

The Medical Home and Integrated Behavioral Health: Advancing the Policy Agenda

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There has been a considerable expansion of the patient-centered medical home model of primary care delivery, in an effort to reduce health care costs and to improve patient experience and population health. To attain these goals, it is essential to integrate behavioral health services into the patient-centered medical home, because behavioral health problems often first present in the primary care setting, and they significantly affect physical health. At the 2013 Patient-Centered Medical Home Research Conference, an expert workgroup convened to determine policy recommendations to promote the integration of primary care and behavioral health. In this article we present these recommendations: Build demonstration projects to test existing approaches of integration, develop interdisciplinary training programs to support members of the integrated care team, implement population-based strategies to improve behavioral health, eliminate behavioral health carve-outs and test innovative payment models, and develop population-based measures to evaluate integration.

Primary care is in the midst of a substantial redesign. This effort to transform the “largest platform of healthcare delivery” into patient-centered medical homes (PCMHs) is built around the determination to reduce the cost of health care and to improve the experience of the patient and the health of the population.¹ To fully achieve these “Triple Aim” goals, the PCMH must be equipped to diagnose, treat, and manage both physical and behavioral health concerns, which often first present in the primary care setting. For the purpose of this article, we use the term behavioral health to include both mental health and substance use.

In May 2013, the Society of General Internal Medicine, the Society of Teachers of Family Medicine, and the Academic Pediatric Association, in partnership with the Agency for Healthcare Research and Quality

(AHRQ), the Veterans Health Administration, the US Department of Veterans Affairs, and the Commonwealth Fund hosted a conference to discuss and update the evidence around the PCMH and to determine policy-relevant strategies to advance the model. At this conference, 1 of 5 expert workgroups sought to determine research and policy priorities regarding the integration of behavioral health and primary care. These priorities served as the basis for the recommendations outlined in this article. The workgroup consisted of researchers, policymakers, a family and patient advocate, and primary care and behavioral health clinicians.

Across the United States, an estimated 26.2% of people over the age of 18 live with a behavioral health disorder, which often goes undiagnosed or untreated.² Given that those with behavioral health issues often first

abstract

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present to the health care system with physical symptoms, primary care clinicians have a unique opportunity to recognize and treat these problems early on.³ Additionally, behavioral health problems are common among people living with multiple chronic conditions and can significantly affect physical health.⁴ The PCMH model has typically focused on the care of patients with chronic medical conditions. However, with access to adequate resources and expertise, the PCMH model can be better equipped to provide basic physical and behavioral health care that is more comprehensive and seamlessly integrated.⁵⁻⁷

PCMH models that incorporate behavioral health services are increasing in number.^{8,9} These models, though often implemented differently, may be classified into 3 groups based on the type of behavioral health integration: coordinated, colocated, and fully integrated. In coordinated approaches, primary care physicians and behavioral health specialists practice in separate facilities and work together, often via telephone, e-mail, or other online services to provide care.³ In the Massachusetts Child Psychiatry Access Project, for example, primary care clinicians are able to call a regional team of behavioral health specialists, which typically includes a psychiatrist, a case manager, and a social worker, to make diagnostic referrals and to receive psychopharmacy support and treatment advice.¹⁰ Similar programs are now being implemented in >30 states.¹¹ The colocation approaches are more advanced forms of addressing behavioral health (eg, referring out for behavioral health), in which the primary care provider and behavioral health specialist practice within the same facility and work together to varying degrees to address patient needs. Referrals may still be used, but they are in house rather than out of house. In the

Washtenaw Community Health Organization, for example, clinicians from the community mental health center are placed within primary care practices and see referred patients.³ Finally, in integrated approaches, behavioral health specialists operate within the primary care system and are a regular part of primary care delivery and treatment. In addition to seeing specific patients, behavioral health clinicians have a major role in advising, consulting, and teaching primary care physicians, although these roles are rarely reimbursed. In the Buncombe County Health Center in North Carolina, behavioral health specialists use the primary care medical record system and facilities and practice as part of the primary care team to both advise the team and provide direct treatment.³ Additionally, a recent trial found that pediatric practices that used the Doctors Office Collaborative Care model to improve collaboration between care managers and pediatricians to address behavioral health problems achieved improved behavioral health outcomes.¹²

Because of its ability to see more patients and have services more available in the moment of need, the integrated approach is often more whole-person focused and is best positioned to facilitate coordination, intervene early, and provide treatments for a wide range of behavioral and physical health problems.¹³⁻¹⁷ However, there are significant challenges to this approach.^{18,19} Seamless integration demands a complete system redesign, including the blending of separate practice cultures, shared medical records, introduction of new workflows, an integrated, team-based approach to treatment, and consideration of available reimbursement options.^{3,20} For practices that are not yet ready to take these steps or are not supported by an appropriate reimbursement system, the initial steps to coordinate or collocate behavioral health can

serve as progressive stepping-stones.²¹⁻²³

Although the evidence base for the coordinated approach is limited, screening patients for behavioral health problems and providing brief interventions in consultation with remote behavioral health specialists has the potential to improve behavioral health care.²⁴ Coordination may be an attractive first step toward integration, although reimbursement for telehealth services remains a barrier, and the approach requires primary care clinicians to develop strong relationships with behavioral health specialists.³ To advance this approach, practices and policymakers can look to the National Committee for Quality Assurance (NCQA) Patient-Centered Specialty Practice Recognition Program, which calls for formal agreements between practices and clinicians to help facilitate coordination between primary care and specialty or subspecialty practices.²⁵

The colocation approach, on the other hand, has a much greater evidence base. By practicing in the same place, behavioral health specialists and primary care clinicians can communicate more often and more effectively.³ Furthermore, this approach allows warm handoffs, in which the primary care provider physically introduces patients to the behavioral health care provider, reducing stigma and improving treatment initiation.^{12,26-27} However, although they practice in the same location, there remain limitations to colocation because behavioral health and primary care may still operate in separate systems with different medical records, appointment procedures, and reimbursement processes. Although colocation may not be as effective as full integration, it has demonstrated numerous health and cost benefits and may be the best option for practices that are not yet prepared, or do not have access to an

appropriate reimbursement system, to transition to an integrated approach.³

Although there are a variety of ways to integrate behavioral health into primary care, the 3 approaches outlined here are well suited to support successful behavioral health integration. Evidence suggests that the fully integrated model provides the greatest potential to improve behavioral health care, but each approach ultimately provides a structure for the inclusion of behavioral health care teams, population-based practices, shared decision-making, and other essential elements of behavioral health integration.

For PCMH models to deliver high-quality behavioral health care to the pediatric population, a number of unique considerations must be addressed. First, pediatric behavioral health care requires a particularly strong focus on prevention, especially given that so many adult behavioral health problems originate in childhood or adolescence.²⁸ Second, prevention and treatment of childhood and adolescent behavioral health problems demand highly engaged teamwork with the family or caregiver, as well as the education sector.^{29,30} Last, the public administration and funding of pediatric behavioral health is highly complex and often fails to adequately serve certain populations, such as children in preschool.³¹

Although gaps in knowledge remain, the current evidence base presents important opportunities to implement specific policy actions to advance behavioral health integration.³² In March 2014, 6 family medicine associations published a set of joint principles calling for the integration of behavioral health into the PCMH, and 8 additional leading health care associations also recently endorsed behavioral health and primary care integration.^{20,33} In the following paragraphs we present

5 policy recommendations to improve the delivery and expand the state of knowledge of integrated behavioral health and primary care. These actions are designed to support the development of approaches of integration, the care team, population-based practices, and payment and evaluation systems (Table 1).

TEST SELECTED APPROACHES OF BEHAVIORAL HEALTH AND PCMH INTEGRATION THROUGH DEMONSTRATION PROJECTS AND EVALUATE USING A COMMON CONCEPTUAL FRAMEWORK

The current evidence shows the potential of a number of integrated approaches to improve physical and behavioral health, and well-funded demonstration projects can now help scale and evaluate these approaches. To assess the generalizability of specific approaches, it will be important to implement these demonstration projects in a variety of locations and practice types. However, participating practices must demonstrate that they are prepared and well-equipped to transition to a given approach. Furthermore, there must be standardized assessments to determine whether integration is truly taking place. These standardized assessments should use measures from the NCQA PCMH criteria^{34,35}

TABLE 1 Policy Recommendations to Improve the Integration of Behavioral Health and Primary Care

1	Build demonstration projects to test existing approaches; evaluate using common conceptual framework
2	Develop interdisciplinary training programs to support critical members of the care team
3	Implement strategies to improve population health; strengthen relationships between primary care practices and community resources
4	Eliminate carve-outs; align innovative payment models with demonstration projects
5	Develop population-based measures to evaluate behavioral health integration

and the AHRQ Integrated Behavioral Health Care Measure Atlas (Table 2).³⁶

Evaluation of these demonstration projects must involve rapid cycle assessments that provide policymakers with key information needed to continuously improve the demonstration projects. Additionally, all evaluations must be based on the common conceptual framework outlined in the Lexicon for Behavioral Health and Primary Care Integration.³⁷ There are a range of terms related to the integrated PCMH that are often used inconsistently and ambiguously. For example, the term behavioral health has been used interchangeably with the term mental health, and terms used to describe different integrated PCMH approaches can also be ambiguous. The definitional framework outlined in the lexicon aims to provide a universal vocabulary to increase the clarity and productivity of conversations and thereby accelerate the progress of behavioral health integration.

IDENTIFY CRITICAL MEMBERS OF INTEGRATED PCMH TEAMS THAT ARE NECESSARY TO IMPLEMENT BEST PRACTICES AND DEVELOP INTERDISCIPLINARY PROFESSIONAL TRAINING PROGRAMS FOR ALL TEAM MEMBERS

Integrated behavioral health treatment in the PCMH often involves a team of professionals who work together to provide and coordinate care. Although this team may include a range of professionals, the patient and the family or caregiver must always be the central members because behavioral health is heavily influenced by family and personal circumstances. Families and caregivers also provide a number of key roles in patient treatment, assisting in developing shared care plans, supporting patient self-management, and addressing social determinants of health.^{38,39} Patients, families or caregivers, researchers,

TABLE 2 Sample Standards From the 2014 NCQA PCMH Recognition Program³⁵ and the AHRQ Integrated Behavioral Health Care Measure Atlas³⁶

2014 NCQA PCMH Recognition Program	
Standard, Element, and Factor	Factor Text
Standard 2: Team-Based Care	The practice has a process for informing patients/families about the role of the medical home and gives patients/families materials that contain the following information: The practice is responsible for coordinating patient care across multiple settings.
Element B: Medical Home Responsibilities Factor 1	<i>Explanation:</i> The practice coordinates care across settings (ie, specialists, hospitals, rehab centers and other facilities), including for behavioral health.
Standard 2: Team-Based Care	The practice uses a team to provide a range of patient care services by:
Element D: The Practice Team Factor 6	Training and assigning members of the care team to support patients/families/caregivers in self-management, self-efficacy and behavior change.
Standard 5: Care Coordination & Care Transitions	The practice:
Element B: Referral Tracking & Follow-Up Factors 3 and 4	Maintains agreements with behavioral health care providers. Integrates behavioral health care providers within the practice site.
AHRQ Integrated Behavioral Health Care Measure Atlas	
Core Measure	Relevant Submeasures
C4. Consumer Assessment of Healthcare Providers and Systems: Clinician & Group Measures	e. Provider's (doctor's) attention to your child's growth and development f. Patient-centered medical home items set
C6. Level of Integration Measure	1. Providers pay attention to your mental or emotional health (adult only) 3. The BHSs share access to the electronic medical record/patient chart with the PCPs. 17. PCPs and BHSs do warm handoffs according to patient needs. 21. PCPs and BHSs collaborate in making decisions about mutual patients in the clinic.
C9. Young Adult Health Care Survey Measures	15. In the last 12 mo, did you and a doctor or other health provider talk about whether you ever felt sad or hopeless almost every day? 24. In the last 12 mo, did you and a doctor or other health provider talk about alcohol use?

BHS, behavioral health service; PCP, primary care provider.

and policymakers must work together to establish the optimal roles for patients and families or caregivers and to determine how they might change under various circumstances. For example, how does the role of the patient change as he or she transitions from adolescence to adulthood? Patients, families or caregivers, and policymakers must also work together to develop effective engagement strategies, tools, and support structures to implement strategies found to be most effective. In addition to the patient and family or caregiver, the integrated PCMH care team often includes a behavioral health specialist, a primary care clinician, and a care manager, and a number of additional roles may exist. The different team members carry out various roles, including assistance with self-management, coordination of care, and facilitation of access to preventive services and community resources.⁴⁰ However, more research is needed to help determine the essential range of responsibilities and personnel

necessary to create high-functioning, integrated teams. For example, evaluation of the Veterans Affairs Collaborative Care for Depression models has demonstrated the importance of the depression care manager in managing treatments and coordinating care between primary care clinicians and behavioral health specialists.⁴¹ Additionally, it is important to determine the ideal size of the team. Although a larger team may offer more perspectives and areas of expertise, it also creates more opportunities for communication errors and misunderstanding of roles.⁴² Last, a number of workflow and communication challenges must be addressed. For example, if different members of the team are responsible for different domains of care, how do they communicate care developments to one another quickly and effectively? Additional research must determine the best ways for different members of the care team to work together and with the patient and family or caregiver to provide care

that is as streamlined and coordinated as possible. For the lessons from this research to be put into practice, there must be interdisciplinary training and retraining opportunities throughout each team member's professional education and career. Whether in a classroom or in a practice-based environment, team-based training will allow care members to better understand each other's roles and learn how to address workflow problems that may arise. In 2011, a number of health profession education associations came together through the Interprofessional Educational Collaborative to set standards for interdisciplinary learning.⁴³ This collaboration offers a promising framework to develop these trainings, although involvement of behavioral health associations, which was not seen in the 2011 collaborative report, is essential as these standards develop.^{42,43} To best foster teamwork, these trainings should encourage clear definition of team roles, shared decision-making

and accountability in patient care, and opportunities for team debriefing. To measure the impact of these training programs, evaluations may assess clinician turnover and satisfaction, a variety of care processes, team communication, and patient outcomes.⁴² Last, these trainings must integrate patients and families or caregivers as well as possible, so that in addition to receiving training themselves, patients and families or caregivers can teach students and clinicians how to best engage future patients and families or caregivers in the team.

IMPROVE POPULATION HEALTH BY IMPLEMENTING POPULATION-BASED PRACTICES AND ESTABLISHING LINKAGES WITH COMMUNITY RESOURCES

There are a number of steps that approaches across the spectrum of integration can take to address population health. The American Academy of Pediatrics Taskforce on Mental Health recommends that primary care clinicians ask patients 2 or 3 questions about functioning at every visit to identify children with behavioral health problems. Children who are at risk for certain conditions can receive preventive services, such as home visits, in which clinicians work with families to address social determinants.⁴⁴ Children identified with behavioral health conditions can receive evidence-based, cost-effective therapies such as psychosocial, behavioral, and family-based interventions, with the goal of preventing serious problems before they develop fully.⁴⁵ For adults, primary care practices use a practice known as screening and brief intervention to quickly screen for depression by using the standardized Patient Health Questionnaire and then provide brief evidence-based treatments.³

Most existing research evaluates disease-specific treatments in well-defined, specific populations (eg, depression treatment for older

adults).⁴⁰ However, the PCMH must be able to provide treatments that are effective across a wide range of conditions and populations. For example, the Common Factors approach developed by Wissow et al⁴⁶ demonstrates the potential of primary care approaches to benefit a range of patients who may have similar symptoms but are not defined by a specific diagnosis. Additional research is needed to identify more treatments that can be similarly applied across a broad population of patients. Furthermore, it is important to determine how these different non-disease-specific treatments might be integrated within the various PCMH approaches.

Next, there is great potential for behavioral health providers to contribute to patients' physical health, beyond providing treatments for specific behavioral health problems. For example, medical problems are often influenced by psychosocial problems, and effective treatments may involve behavioral changes to address diet, exercise, and tobacco or other substance use.⁴⁰ We must determine whether behavioral health providers, through practices such as motivational interviewing and cognitive behavioral therapy, can address these issues and improve overall health outcomes.¹⁷

It will also be important to integrate behavioral health metrics into condition-specific programs typically addressing chronic health care problems. Condition-specific programs have demonstrated use of metrics to drive improvement of care. For example, diabetes programs track the health of their patients through frequent hemoglobin A1C measurements, and coronary artery disease programs carefully monitor their patients' blood pressure. Given the prevalence of behavioral health problems among people with chronic conditions, there is an opportunity for these programs to measure and address process and outcome metrics

for behavioral health (eg, percentage of patients with behavioral health problems identified, percentage treated).^{4,21} It will be important to determine whether clinicians in condition-specific programs can use these measures alongside those for chronic conditions to identify, refer, and treat patients with behavioral health problems and to improve overall population health.

Last, to support behavioral health interventions on a population-based level, PCMH models must forge strong relationships with community resources.⁴⁷ For example, there should be significant collaboration between the juvenile justice and adolescent behavioral health systems and between schools and pediatric practices. Such relationships offer the potential for the primary care and behavioral health systems to work together with community resources to identify patients with behavioral health problems and to help manage treatments. In addition to developing relationships with the justice system and with schools, the integrated PCMH could form connections with workplace wellness and employee assistance programs. Such relationships could be very valuable in improving the treatment and reducing the prevalence of behavioral health problems across the population. Furthermore, they could have tremendous value to the education system, justice system, and workplace.⁴⁷ It will thus be very important to determine which additional community resources would best support the PCMH, to identify best practices in establishing these linkages, and finally to evaluate the impact of such relationships on society as a whole.

ELIMINATE BEHAVIORAL HEALTH CARVE-OUTS AND ALIGN AND TEST INNOVATIVE PAYMENT STRATEGIES WITH INTEGRATED APPROACHES

The administration of physical and behavioral health is often based in

multiple state agencies, which complicates coordinated state action on issues ranging from the elimination of carve-outs to the promotion of innovative payment systems. To ensure coordinated action to improve health and advance innovations, state governments should consolidate physical and mental health agencies, as was recently completed in California. States that are unable to take this step should consider consolidating key administrative roles, such as behavioral and physical health payment administration. Finally, even before states take these steps, Medicaid agencies around the country, which account for 26% of behavioral health care spending, have an important opportunity to take the lead in eliminating mental health carve-outs by integrating behavioral and physical health payments.⁴⁸

The widespread presence of behavioral health carve-outs, the administration of behavioral health reimbursements through independent payment systems, has significantly impeded the delivery of integrated behavioral health care. Because of carve-outs, primary care clinicians often are not reimbursed for mental health diagnoses and are unable to bring onsite behavioral health clinicians.^{19,49} This lack of reimbursement severely limits primary care clinicians' ability to provide prevention and early treatment, and as a result, conditions are identified at a much later, more difficult to treat point in the course of the illness. A number of studies have demonstrated how carve-outs lead to fragmented and uncoordinated care.^{19,48,50-53} To ensure that all patients benefit from the integrated PCMH, carve-outs must be eliminated, and care for both behavioral and physical problems must be adequately reimbursed.

Across the country a number of payment models are being developed, which specifically aim to increase the

integration of behavioral health and primary care. In Massachusetts, for example, Medicaid has started to provide bundled payments for a specific set of behavioral health and primary care services.⁵⁴ In Colorado, there are progressive pilots and Medicaid programs that use alternative payment methods to better support primary care and behavioral health.⁴⁹ This breadth of innovation offers an important opportunity to pilot various payment strategies as part of integrated demonstration projects.

To fully support integration of behavioral health and primary care, these payment strategies must address a number of key issues. First, payment systems must encourage coordination of care between primary care and behavioral health and must support all members of the care team. In the short-term, this need could be addressed through billing mechanisms that support warm handoffs or through per-member-per-month care coordination infrastructure payments, which are a key part of many PCMH demonstration projects.^{26,27} Next, payment changes must help achieve true behavioral health parity, such that patients have access to appropriate behavioral health services when they need them. This will require the elimination of financial barriers to appropriate behavioral health services and the removal of other payment features that restrict patient choice of services. Last, for the integrated PCMH to successfully achieve the key goal of the PCMH, it must improve the physical and behavioral health of the population. This integration might be achieved through payment systems that consider key performance metrics and account for differences in patients' baseline health statuses. Policymakers must determine the ability of existing models to achieve these goals and

develop innovative payment designs where there are opportunities for improvement.

DEVELOP A NEW GENERATION OF MEASURES THAT ARE POPULATION-FOCUSED AND ATTUNED TO DETECTING THE SOCIETAL IMPACT OF BEHAVIORAL HEALTH INTEGRATION

Currently, both the administration of the Children's Health Insurance Program Reauthorization Act and the National Quality Forum publish a set of measures of behavioral health, which are rigorous and widely used.^{55,56} However, largely because of the low prevalence of specific conditions in the population, these measures do not adequately capture health on a population level. The measures tend to focus on specific disease states rather than overall health and on process rather than outcomes. To effectively evaluate the impact of the PCMH on population health, researchers must develop outcome measures that reflect global measures of wellness and take into account entire, non-disease-specific patient populations. These new measures should involve data that can be generated as a normal consequence of clinical documentation and should not require any additional coding or data input by members of the clinical team. Additionally, measures must address the uniqueness of integrated behavioral health and assess the involvement of different members of the care team and the family or caregiver in patient care. To incorporate these elements and to ensure comparability, these measures could build off the frameworks established in the NCQA PCMH criteria and AHRQ Integrated Behavioral Health Care Measure Atlas.^{35,36}

Given the potential of the PCMH to affect numerous aspects of patients' and families' lives, measures to evaluate the impact of the PCMH on outcomes distal to the health care

process are needed. For example, by improving treatment and management of behavioral health and physical health issues, the PCMH may help increase productivity at work and reduce sick days. Similarly, improved pediatric behavioral and physical health could improve children's ability to learn while in school and reduce sick days from school. Such a reduction in missed school days could reduce the number of days parents take off work to care for their children. To capture these potential societal benefits, new measures must be created that reflect a comprehensive notion of population health and that use data from the various sectors that the PCMH might affect. The World Health Organization International Classification of Functioning, Disability and Health includes a number of standardized measures of health and offers an ideal framework for the development of these measures.⁵⁷ Finally, given the potential for the PCMH to have long-term societal impacts, especially among the pediatric population, these measurements must be part of studies that track patients over long periods of time, using a standardized framework, such as the International Classification of Functioning, Disability and Health, to maximize comparability.

CONCLUSIONS

The widespread innovation that is taking place to improve the integration of behavioral health and primary care offers an important opportunity to advance policies to spread successful practices and to support progress. To take advantage of this opportunity, we offer 5 recommendations. First, there must be well-funded demonstration projects to scale and evaluate the most promising approaches of behavioral health integration. Second, we must identify best practices for the care team and develop interdisciplinary training systems to support each member. Third, we must

focus on improving population-level behavioral health by identifying and supporting key practices and strengthening linkages with community resources. Fourth, we must eliminate behavioral health carve-outs and identify and develop payment designs to encourage integration. Fifth, we must develop new measures to better evaluate the impact of the PCMH on population health and society as a whole. We believe these recommendations will expand the state of knowledge about the PCMH and will improve the delivery of high-quality, population-focused, integrated care.

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REFERENCES

1. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)*. 2008;27(3):759–769
2. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication [published correction appears in *Arch Gen Psychiatry*. 2005;62(7):709]. *Arch Gen Psychiatry*. 2005;62(6):617–627
3. Collins C, Hewson DL, Munger R, Wade T. *Evolving Models of Behavioral Health Integration in Primary Care*. New York, NY: Milbank Memorial Fund; 2010. Available at: www.milbank.org/uploads/documents/10430EvolvingCare/

- 10430EvolvingCare.html. Accessed August 15, 2014
4. Katon WJ, Lin EH, Von Korff M, et al. Collaborative care for patients with depression and chronic illnesses. *N Engl J Med*. 2010;363(27):2611–2620
5. Kwan B, Nease D Jr. The state of the evidence for integrated behavioral health in primary care. In: Talen MR, Burke Valeras A, eds. *Integrated Behavioral Health in Primary Care*. New York, NY: Springer; 2013:65–98
6. McDaniel SH, Fogarty CT. What primary care psychology has to offer the patient-centered medical home. *Prof Psychol Res Pr*. 2009;40(5):483–492
7. Miller BF, Talen MR, Patel KK. Advancing integrated behavioral health and primary care: the critical importance of behavioral health in health care policy. In: Talen MR, Valeras AB, eds. *Integrated Behavioral Health in Primary Care: Evaluating the Evidence, Identifying the Essentials*. New York, NY: Springer; 2013
8. Burke BT, Miller BF, Proser M, et al. A needs-based method for estimating the behavioral health staff needs of community health centers. *BMC Health Serv Res*. 2013;13:245
9. Kenney GM, Ruhter J, Selden TM. Containing costs and improving care for children in Medicaid and CHIP. *Health Aff (Millwood)*. 2009;28(6):w1025–w1036
10. Sarvet B, Gold J, Bostic JQ, et al. Improving access to mental health care for children: the Massachusetts Child Psychiatry Access Project. *Pediatrics*. 2010;126(6):1191–1200
11. Kuehn BM. Pediatrician-psychiatrist partnerships expand access to mental health care. *JAMA*. 2011;306(14):1531–1533
12. Kolko DJ, Campo J, Kilbourne AM, Hart J, Sakolsky D, Wisniewski S. Collaborative care outcomes for pediatric behavioral health problems: a cluster randomized trial. *Pediatrics*. 2014;133(4). Available at: www.pediatrics.org/cgi/content/full/133/4/e981
13. Bartels SJ, Coakley EH, Zubritsky C, et al; PRISM-E Investigators. Improving access to geriatric mental health services: a randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression,

- anxiety, and at-risk alcohol use. *Am J Psychiatry*. 2004;161(8):1455–1462
14. Cunningham PJ. Beyond parity: primary care physicians' perspectives on access to mental health care. *Health Aff (Millwood)*. 2009;28(3):w490–w501
 15. Mitchell AJ, Selmes T. Why don't patients attend their appointments? Maintaining engagement with psychiatric services. *Adv Psychiatr Treat*. 2007;13(6):423–434
 16. Unutzer J, Katon W, Callahan CM, et al; IMPACT Investigators. Improving Mood-Promoting Access to Collaborative Treatment. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. *JAMA*. 2002;288(22):2836–2845
 17. Miller BF, Brown Levey SM, Payne-Murphy JC, Kwan BM. Outlining the scope of behavioral health practice in integrated primary care: dispelling the myth of the one-trick mental health pony. *Fam Syst Health*. 2014;32(3):338–343
 18. Davis M, Balasubramanian BA, Waller E, Miller BF, Green LA, Cohen DJ. Integrating behavioral and physical health care in the real world: early lessons from advancing care together. *J Am Board Fam Med*. 2013;26(5):588–602
 19. Kathol RG, Butler M, McAlpine DD, Kane RL. Barriers to physical and mental condition integrated service delivery. *Psychosom Med*. 2010;72(6):511–518
 20. Baird M, Blount A, Brungardt S, et al. Joint principles: integrating behavioral health care into the patient-centered medical home. *Ann Fam Med*. 2014;12(2):183–185
 21. Miller BF, Mendenhall TJ, Malik AD. Integrated primary care: an inclusive three-world view through process metrics and empirical discrimination. *J Clin Psychol Med Settings*. 2009;16(1):21–30
 22. Miller BF, Petterson S, Burke BT, Phillips RL Jr, Green LA. Proximity of providers: colocating behavioral health and primary care and the prospects for an integrated workforce. *Am Psychol*. 2014;69(4):443–451
 23. Peek CJ; National Integration Academy Council. *Lexicon for Behavioral Health and Primary Care Integration: Concepts and Definitions Developed by Expert Consensus*. Rockville, MD: Agency for Healthcare Research and Quality; 2013
 24. Phillips RL Jr, Miller BF, Petterson SM, Teevan B. Better integration of mental health care improves depression screening and treatment in primary care. *Am Fam Physician*. 2011;84(9):980
 25. National Committee for Quality Assurance. Patient-centered specialty practice recognition white paper. 2013. Available at: www.ncqa.org/Programs/Recognition/RecognitionProgramsResearchResources/PCSPResources.aspx. Accessed September 16, 2014
 26. National Quality Forum (NQF). Preferred practices and performance measures for measuring and reporting care coordination: a consensus report. 2010. Available at: www.qualityforum.org/Publications/2010/10/Preferred_Practices_and_Performance_Measures_for_Measuring_and_Reporting_Care_Coordination.aspx. Accessed October 4, 2014
 27. Patterson ES, Roth EM, Woods DD, Chow R, Gomes JO. Handoff strategies in settings with high consequences for failure: lessons for health care operations. *Int J Qual Health Care*. 2004;16(2):125–132
 28. O'Connell ME, Boat T, Warner KE. Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities. 2009. Available at: www.nap.edu/catalog.php?record_id=12480. Accessed October 15, 2014
 29. Croghan TW, Brown JD. Integrating mental health treatment into the patient centered medical home. 2010. AHRQ publication no. 10-0084-EF. Available at: https://www.michigan.gov/documents/mdch/shlIntegrating_Mental_Health_Treatment_in_PCMH_346582_7.pdf. Accessed October 9, 2014
 30. Kelleher KJ, Stevens J. Evolution of child mental health services in primary care. *Acad Pediatr*. 2009;9(1):7–14
 31. Nelson F, Mann T. Opportunities in public policy to support infant and early childhood mental health: the role of psychologists and policymakers. *Am Psychol*. 2011;66(2):129–139
 32. Miller BF, Kessler R, Peek CJ, Kallenberg GA. A national research agenda for research in collaborative care: papers from the Collaborative Care Research Network Research Development Conference. 2011. AHRQ publication no. 11-0067. Available at: www.ahrq.gov/research/collaborativecare/. Accessed October 4, 2014
 33. Mauksch LB, Fogarty CT. How do we know when to celebrate? *Fam Syst Health*. 2014;32(2):135–136
 34. National Committee for Quality Assurance. Patient-centered medical home recognition. 2014. Available at: www.ncqa.org/Programs/Recognition/Practices/PatientCenteredMedicalHome-PCMH.aspx. Accessed September 30, 2014
 35. National Committee for Quality Assurance. Patient centered medical home (PCMH 2014) standards parts 1 & 2 training. 2014. Available at: www.ncqa.org/Programs/Recognition/RelevanttoAllRecognition/RecognitionTraining/PCMH2014Standards.aspx. Accessed October 14, 2014
 36. Korsen N, Narayanan V, Mercincavage L, et al. Atlas of integrated behavioral health care quality measures. 2013. AHRQ publication no. 13-IP002-EF. Available at: <http://integrationacademy.ahrq.gov/atlas>. Accessed October 4, 2014
 37. Peek CJ, National Integration Academy Council. *Lexicon for behavioral health and primary care integration: concepts and definitions developed by expert consensus*. 2013. AHRQ publication no. 13-IP001-EF. Available at: <http://integrationacademy.ahrq.gov/sites/default/files/Lexicon.pdf>. Accessed October 5, 2014
 38. Alakeson V, Frank RG, Katz RE. Specialty care medical homes for people with severe, persistent mental disorders. *Health Aff (Millwood)*. 2010;29(5):867–873
 39. Peek CJ. Building a medical home around the patient: what it means for behavior. *Fam Syst Health*. 2010;28(4):322–333
 40. Kwan B, Nease D Jr. *The State of the Evidence for Integrated Behavioral Health in Primary Care: Evaluating the Evidence, Identifying the Essentials*. New York, NY: Springer; 2013: 65–98
 41. Chaney EF, Rubenstein LV, Liu CF, et al. Implementing collaborative care for depression treatment in primary care: a cluster randomized evaluation of a quality improvement practice redesign. *Implement Sci*. 2011;6:121

42. Hern T, Burke Valeras A, Banker J, Riebe G. *Collaborative Partnerships Within Integrated Behavioral Health and Primary Care. Integrated Behavioral Health in Primary Care: Evaluating the Evidence, Identifying the Essentials*. New York, NY: Springer; 2013:209–227
43. Interprofessional Education Collaborative Expert Panel. Core competencies for interprofessional collaborative practice: report of an expert panel. 2011. Available at: www.aacn.nche.edu/education-resources/ipccreport.pdf. Accessed September 16, 2014
44. Toomey SL, Cheng TL; APA-AAP Workgroup on the Family-Centered Medical Home. Home visiting and the family-centered medical home: synergistic services to promote child health. *Acad Pediatr*. 2013; 13(1):3–5
45. Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health. Policy statement—The future of pediatrics: mental health competencies for pediatric primary care. *Pediatrics*. 2009;124(1):410–421
46. Wissow L, Anthony B, Brown J, et al. A common factors approach to improving the mental health capacity of pediatric primary care. *Adm Policy Ment Health*. 2008;35(4):305–318
47. Robert Wood Johnson Foundation Commission to Build a Healthier America. Time to act: investing in the health of our children and communities. 2014. Available at: www.rwjf.org/en/research-publications/find-rwjf-research/2014/01/recommendations-from-the-rwjf-commission-to-build-a-healthier-am.html. Accessed October 14, 2014
48. Bachrach D, Anthony S, Detty A. State strategies for integrating physical and behavioral health services in a changing Medicaid environment. 2014. Available at: www.commonwealthfund.org/publications/fund-reports/2014/aug/state-strategies-behavioral-health. Accessed October 5, 2014
49. Kathol RG, Degruy F, Rollman BL. Value-based financially sustainable behavioral health components in patient-centered medical homes. *Ann Fam Med*. 2014; 12(2):172–175
50. American Psychiatric Association. Position statement on carve-outs and discrimination. 2002. Available at: www.psychiatry.org/File%20Library/Advocacy%20and%20Newsroom/Position%20Statements/ps2002_Carve-Outs.pdf. Accessed September 8, 2014
51. Petterson SM, Phillips RL Jr, Bazemore AW, Dodoo MS, Zhang X, Green LA. Why there must be room for mental health in the medical home. *Am Fam Physician*. 2008;77(6):757
52. Summer L, Hoadley J. The Role of Medicaid Managed Care in Health Delivery System Innovation. New York, NY: The Commonwealth Fund; 2014:13. Available at: www.commonwealthfund.org/~media/files/publications/fund-report/2014/apr/1741_summer_role_medicare_managed_care_hlt_sys_delivery.pdf. Accessed October 4, 2014
53. Kathol RG, Melek S, Bair B, Sargent S. Financing mental health and substance use disorder care within physical health: a look to the future. *Psychiatr Clin North Am*. 2008;31(1): 11–25
54. Massachusetts Executive Office of Health and Human Services. Primary Care Payment Reform Initiative. 2014. Available at: www.mass.gov/eohhs/gov/newsroom/masshealth/providers/primary-care-payment-reform-initiative.html. Accessed November 8, 2014
55. Center for Medicaid and CHIP Services. Centers for Medicare & Medicaid Services. Core Set of Children's Health Care Quality Measures for Medicaid and CHIP (Child Core Set). Technical Specifications and Resource Manual for Federal Fiscal Year 2014 Reporting. Washington, DC: National Committee for Quality Assurance; 2014. Available at: www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Medicare-and-CHIP-Child-Core-Set-Manual.pdf. Accessed October 7, 2014
56. Weireter E. NQF endorses behavioral health measures. 2014. Available at: www.qualityforum.org/News_And_Resources/Press_Releases/2014/NQF_Endorses_Behavioral_Health_Measures.aspx. Accessed October 8, 2014
57. World Health Organization. International Classification of Functioning, Disability and Health (ICF). 2014. Available at: www.who.int/classifications/icf/en/. Accessed August 31, 2014

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