health through direct clinical service, a broader impact can be made by increasing the depth and breadth of the primary care team's ability to manage biopsychosocial concerns. For example, a BHC could help PCPs build skills and knowledge in management of depressive disorders thorough shared care management, formal didactics, and patient consultation. Based on our experience, enhancing PCPs' skills can improve their ability to effectively address behavioral health issues through a team approach (not just the BHC), and may reduce the frequency of unnecessary specialty mental health referrals or situations where these problems are ignored completely (Kinman, Gilchrist, Payne-Murphy, & Miller, 2015).

Clinical Quality Improvement and Assurance

Measuring health services quality in a meaningful way, a primary goal of the Triple Aim, has emerged as a priority for attention by almost every stakeholder in the healthcare system (Stelfox et al., 2015). "Quality over quantity" and "pay for performance" are common mantras guiding efforts to reform the financing and regulation of healthcare delivery (Burwell, 2015). Performance on quality metrics such as the Healthcare Effectiveness Data and Information Set (HEDIS), a tool used by more than 90% of America's health plans to measure performance, is increasingly determining payment contracts, negotiated fee schedules, and incentive pay to providers and organizations (Damberg et al., 2014). HEDIS metrics can be either objective outcome or process measures of clinical quality, and often are influenced by an amalgam of physical, behavioral, and social factors. Examples of HEDIS measure areas include prenatal and postpartum care, blood pressure control, diabetes control, obesity assessment, asthma management, psychiatric hospitalization follow-up, breast cancer screening, depression and attention deficit hyperactivity disorder (ADHD) management, tobacco use, and adolescent well visits. BHCs can support protocols and implementation of evidence-based practice guidelines to help meet these clinical quality goals. Further, in our experience, the shared care coordination offered by PCBH model service delivery allows for robust attention to gaps in care. For example, at Cherokee Health Systems, a BHC may get a daily list of patients with scheduled appointments whose quality outcomes are below standards. One such daily Gap in Care report prompted a BHC to address a patient's fears about getting a mammogram, conduct collaborative dietary goal setting to reduce blood pressure in another patient, provide a rapid aftercare follow-up for a patient with a recent psychiatric hospitalization, and implement a behavioral plan for appropriate inhaler use for a child with asthma.

PCMH Initiatives

As an anchoring framework for comprehensive and coordinated care, PCMH recognition by a quality assurance entity (e.g., NCQA, TJC) has become an expectation for most primary care practices (Rittenhouse & Shortell, 2009; Rittenhouse, Shortell, & Fisher, 2009). The integration of behavioral health care has become highly important to attaining PCMH recognition; for example, behavioral health is key to five of the six "must pass" elements set forth by NCQA (2014). Our experience has been that PCBH model services operating within the PCMH structure and workflow can play a central role in meeting the elements within each of the six standards: (1) Enhance access and continuity, (2) team-based care, (3) population health management, (4) plan and manage care, (5) track and coordinate care, and (6) measure and improve performance. For example, at Cherokee Health Systems, the BHC completes the required self-management goal setting at the patient level, supports management of high complexity at the primary care panel population level, and provides training on motivational interviewing, shared decision-making, and patient activation and engagement at the practice team level.

Program Development and Evaluation

Improving population-based health in the resource-limited, (often) chaotic, and dynamic world of primary care involves systematic and strategic needs assessment, planning, program implementation, and evaluation (Institute of Medicine [IOM], 2012). PCBH model services can provide structure to this process. With PCBH model clinical pathways in place, PCMHs can more efficiently and effectively target high risk and/or complex conditions that might typically overwhelm a primary care system. For example, Katon et al.'s (1996) study evaluated BHC services working in a team-based vertical strategy designed to improve outcomes for depressed primary care patients. In less than three total hours of contact with a BHC (a menu of four to six, 30-min visits drawing from behavioral activation, values, problem solving, cognitive strategies, and relapse prevention), the team achieved improved clinical, cost, and satisfaction outcomes relative to usual primary care. Ninety-one percent of the patients attending the first visit completed at least four visits (considered treatment completion). Thus, it appeared that this vertical organization strategy for delivery of behavioral interventions yielded strong engagement from patients and greater PCP satisfaction, two important outcomes for program development.

PCBH Model Pathways

PCBH pathways are defined by Robinson and Reiter (2016) as "a multidisciplinary management tool developed to improve outcomes for a target group of patients, using evidence-based practice and resources available" (p. 236). A PCMH ready to develop a PCBH model clinical pathway has a wide variety of options in health behaviors or conditions from which to choose. One PCMH may develop pathways for parenting/pediatric behaviors or ADHD; another may focus on tobacco cessation, medication adherence, or headaches. In 2014, for example, clinical pathways were developed for use in the Department of Defense (DoD) for depression, anxiety, alcohol misuse, tobacco cessation, obesity, diabetes, insomnia, and chronic pain. Each of these clinical pathways include direction for PCMH staff on identification of patients (e.g., screening, data pulls), workflows for connecting patients with BHCs, evidence-based interventions for the BHCs, and methods of monitoring outcomes. Three of these clinical pathways (depression, alcohol misuse, and obesity) could help PCPs better follow USPSTF guidelines. These recommendations can be difficult for PCPs to address on their own in an efficient and effective manner; however, they are more likely executable by incorporating BHC services. All pathways aim to best meet the needs of the population that PCMHs serve by enriching usual primary care.

While detailing clinical pathways is outside of the scope of this article, below are just a few examples in which BHCs can augment the care provided in a PCMH.

Depression

Almost 7% of Americans had at least one major depressive episode in the last year (National Alliance for Mental Illness, 2015). The USPSTF recommends screening for depression and specifies that "screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up" (Siu et al., 2016, p. 380). Despite these recommendations, only 35.3% of people with severe depressive symptoms, 20% with moderate depressive symptoms, and 13% with mild symptoms reported having seen a mental health provider in the previous year (Pratt & Brody, 2014). While appropriate follow-up for some patients means a referral to specialty mental health, many patients with depression may have their needs met solely in primary care. Use of BHC's services to provide additional assessment, particularly concerning behaviors that trigger and maintain symptoms of depression, may result in the design of individually tailored behavioral plans that promote vitality and health. These interventions may include behavioral activation, cognitive therapy strategies, mindfulness, and values-based behavior change. In fact, patients may prefer behavioral or cognitive approaches (Gum et al., 2006; van Schaik et al., 2004) and may demonstrate improvement without use of medications (DeRubeis, Siegle, & Hollon, 2008). When medications are used, augmenting antidepressant treatment with targeted skill training in brief BHC visits can increase the likelihood of treatment success; specifically, improvement and safety may be enhanced by the BHC's coaching for medication adherence, risk assessment (Bryan et al., 2012), and delivery of psychosocial interventions such as Acceptance and Commitment Therapy (ACT; Bauman, 2014; Beachy, 2014), behavioral activation (Kanter, Baruch, & Gaynor, 2006), and brief cognitive behavioral therapy (Cape, Whittington, Buszewicz, Wallace, & Underwood, 2010). BHCs can also assist with referrals to specialty mental health for patients with more severe symptoms as well as provide a bridge in care while patients await their first specialty appointment.

The Opioid Epidemic and Management of Persistent Pain

Two hundred fifty-nine million prescriptions were written for opioids in 2012, an amount more than enough to give every American adult their own bottle of pills (CDC, 2014a). As many as one in four primary care patients receives opioid prescriptions long-term for non-cancer pain battle addiction (Boscarino, Rukstalis, & Hoffman, 2010), and over 1000 people go to emergency departments each day for opioid misuse treatment (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). Four of five new heroin users started with misuse of prescription pain killers, and 94% of participants surveyed in an opioid treatment group reported choosing heroin because prescription opioids were "far more expensive and harder to obtain" (Cicero, Ellis, Surratt, & Kurtz, 2014). Opioids (including prescription opioids and heroin) killed more than 33,000 people in 2015, more than any previous year, and nearly half of opioid overdose deaths involve a prescription opioid (CDC, 2017).

The PCBH model and use of a clinical pathway can make a meaningful difference in the problem of persistent pain and opioid use. While PCPs seem to avoid long-term opioid therapy and emphasize functional treatment goals for their patients, there are still many individuals that continue the pursuit of reducing pain intensity (Henry, Bell, Fenton, & Kravitz, 2017). Initial goals of a persistent pain, opioid use pathway might include (1) identifying feasible strategies for evaluating patient functioning on an ongoing basis, (2) assisting patients with greater acceptance of pain and improved engagement in meaningful life activities, (3) assisting patients with tapering from higher opioid dosages, and (4) increasing patient participation in treatments such as acupuncture and physical therapy. BHC services might optimally be provided through a group medical visit given the large number of patients with persistent pain and opioid use, as well as the intensity of behavioral interventions needed to benefit patients with persistent pain. Guidance for implementing PCBH model clinical pathways for persistent pain is available and includes measurement and implementation materials (see Robinson & Bauman, 2017; Robinson, Bauman, & Beachy, 2016). Focused Acceptance and Commitment Therapy [FACT]; (Robinson, Gould, & Strosahl, 2010; Strosahl, Robinson, & Gustavsson, 2012) is one recent approach that has emerged as a viable treatment pathway for chronic pain by facilitating patients' achievement of valueconsistent health goals. The first randomized controlled trial to evaluate FACT for persistent pain delivered by a BHC in a group format is currently in process (Kanzler et al., 2017). For this trial, efforts were made to create a manualized intervention that would support rapid dissemination if results are positive. The problem of persistent pain will not go away quickly and sustained efforts to reduce harm in this group are imperative.

Alcohol Misuse

persons engaged in risky or hazardous drinking be provided brief behavioral counseling interventions to reduce alcohol misuse. Utilizing an alcohol misuse clinical pathway such as SBIRT includes a routine method of assessing for risky alcohol use and providing early intervention and treatment for those who have at-risk drinking behaviors (CDC, 2014b). Brief (10–15 min), multi-contact counseling interventions, ideally suited for the PCBH model of care, have been shown to be effective at reducing weekly alcohol consumption and improving long-term adherence to recommended drinking limits (Jonas et al., 2012). BHCs may provide interventions such as cognitive behavioral strategies, action plans, drinking diaries, stress management, and problem solving. BHCs may also facilitate timely referrals to more intensive substance use treatment when indicated.

Obesity

One-third of the US population is obese (Ogden et al., 2014). The USPSTF recommends that all adults be screened for obesity, and patients with a body mass index (BMI) of 30 kg/ m² or higher should receive intensive, multi-component behavioral interventions (USPSTF, 2014). Behaviorally based treatments are known to be safe and effective for weight loss and maintenance with more treatment sessions (12–26 sessions in a year) associated with greater loss (LeBlanc, O'Connor, Whitlock, Patnode, & Kapka, 2011). Most of the higher-intensity behavioral interventions included multiple behavioral management activities, such as setting weight-loss goals, improving diet or nutrition, increasing physical activity, addressing barriers to change, actively using self-monitoring strategies, and planning to maintain lifestyle changes. A challenging task for a PCP alone, BHCs are ideally positioned to team with the PCP, nutritionist, and other PCMH staff to ensure that a wide array of services are available and coordinated to best assist patients in meeting health goals. In our experience, having BHCs readily available to address obesity concerns allows practices to dedicate the necessary time and resources to behavior change strategies. Thus, PCBH model services play an important role to ensure that behavioral treatment continues to be a first-line intervention for obesity in primary care.

Insomnia

The National Ambulatory Medical Care Survey found that 5.5 million outpatient visits in 2010 were for insomnia, with 20.8 million for sleep medication prescriptions (a 293% increase from 1999) written in an attempt to address these problems (Ford et al. 2014). Cognitive behavioral therapy for insomnia (CBT-I) has long demonstrated effectiveness and even superiority over hypnotics as a treatment for insomnia (Trauer, Qian, Doyle, Rajaratnam, & Cunnington, 2015),

although a shortage of trained providers and the number of treatment sessions limits its wide-spread use. More recently, University of Pittsburgh developed a protocol for brief behavioral treatment for insomnia (BBTI), a four appointment (two of which may be phone) treatment using the core components of stimulus control and sleep restriction. BBTI, delivered by a master's level mental health nurse practitioner without sleep medicine or behavioral intervention experience, has demonstrated efficacy in treating older adults with insomnia (Buysse et al., 2011). Given these promising findings, this protocol has been adapted to even more closely align with the PCBH model and is in use by BHCs within the United States Army.

Social Determinants of Health

While not part of a diagnosis-specific pathway, we have found that screening and addressing a patient's healthrelated social factors is becoming more commonplace in primary care practices, especially those recognized as PCMHs. This evolution is partly due to the emergence of new data which de-emphasizes physical health interventions and instead focuses on social and emotional health interventions. Recent public health findings suggest that physical health care delivery only affects about 20% of a population's health (McGovern, Miller, & Cromwick, 2014). McGovern et al. (2014) posit that socio-economic factors (e.g., education, employment, income, family/social support) and health behaviors (e.g., tobacco use, diet, exercise, alcohol use, unsafe sex) together impact roughly 70% of population health. NCQA and HRSA, among others, have recognized the need to address non-medical factors influencing health and now require organizations to collect and report these data. NCQA's (2014) standards take it a step further in that social and behavioral determinants of health must be considered for risk stratification, care management, and treatment approaches. Closely associated with social and behavioral factors, the identification and treatment of psychological trauma has become an integral component of effective, "whole person" care delivery. Findings from the Adverse Childhood Experiences (ACEs) study indicate that the presence of psychological or emotional trauma in one's childhood has been linked to poorer health outcomes, risky health behaviors, and early death (Felitti & Anda, 1997). Logically, it makes sense for organizations to prioritize the aforementioned risk factors given how these concerns can influence one's current and future health status.

In our experience, BHCs are viewed as integral team members when patients are impacted by psychological trauma and social determinants of health present in primary care. While same day "warm handoffs" tend to ease the burden for PCPs in the midst of their busy days, BHCs also have become increasingly valued in their development of organizational protocols for vulnerable patient populations. We have found that trauma informed care is commonly championed by BHCs, particularly in areas of sensitivity training, treatment considerations, and policy revision, to better serve patients with emotional trauma. BHCs' "expert" knowledge at both the administrative and clinical level makes them valuable assets for trauma informed practice transformation that is both meaningful and sustainable. BHCs can assume a role in addressing the social determinants of health by initiating and revising workflows for screening, identification, and treatment based on patients' unique needs. Often, patients present with myriad psychiatric, social, and behavioral concerns. So it is helpful for the BHC to assess the patient's "hierarchy of needs," implement appropriate treatment, and determine next steps in care.

Developing a Clinical Pathway

PCBH model clinical pathways define the roles and responsibilities of BHCs and, in some instances, the behavior of other team members. Pathways may be thought of as care delivery plans that support close working relationships between a BHC and other team members in efforts to improve care to patients in a target population (Robinson & Reiter, 2016). Principles guiding the idea of PCBH model clinical pathways derive from ideas about quality management generated in the 1980s. Key goals were to make the most of limited health care resources and improve the efficiency of care, and these goals are more important than ever in today's healthcare environment.

To identify a pathway target population, BHCs can perform needs assessment and PCBH model clinical pathway surveys to inform priorities for development of populationspecific programs that use the BHC to better implement evidence-based interventions. Cross-functional members of the team design pathways, evaluate them over time, and change them as indicated. Pathways define what evidencebased services the BHC and other members of the team will deliver; when and how services will be delivered; and how results will be assessed. PCBH model services may include phone contacts, individual visits, and class offerings. Pathways often involve group services, as this format allows the BHC to deliver more intensive skill training to patients and an opportunity to teach these interventions to health team members who also may be involved in delivery of care to these patients. Utilizing a process improvement strategy is helpful in evaluating adaptations of evidence-based interventions, and adaptations are usually necessary in order to meet the demands of the brief, at-the-moment-of-need context of primary care.

Robinson and Reiter (2016) recommend nine implementation steps that may be helpful in successfully initiating a PCBH model clinical pathway. Attention to these steps may support the work of quality improvement committees, help prevent slowed and problematic implementation, and enhance rapid attainment of optimal outcomes.

Step 1 involves identification of a target population for the pathway. This target population could be organized by individuals with a general condition (e.g., diabetes, chronic pain) or could consist of a narrowed subpopulation based on certain characteristics (e.g., pregnant mothers who use tobacco, chronic pain patients who are on opioid medications).

Step 2 consists of the development of a pathway-specific team. Membership needs to include representation from all staff groups that will be involved in the pathway work.

Step 3 involves an attempt to describe current practices and identify available data for evaluating the impact of current practices.

Step 4 includes a review of evidence for improving care to the target population. Evidence specific to primary care is highly valuable; however, such evidence may not always be available, and the team will need to consider strategies for adapting evidence obtained from a specialty care setting.

Step 5 encourages implementers to look at the cost of implementing a variety of possible changes and determining the best value.

Step 6 consists of forming the pathway statement of "who does what."

Step 7 concerns defining pathway goals and management/ evaluation strategies.

Step 8 conducting a pilot study, while not always necessary, is often helpful. A pilot allows the team to identify problems and address them prior to wider dissemination.

Step 9 is dissemination. Pilot results often help to generate interest and enthusiasm for dissemination.

Summary

Primary care continues to be in the epicenter of health care transformation, and the development of innovative, effective ways to manage large panels of patients is of fundamental importance to achieving the Quadruple Aim. Behavioral health leaders and team members with expertise in behavioral science support the realization of this opportunity in a variety of ways. Fully integrated BHCs can enhance the resiliency of the team, facilitate patient access to evidencebased behavioral interventions, help minimize over-emphasis on use of medications to address human suffering, and deepen the potential for primary care to attain its mission of improving the health of a community. BHCs who are fully integrated in the primary care setting are positioned to support healthcare redesign.

The PCBH model provides an excellent platform to promote "whole person" care in a meaningful way and among a variety of health domains. Health systems across the country are now embracing the value of integrated care, and using the PCBH model of service delivery can be an important avenue to successfully provide the comprehensive care that is desired. Optimizing the value of PCBH model services begins with understanding that the PCBH model is not just about improving behavioral health outcomes in primary care. Its mission is broader than that: it is designed to strengthen the *system* of health care service delivery by making interventions toward healthy behaviors a routine part of health care. BHC services can be of fundamental importance in practice transformation and aid in the attainment of clinical quality initiatives. A BHC at the table can help with development and improve population health outcomes.

Compliance with Ethical Standards

Conflict of interest Brian E. Sandoval, Jennifer Bell, Parinda Khatri, and Patricia J. Robinson declare that they have no conflict of interest.

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