

## Behavioral health integration: an essential element of population-based healthcare redesign

Shandra M Brown Levey, PhD<sup>1</sup>, Benjamin F Miller, PsyD<sup>1</sup>, Frank Verloin deGruy III, MD, MSFM<sup>1</sup>

<sup>1</sup>Department of Family Medicine, University of Colorado Denver School of Medicine, Mail Stop F496, Academic Office 1, 12631 East 17th Avenue, Aurora, CO 80045, USA

Correspondence to: S M Levey  
shandra.brownlevey@ucdenver.edu

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### ABSTRACT

The fundamental aim of healthcare reform is twofold: to provide health insurance coverage for most of the citizens currently uninsured, thereby granting them access to healthcare; and to redesign the overall healthcare system to provide better care and achieve the triple aim (better health for the population, better healthcare for individuals, and at less cost). The foundation for this improved system will rest on a redesigned (i.e., sufficiently comprehensive and integrated) system of primary care, with which all other providers, services, and sites of care are associated. The Patient-Centered Medical Home (PCMH) and its congeners are the best current examples of the kind of primary care that can achieve the triple aim, if they can become sufficiently comprehensive and can adequately integrate services. This means fully integrating behavioral healthcare into the PCMH, a difficult task under the most favorable circumstances. Creating functioning accountable care organizations is an even more daunting task: this requires new principles of collaborating and financing and the current prototypes have generally failed to incorporate behavioral healthcare sufficient to meet even the basic needs of the target population. This paper will discuss (1) the case for and the difficulties associated with integrating behavioral healthcare into primary care at three levels: the practice, the state, and the nation; and (2) how this looks clinically, operationally, and financially.

### KEYWORDS

Mental health, Behavioral health, Primary care, Integrated care, Collaborative care, Healthcare policy

### INTRODUCTION

The US healthcare system is changing. The passing of the Patient Protection and Affordable Care Act (PPACA) began the simultaneous expansion of health insurance coverage while attempting to increase quality and decrease costs [1]. However, it is one thing to pass a bill and quite another to fund it and implement its provisions. Regardless of one's political convictions, it is apparent that our current system is deeply flawed, unsustainable, and in desperate need of change [2].

### Implications

**Policy:** Without the inclusion of behavioral health in healthcare reform efforts, comprehensive, whole-person care will be unachievable and make it more difficult to achieve the triple aim.

**Research:** It is challenging to truly research primary care without also examining the impact of behavioral health conditions and in some cases behavioral health providers.

**Practice:** Better understanding of the relationship of behavioral health conditions on medical conditions can help achieve comprehensive, whole-person care.

Healthcare spending in the USA is increasing uncontrollably and, if left to its present trajectory, will surpass the median family income by 2025 [3]. Around the world, healthcare spending is rising faster than overall economic growth: most countries are seeing healthcare costs consume an increasing percentage of their gross domestic product (GDP). This phenomenon is particularly problematic in the USA, which has both the highest percentage of GDP committed to healthcare costs and also has the highest growth rate in healthcare spending [4].

Despite our incredible healthcare costs, the USA consistently ranks last among 16 industrialized countries on all or nearly all measures of health affected by medical care. For example, our premature death rates are 68 % higher than the best-performing countries [5, 6].

We not only have one of the poorest-performing and most expensive health care systems in the developed world, we also have one of the most fragmented. Fragmentation itself can be thought of as a principal driver of high costs and low quality. This is most problematic where mental health is fragmented, or separated, from physical health [7]. This pernicious state of fragmentation is not only conceptually nonsensical but unnecessary—and the cost and quality consequences can be reversed [8–10].

Over a quarter of Americans suffer from a diagnosable mental disorder in a given year, and they are most frequently seen in a primary care setting, where they most often present with a

physical symptom [11, 12]. As many as 70 % of primary care visits are associated with significant psychosocial issues, although patients usually present with a physical complaint [13–15]. Furthermore, 12 % of emergency department visits are related to behavioral health issues, with 40 % of those visits resulting in a hospital admission [16]. Most patients with a chronic illness have more than one chronic illness, and frequently have comorbid mental disorders. This is true for cancer, chronic pain, cardiovascular disease, Crohn’s disease, diabetes, asthma, and chronic obstructive pulmonary disease [17, 18]. The presence of depression worsens medical prognosis, hinders adherence to treatment, impairs physical and cognitive function, diminishes quality of life, increases morbidity, affects the course of medical diseases, increases health care utilization, and decreases survival [18, 19]. The Centers for Disease Control and Prevention reports that adults with depression are more likely to report decreased physical activity, increased smoking, binge drinking, obesity, high blood pressure, and high cholesterol [20]. In fact, it does not take a full-blown mental disorder—the mere presence of psychological and behavioral factors worsens physical health outcomes and increases overall service utilization [18, 21–29]. Conversely, the severity of mental health diagnoses is strongly linked to medical comorbidity [17].

Significant cost savings and improved health outcomes are possible if behavioral health services are integrated into medical treatment [30]. Integrated PCMH demonstrations have shown success at increasing quality and reducing cost through reduced hospitalizations and emergency room visits, improvement in patient and provider experiences of care, developing relationships between practices with established systems, and decreasing inpatient and emergency care with patients with diabetes [14, 31–33]. Implementing integrated systems of care can be complicated, but successful, sustainable programs are possible when healthcare providers, institutions, governments, and health plans work together to that end. This is not something individual clinicians or practices can do alone [11, 15]. Under current conditions, many primary care practices pay a steep penalty for offering comprehensive, integrated services, and the participation of all of these stakeholders is mandatory.

We will examine the critical role of mental health, behavioral health, and substance use counseling (henceforth referred to as behavioral health) within the redesign of healthcare, highlighting efforts to integrate behavioral health providers into primary care. We will discuss ways in which joining two different delivery systems (behavioral health and physical health) is inherently complicated and requires innovation, compromise, and community support. We identify key trends and opportunities found in Accountable Care Organizations (ACOs) and Patient-Centered Medical Homes (PCMHs) and outline specific policy efforts around integration

within health reform at the practice, state, and federal levels.

#### The practice level

What is integrated care? Integration must involve linking primary care providers with mental health providers, but interpretations, strategies, and definitions of integration are highly variable [8, 34, 35]. Moreover, local implementation of an integrated practice depends on local resources, constraints, and conventions, which further adds to the variability. In scanning the literature on collaborative practice, one encounters such terms as improved collaboration, medically provided behavioral health care, co-location, disease management, bidirectional or “reverse” co-location, unified or advanced primary care and behavioral health, primary care behavioral health, and collaborative system of care [11]. Thus, it is imperative that practices and systems of care carefully define their terms and models of care.

At the practice level, integrated care, as we mean it here, consists of whole-person care—care that includes all of a patient’s problems, concerns, and needs—organized and coordinated by a team of clinicians that includes at least a primary care clinician and a behavioral health clinician, into a coherent, unitary plan. It means that the patient may, but not must, be seen by any member of the team with the expectation that the personal health plan will be known and used in a consistent fashion. These practice-level changes can bring about a dramatic improvement in health outcomes and their costs [18].

#### How clinical models of integration fit into ACOs

ACOs are a critical aspect of the PPACA: they simultaneously offer a new model of care delivery across providers and settings while also opening up new ways for providers to be incented to improve care and decrease cost [30, 36]. Examples of this are seen through the Medicare Shared Savings Program (MSSP). ACO regulations will become more important as the program is capitalized and new partnerships are formed between physician groups, hospitals, and health plans [30, 37]. These partnerships will ultimately include commercial as well as public plans, and will almost inevitably produce lower costs [36]. Unfortunately, behavioral healthcare is not systematically incorporated into these regulations. This omission leaves one of the greatest opportunities untapped to achieve the triple aim of better health for populations, better healthcare for individuals, at a lower cost.

#### The state level

Integrating care involves care coordination, which is generally not a billable service in conventional fee-for-service systems [38]. Beyond this, there is inconsistency with which providers may even sub-

mit a bill. The Health Insurance Portability and Accountability Act (HIPAA) brought a standard format for billing, and there is a common set of Current Procedural Technology (CPT) codes; however, there is not a standard set of guidelines specifying who may actually use these codes. Individual states and individual private insurers set their own standards on who can bill for a given service. This adds prohibitive complexity to the delivery of care [39].

Tennessee and Missouri have developed solutions for safety net settings that demonstrate what is possible in behavioral health integration. A safety net setting provides access to care for low-income, uninsured, and vulnerable populations [40]. Although these examples occur in safety net settings, lessons can be learned that apply to other settings. In 2006, Tennessee began to deliver Medicaid services through managed care organizations (MCOs) responsible for both medical and behavioral health care, and has used policy strategies to make progress toward further integration [38].

Tennessee pays for certain billing codes for Screening, Brief Intervention, Referral, and Treatment (SBIRT services); allows same-day billing (i.e., bills can be generated for separate visits when a patient sees both their primary care and behavioral health providers on the same day); reimburses for certified peer specialist services and now requires managed care contracts that include integrated medical and behavioral health care. The National Committee for Quality Assurance (NCQA) certification for MCOs is required, which includes behavioral health assessments and health information technology with reimbursement for both parties involved in tele-health. The Commissioner of the Department of Mental Health and Developmental Disabilities ruled that a Federally Qualified Health Center (FQHC) or primary care clinic may deliver behavioral health services without being licensed as a Community Mental Health Center (CMHC) [38].

Integration efforts in Missouri date back to the state's Medicaid Reform Commission's report in 2005 [38]. The Behavioral Health and Primary Care Integration Pilot was allotted \$1.4 million by the Missouri legislature for 3 years to support FQHCs and CMHCs working together to provide integrated care with support for health information technology (HIT). Missouri is supportive of same-day billing, is broadening SBIRT availability, supports tele-health, and promotes CyberAccess. Missouri's Chronic Care Improvement Program (CCIP) provides primary care case management to Medicaid fee-for-service (FFS) beneficiaries with one or more of six chronic illnesses other than serious mental illness (SMI), but does attempt to manage the care of people with psychiatric illness due to the high rates of diabetes and pre-diabetes in patients taking psychotropic medicines. Missouri carved out its Behavioral Pharmacy Management Program, which reviews Medicaid prescription patterns, compares

prescribing patterns to national best practices, and informs physicians about their patients' prescription refill status.

While these states' challenges and solutions differ, lessons can be learned that are generalizable [38]. State Medicaid agencies can provide *integration incentives* by setting behavioral health expectations in managed care and disease management contracts and by aligning payment strategies that reward integrated performance. Missouri *engaged state policy champions* in Medicaid, mental health agencies, and the private sector to advance integration efforts. *Flexibility* in making the health care system work for the individual setting is essential in both Tennessee and Missouri. In Tennessee, Medicaid MCOs are afforded latitude in creating *integrated networks of care* and implementing *payment innovations* that support integration. Missouri state officials provided flexibility at the provider level within state programs, including *integration pilots* and the Chronic Care Improvement Program. Efforts to integrate have resulted in safety net providers with a greater ability to serve patients in an integrated manner. The safety net is positioned to integrate care through partnerships, and both states have encouraged these partnerships and supported both FQHCs and CMHCs through initiatives. From these notable changes, an integrated system of care is beginning to emerge [38].

The Patient-Centered Primary Care Collaborative (PCPCC) Payment Reform Task Force has explored practical approaches to payment reform implementation for the PCMH, and has offered a range of payment mechanisms according to the degree of performance risk and reward that practices or networks are willing to take on [41]. The PCPCC approach to payment reform for the PCMH is outlined in Table 1.

The highest level of performance, a global payment system, can substantially lower costs, improve health outcomes, and improve patient and provider satisfaction, but requires a major investment in high-level teamwork and leadership.

## The federal level

### *The role of behavioral health in the PCMH*

Improved facilitation of treatment for patients with mental/behavioral and substance-use conditions is needed. Carve-outs for mental health benefits such as only paying for behavioral health care delivered by behavioral health professionals, high copayments for behavioral health treatment, and inadequate reimbursement are barriers to effective collaboration and discourage primary care mental health screenings and treatment [42]. Resolving inconsistencies, eliminating mental health carve-outs, and constructing blended payment systems could improve behavioral health treatment in primary care, and support integrated, patient-centered health care consistent with PCMH standards [42].

Table 1 | PCPCC payment reform for the PCMH

| Performance risk | Reward   | Outcome  |
|------------------|----------|--|
| Lowest           | Least    | <ul style="list-style-type: none"> <li>• Maintaining fee for service (FFS)</li> <li>• Inadequate levels of payment to sustain the PCMH and counterproductive incentives that maximize volume</li> </ul>  |
| Modest           | Modest   | <ul style="list-style-type: none"> <li>• Efforts to qualify as an accredited PCMH in return for a management fee to support PCMH activities needed to support practice transformation and sustained delivery of enhanced PCMH services.</li> </ul> |
| Moderate         | Moderate | <ul style="list-style-type: none"> <li>• Adding a component of pay for performance (P4P) to FFS for achieving desired outcomes and goals in cost, quality, and patient experience.</li> </ul>  |
| Highest          | Highest  | <ul style="list-style-type: none"> <li>• Global payment for operation of PCMH combined with large P4P bonus payment, which eliminates the need to maximize volume and replaces it with emphasis on value creation.</li> </ul>                      |

*The role of behavioral health ACO*

As reported by Ries [30], the PCMH model includes the coordination of treatment across specialties and settings [43], and the Accountable Care Act authorizes CMS to set their own inclusion criteria for healthcare professionals eligible to participate in ACOs. It is therefore disappointing that the Medicare Shared Savings Plan essentially excludes behavioral health professionals (excepting psychiatrists) as participating clinicians [30, 44]. An “ACO professional” is limited to medical doctors, physicians’ assistants, nurse practitioners, and clinical nurse specialists [45]. Regulations would assess “psychosocial needs” as part of individualized care planning for high-risk individuals targeted for case management [46], but when ACOs evaluate population health needs, they are not obligated to evaluate behavioral health needs [47].

Only one of the 65 quality measures for ACOs, a measure for depression, is aimed at a behavioral health need for Medicare beneficiaries [30]. Regulations would require screening for depression with a documented follow-up plan, demonstrating procedure, not treatment, and would not prevent depression or encourage coordination with a behavioral health clinician or service [30]. The exclusion of behavioral health services from the MSSP is surprising, given reforms including the Mental Health Parity Act of 1996, the Mental Health Parity and Addiction Equity Act of 2008, and the Medicare Improvements for Patients and Providers Act of 2008 [30, 48, 49]. Various states have similar parity provisions within their insurance code [50, 51] and require insurance coverage for serious mental illnesses [52], substance use [53], and autism treatment [54]. ACOs will likely be unable to accomplish treatment objectives without better behavioral health integration [30].

CMS risks setting the MSSP apart from other provisions of PPACA by excluding behavioral health [30]. PPACA plans to extend mental health equality to qualified plans participating in the state-based insurance exchanges [55]. Coverage attained through the exchanges will include behavioral health benefits and treatment [30, 56]. ACOs may be unprepared to implement these interventions

within proposed regulations; therefore, CMS should encourage the delivery of behavioral healthcare in the final rules for ACOs to further the Affordable Care Act’s purpose of improving the quality and efficiency of treatment [30].

**Essential health benefits**

The Department of Health and Human Services (HHS) is planning a regulatory approach to define essential health benefits (EHB) under the Affordable Care Act. The approach uses a reference plan based on employer-sponsored coverage to ensure that plans cover 10 statutory categories including mental/behavioral health and substance use disorder services, behavioral health treatment, preventive and wellness services, and chronic disease management. This covers inpatient and outpatient mental/behavioral health and substance use disorder services; however, coverage in the small group market is limited. Coverage will be consistent with the Mental Health Parity and Addiction Equity Act (MHPAEA), but the extent to which plans cover behavioral health treatment is unclear [57]. The MHPAEA addressed the potential for discrimination in mental/behavioral health and substance use disorder benefits by stating that the financial requirements or treatment limitations for mental/behavioral health and substance use disorder benefits be no more restrictive than those for medical and surgical benefits. Although parity is discussed for covered mental/behavioral health and substance use disorder benefits, there is no requirement to offer such a benefit in the first place. Prior to the Affordable Care Act, MHPAEA parity requirements did not apply to the individual market or group health coverage sponsored by employers with 50 or fewer employees [58]. To be consistent, MHPAEA and EHBs should include behavioral health.

**Opportunities for better integration within NCQA PCMH criteria**

NCQA’s 2011 PCMH program for improving primary care gives information about organizing care around patients, working in teams, coordinat-

ing and tracking care over time, facilitating partnerships between individual patients and their personal physicians, and, when appropriate, the patient's family [59]. There are many ways for behavioral health integration to be an essential component of the PCMH: behavioral health providers can help improve care coordination, planning and management, improve access, improve self-care, assist with population management and outcomes measurement, assist with high utilizing and vulnerable populations, and streamline patient centered workflow. Patient centeredness is a key program goal, including a stronger focus on integrating behavioral healthcare and care management.

#### Opportunities for integration

We could make better decisions about integrated care if we had more and better information. We are desperately in need of research that tests clinical models, systems of care, financing and incentive models, and policy effects [60–63]. We need these results not only for primary care leaders but also for those working with primary care in order to create a compelling case that integration makes a real world difference in quality of care, cost offset, and population-based health improvement. As stated by Green and Ottoson: “If we want more evidence-based practice, we need more practice-based evidence.” [64] One way in which to gather data to establish the effectiveness of integrated primary care as well as improve interdisciplinary team communication without interrupting practice workflow is through the use of electronic health record (EHRs). As reported by Pace and Staton [65], electronic data collection offers some possible solutions such as transparent decision algorithms, improved data entry, data integrity, improved data transfer, and tracking systems. Practice-based research networks (PBRNs) can use a variety of electronic data collection options; therefore, if planning to collect data electronically, it is important to match the electronic data collection method to the study design [65]. Additionally, EHR development is a core element of NCQA certification for the PCMH. As reported in the PCMH 2011 Draft Standards [66], practices with a fully functioning EHR achieved higher scores on the Physician Practice Connections® (PPC) survey [67], and a positive correlation has been demonstrated between the overall PPC score and diabetes care measures [68].

Furthermore, it is well supported that mental health treatment is effective for a variety of problems [69] and these services are most often delivered in outpatient specialty mental health settings. Despite its effectiveness, most people do not choose to go to specialty mental health for treatment of their mental health concerns; instead they choose to go to their PCP [70, 71]. This is why it is so important that mental health be included in healthcare redesign. Once behavioral health services can be provided in

primary care more readily, data will be able to be collected in a more systematic manner and the specific interventions that are most effective and cost efficient will be able to be determined.

Behavioral health leaders should recognize the centrality of their role in policy reform. Whether through hearing the success story of another integrated behavioral health primary care site or a site that had difficulties integrating, advocacy is helpful in understanding what specific policy changes are needed for successful integration. The behavioral health field needs to mature, needs more evidence, more innovation, more advocacy, and better integration with other health reform efforts in order to continue to make progress.

Organizations wishing to participate in ACOs must develop the capacity to meet programmatic requirements, and must develop new relationships with hospitals and provider organizations [72]. Success requires continual learning from mistakes, adaptation, change, and the ability to transfer knowledge among participants [72]. Ten potential mistakes one should be aware of regarding ACO implementation include:

1. overestimating the ability to manage risk;
2. overestimating the ability to use electronic health records;
3. overestimating the ability to report performance measures;
4. overestimating the ability to implement standardized care management protocols;
5. failure to balance interests and engage stakeholders (such as hospitals and physician groups) in creating processes to resolve differences;
6. failure to engage patients in self-care management and self-determination;
7. failure to develop contractual relationships with cost effective specialist providers;
8. failure to navigate the new regulatory and legal environment;
9. failure to integrate beyond the structural level; and
10. failure to recognize various interdependencies [72].

Although strategies for addressing each of these mistakes exist, they tend to be local, and organizations must develop learning systems to avoid mistakes, take corrective action as needed, and predict future challenges [73]. Cooperative leadership from CMS, payers, hospitals, physicians, and other professionals to encourage learning systems and develop mature performance assessment for process feedback will be crucial [72].

According to Cohen [74], one way professionals may become more actively involved in the development of ACOs could be to encourage a partnership between an independent practice association (IPA) and a community hospital to create an ACO. Medicare determines what it costs per year to treat

the average beneficiary in the geographic area. Then providers submit their traditional claims to Medicare under the resource-based relative value scale (RBRVS) system and the hospital submits typical diagnosis related groups (DRG)-base claim [74]. The traditional fee-for-service system would remain in place during this time and then at the end of the year, Medicare determines if the ACO provided care for less than the previously calculated benchmark cost. If so, the ACO is eligible to share in the cost savings, and the savings are divided among the providers and hospital [74]. Although simple in principle, this approach requires that important details and negotiations be an ongoing part of the process.

As discussed by Hong and Robiner [75], in 2011 CMS requested comments about the proposed rule in Section 3022 of the Accountable Care Act. One example of a behavioral health response to this proposed rule noted that in its proposed form, psychologists, specifically, were not included in the list of ACO providers. The ACO model has the potential to drastically change the practice of psychology, as well as other mental health professions, if, in order to be eligible for payment by Medicare/Medicaid and other insurance companies in the future, behavioral health providers are required to join ACOs. Thus, it is incumbent to successfully convince ACOs of the benefits of behavioral health integration into clinical, programmatic, and quality assurance endeavors. Otherwise, ACOs will likely assume that fewer behavioral health providers are needed and they may become relegated to the margins of the healthcare system as private, fee-for-service occupations [75]. In response to the aforementioned ACO proposal, William Robiner, Ph.D., President of the Association of Psychologists in Academic Health Care Centers (APAHC), Section VIII of Division 12, sent a letter to Dr. Berwick, Director of CMS, requesting that psychologists, specifically, be included in the list of ACP providers just as physicians, physician assistants, nurse practitioners, and clinical nurse specialists were [75]. In this letter, he reported that promoting psychological services and integrating them with other organized health services are effective for enhancing outcomes, curbing costs, and are essential to achieving goals of the Affordable Care Act [75]. This type of action may be advisable for other behavioral health provider organizations that are looking to be included in the list of ACO providers. Behavioral health providers must keep abreast of state and federal policy changes and the emerging literature that supports the need for and value of behavioral health services in order to advance their advocacy efforts [75].

#### CONCLUSIONS—UNITING TO IMPROVE HEALTHCARE

Behavioral health has been excluded from much of the emerging healthcare reform conversation, which

puts patients at risk for unmet healthcare needs. Most medical issues have a behavioral health component to varying degrees, and if we are unable to treat the whole person, health outcomes will be compromised and healthcare will be more expensive. We cannot afford to ignore the behavioral health needs of patients. Integrating behavioral health into primary care is just a good idea. It improves access, minimizes stigma, increases overall health outcomes, and lowers costs [11]. Integrating behavioral health services into the overall healthcare structure can help to move past tendencies to separate the mind and body and is in keeping with comprehensive whole person care [18, 76]. In order for this to be realized, support is needed from policy makers at all levels. There is more than enough work to go around, and without teamwork, integration will flounder. We need each other; we must join resources from the fields of medicine, psychology, nursing, social work, and the like to create general principles and local solutions. Clinicians who unite can influence governments and payers to make changes that improve patient needs and provide support for needed services with appropriate compensation. If we continue to ignore behavioral health needs, patients and providers will suffer the consequences, and we will regret that we did not work together to bring a comprehensive, integrated form of healthcare to our citizens when we had the chance.

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1. Marris Maddocks & Associates. Patient Protection and Affordable Care Act (PPACA). 2010; <http://ppaca.com/>, 2012.
2. Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century*. Washington, D.C.: National Academy Press; 2001.
3. DeVoe JE, Doodoo MS, Phillips RL Jr, Green LA. Who will have health insurance in the year 2025? *American Family Physician*. 2005;72(10):1989.
4. Organisation for Economic Co-operation and Development. *Health Care Spending in the United States and Selected OECD Countries*. April 2011 2011.
5. Nolte E, McKee, M. Measuring the health of nations: analysis of mortality amenable to health care. *BMJ*. 2003;327(7424).
6. Thorpe K, Howard, DH, Galactionova, K. Differences in disease prevalence as a source of the U.S.–European health care spending gap. *Health Affairs Web Exclusive* October 2, 2007.
7. deGruy F. Mental health care in the primary care setting. In: Donaldson MS, Yordy KD, Lohr KN, Vanselow NA (Eds.) *Primary care: America's health in a new era*. Washington, D.C.: Institute of Medicine; 1996.
8. Butler M, Kane RL, McAlpin D, et al. *Integration of Mental Health/ Substance Abuse and Primary Care No. 173 (Prepared by the Minnesota Evidence-Based Practice Center under Contract No. 290-02-0009.) AHRQ Publication No. 09-E003*. Rockville, MD: Agency for Healthcare Research and Quality; October 2008 2008.
9. Lurie IZ, Manheim LM, Dunlop DD. Differences in medical care expenditures for adults with depression compared to adults with major chronic conditions. *The Journal of Mental Health Policy and Economics*. 2009;12(2):87-95.
10. Stoner SC, Marken PA, Sommi RW. Psychiatric comorbidity and mental illness. *Medical Update for Psychiatrists*. 1998;3(3):64-70.
11. Collins C, Hewson DL, Munger R, Wade T. *Evolving Models of Behavioral Health Integration in Primary Care* 2010.

12. National Institute of Mental Health. The numbers count: mental disorders in America. 2008.
13. Kroenke K, Mangelsdorff AD. Common symptoms in ambulatory care: incidence, evaluation, therapy, and outcome. *American Journal of Medicine*. 1989;86:262-266.
14. Flottemesch T SS, O'Connor PJ, Solberg L, Asche S, Pawlson LG. 2010. *Under review*. Are characteristics of the medical home associated with diabetes care costs?
15. Robinson PJ, Reiter JT. *Behavioral consultation and primary care: a guide to integrating services*. New York: Springer; 2007.
16. Owens P, Mutter, R.L., & Stocks, C. Mental health and substance abuse-related emergency department visits among adults, 2007. 2010. <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb92.pdf>
17. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey replication. *Archives of General Psychiatry*. 2005;62(6):593-602.
18. Trask PC, Schwartz SM, Deane SL, et al. Behavioral medicine: the challenge of integrating psychological and behavioral approaches into primary care. *Effective Clinical Practice*. 2002;5:75-83.
19. Evans DL, Charney DS, Lewis L, Golden RN, Gorman JM, Ranga Rama Krishnan K, Nemeroff CB, Bremner JD, Carney RM, Coyne JC, DeLong MR, Frasur-Smith N, Glassman AH, Gold PW, Grant I, Gwyther L, Ironson G, Johnson RR, Kanner AM, Katon WJ, Kaufmann PG, Keefe FJ, Ketter T, Laughren TP, Leserman J, Lyketsos CG, McDonald WM, McEwen BS, Miller AH, Musselman D, O'Connor C, Petitto JM, Pollock BG, Robinson RG, Roose SP, Rowland J, Sheline Y, Sheps DS, Simon G, Spiegel D, Stunkard A, Sunderland T, Tibbits P, Valvo WJ. Mood disorders in the medically ill: scientific review and recommendations. *Biological Psychiatry*. 2005;58:175-189.
20. Daniel J, Honey, W., Landen, M., Marshall-Williams, S., Chapman, D., Lando, J. Mental health in the United States: health risk behaviors and conditions among persons with depression—New Mexico, 2003. *Morbidity and Mortality Weekly Report*. 2005;39:989-991.
21. Allison TG, Williams DE, Miller TD. Medical and economic costs of psychological distress in patients with coronary artery disease. *Mayo Clinic Proceedings*. 1995;70:734-742.
22. Compas BE, Haaga DAF, Keefe FJ, Leitenberg H, Williams DA. Sampling of empirically supported psychological treatments for health psychology: smoking, chronic pain, cancer, and bulimia nervosa. *Journal of Consulting and Clinical Psychology*. 1998;66:89-112.
23. Spiegel D, Bloom JR, Yalom I. Group support for patients with metastatic cancer: a randomized prospective outcome study. *Archives of General Psychiatry*. 1981;38:527-533.
24. Spiegel D, Bloom JR, Kramer HC, Gotthel E. Effect of psychosocial treatment on survival of patients with metastatic breast cancer. *Lancet*. 1989;2:888-890.
25. Fawzy FI, Fawzy NW, Hyun CS. Effects of an early structured psychiatric intervention, coping and affective state on recurrence and survival 6 years later. *Archives of General Psychiatry*. 1993;50:681-689.
26. Anderson BL. Psychological interventions for cancer patients to enhance quality of life. *Journal of Consulting and Clinical Psychology*. 1992;60:552-568.
27. Spiegel D, Sephton SE, Stites DP. Effects of psychosocial treatment in prolonging cancer survival may be mediated by neuroimmune pathways. *Annals of the New York Academy of Sciences*. 1998;840:674-683.
28. Richardson JL, Shelton DR, Krailo M, Levine AM. The effects of compliance with treatment on survival among patients with hematologic malignancies. *Journal of Clinical Oncology*. 1990;8:356-364.
29. Hermann C, Brand-Driehorst S, Kaminsky B. Diagnostic groups and depressed mood as predictors of 22-month mortality in medical inpatients. *Psychosomatic Medicine*. 1999;60:570-577.
30. Ries DK. ACO mission: behavioral healthcare under the Medicare Shared Savings Program. *June 2011 ACO Special Edition* 2011. Accessed October, 23, 2011.
31. Fields D, Leshen E, Patel K. Driving quality gains and cost savings through adoption of medical homes. *Health Affairs*. 2010;29(5):819-826.
32. Reid RFP, Yu O, Ross T, Tufano JT. Patient-centered medical home demonstration: a prospective, quasi-experimental, before and after evaluation. *The American Journal of Managed Care*. 2009;15(9):71-87.
33. Patient Centered Primary Care Collaborative. PCMH—Evidence of Quality. 2011; <http://www.pcpcc.net/content/pcmh-outcome-evidence-quality>. Accessed October, 24, 2011.
34. 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. *AHRQ Publication No. 11-0067*. 2011. <http://www.ahrq.gov/research/collaborativecare/>
35. Miller BF, Mendenhall TJ, Malik AD. Integrated primary care: an inclusive three-world view through process metrics and empirical discrimination. *Journal of Clinical Psychology in Medical Settings*. 2009;16:21-30.
36. "Patient Protection and Affordable Care Act", 111 H.R. 3590 [including the Medicare Shared Savings Program under Title III—named "Improving the Quality and Efficiency of Health Care"—under the subpart for "Encouraging Development of New Patient Care Models."].
37. BlueCross Blue Shield of Minnesota has launched a "shared incentive" payment model with four of Minnesota's largest care systems—Allina Hospitals & Clinics, Essentia Health, Fairview Health Services, and HealthEast Care System. (See <http://www.bcbs.com/news/plans/minnesota-largest-health-plans-signs-new-total-cost-of-care-contracts.html>) In San Diego, Anthem Blue Cross is collaborating with Sharp Community Medical Group and Sharp Rees-Stealy Medical Centers on an ACO (see <http://www.sharp.com/news/anthem-blue-cross-scmg-srs-collaborate.cfm>).
38. Takach M, Purington, K., Osius, E. *A tale of two systems: a look at state efforts to integrate primary care and behavioral health in safety net settings*. Portland: National Academy for State Health Policy; 2010.
39. Bachman J, Pincus HA, Houtsinger JK, Unutzer J. Funding mechanisms for depression care management: opportunities and challenges. *General Hospital Psychiatry*. 2006;28(4):278-288.
40. National Association of Public Hospitals and Health Systems. What is a Safety Net Hospital? [http://www.literacyworks.org/hls/hls\\_conf\\_materials/WhatIsASafetyNetHospital.pdf](http://www.literacyworks.org/hls/hls_conf_materials/WhatIsASafetyNetHospital.pdf).
41. Collaborative PCPC. Payment Reform Task Force Agenda 2011. <http://www.pcpcc.net/content/payment-reform-task-force-agenda-1182011-4pm-et>.
42. Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Preventing Chronic Disease*. 2006;3(2):A42.
43. 42 U.S.C. § 256a-1 [Under the PPACA section for "Establishing Community Health Teams to Support the Patient-Centered Medical Home" one requirement of health teams is that they "implement interdisciplinary, interprofessional care plans" § 256a-1(c)(4)] and 42 U.S.C. § 1396w-4 [Under PPACA's "State Option to Provide Health Homes for Enrollees with Chronic Conditions", the care team is comprised of "physicians and other professionals, such as a nurse care coordinator, nutritionist, social worker, behavioral health professional, or any professionals deemed appropriate by the State." § 1396w-4(h)(6).]
44. 42 U.S.C. § 1899(b)(1)(E).
45. Proposed rule 42 C.F.R. § 425.4.
46. Proposed rule 42 C.F.R. § 425.5(d)(15)(ii)(B)(4).
47. Proposed rule 42 C.F.R. § 425.5(d)(15)(ii)(B)(3).
48. 29 U.S.C. § 1185a; 29 C.F.R. § 2590.712.
49. 42 U.S.C. § 13951(c).
50. States with mental health parity statutes are: Alabama (§ 27-54-4(b)), Alaska (§ 21.54.151), Arizona (§ 20-2322), Arkansas (§§ 23-99-501 to 23-99-12), Connecticut (§ 38a-476a), Georgia (§ 33-29-24.1), Hawaii (§ 431 M-5), Idaho (for state employees at § 67-5761A), Illinois (215 § 5/370c), Indiana (§§ 27-13-7-14.8, 27-8-5-15.6), Kansas (§ 40-2,105a), Minnesota (62Q.47), Missouri (§ 376.811), Montana (§ 33-22-703 ), Nebraska (§ 44-793), New Hampshire (§ 415:18-a), New Mexico (§§ 59A-23E-18), New York (Ins. § 3221(1)(5)(A)), North Carolina (§ 58-3-220), North Dakota (§26.1-36-08), Ohio (§§ 3923:29, 3923:281, 3923:282), Oklahoma (§ 6060.11), Oregon (§ 743A.168), Rhode Island (Ch. 27–38.2), South Carolina (§ 38-71-290), South Dakota (§ 58-17-98), Tennessee (§ 56-7-2360 [mental health]), § 56-7-2602 [substance abuse]), Texas (Ins. § 1355), Vermont (8 § 4089b), Virginia (38.2 § 3412.1:01 [mental health only]), and Wisconsin (§ 632.89).
51. National Advisory Mental Health Council Parity in Financing Mental Health Services (National Institute of Mental Health Archive, 1998) at 54 (listing states that had enacted mental health parity laws by 1997 as: Arizona, Arkansas, Colorado, Connecticut, Indiana, Maine, Maryland, Minnesota, Missouri, New Hampshire, North Carolina, Rhode Island, South Carolina, Texas and Vermont).
52. Insurance coverage for the treatment of mental illness is required by Alabama (27-54-4(a)), Arkansas (§ 23-86-113), California (Ins. § 10125), Connecticut (§ 38a-488a), Delaware (Ins. § 3578), Florida (§ 627.668), Georgia (§ 33-24-28.1), Hawaii (§ 431 M-4(c)), Illinois (215 § 5/370c), Iowa (§ 514 C.22), Kansas (§ 40-2,105), Louisiana (R.S. 22:1043), Maine (Title 24-A, §§2749, 2843, 4234-A), Massachusetts (Ch. 175, § 47B), Missouri (§§ 376.814, 376.1550), Montana (§ 33-22-703), Nevada (§§ 689A.0455, 689 C.169), New Hampshire (§ 417-

- E:1), New Jersey (§§ 17:48-6v, 17:48A-7u, 17:48E-35.20, 17B:26-2.1 s, 17B:27-46.1v), North Carolina (§ 58-3-220), Ohio (§ 3923:282), Oklahoma (§ 6060.11), Oregon (§ 743A.168), Rhode Island (Ch. 27-38.2), South Carolina (§ 38-71-290), South Dakota (§ 58-17-98), Tennessee (§ 56-7-2601), Texas (Ins. § 1355), Utah (§ 31A-22-625 [mandating offer of coverage]), Vermont (8 § 4089b), Virginia (38.2 § 3412.1), Washington (§ 48.21.241 [commercial insurance] and § 48.41.220 [coverage by state insurance pool]), West Virginia (§ 33-16-3a) Wisconsin (§ 632.89), and Wyoming (§§ 26-22-102, 26-22-106).
53. Insurance coverage for the treatment of substance abuse is required by Arkansas (§ 23-79-139), Colorado (§ 10-16-104.7), Delaware (Ins. § 3343(b)), Florida (§ 627.669), Hawaii (§ 431 M-4(b)), Kansas (§ 40-2-105), Louisiana (R.S. 22:1025), Maine (24-A, §2842), Maryland (§ 15-802), Mississippi (§ 83-9-27), Missouri (§ 376.811), Montana (§ 33-22-703), Nevada (§§ 689A.046, 689 C.166), New Jersey (§§ 17:48-6a, 17:48A-7a, 17:48E-34, 17B:26-2.1), New Mexico (§§ 59A-23-6; 59A-47-35), North Dakota (§26.1-36-08), Ohio (§ 3923:29), Oregon (§ 743A.168), Tennessee (§ 56-7-2601), Texas (Ins. § 1368), Utah (§ 31A-22-625 [mandating offer of coverage]), Vermont (8 § 4089b), Virginia (38.2 § 3412.1), and Wisconsin (§ 632.89).
  54. Insurance coverage of autism spectrum disorders is required in California (Health & Safety Code § 1374.72), Connecticut (§ 38a-514b), Illinois (215 ILCS 5/3562.14), Indiana (§ 27-13-7-14.7), Louisiana (§ 22:1050), Nevada (§ 689A.0435), Pennsylvania (40 P.S. § 764 h), South Carolina (§ 38-71-280), Vermont (8 § 4088i), Virginia (38.2 § 3412.1:01), and Wisconsin (§ 632.895(12 m)).
  55. 42 U.S.C. § 18031(j).
  56. 42 U.S.C. § 18022(b)(1)(E).
  57. Affordable Care Act § 1311(j); see also PHS Act § 2726 E, Internal Revenue Code § 9812. See also interim final regulations at 75 FR 5410 (February 2, 2010) and guidance published on June 30, 2010 (<http://www.dol.gov/ebsa/faqs/faq-mhpaea.html>), December 22, 2010 (<http://www.dol.gov/ebsa/faqs/faq-aca5.html>), and November 17, 2011 (<http://www.dol.gov/ebsa/faqs/faq-aca7.html>).
  58. Department of Health and Human Services. Essential Health Benefits Bulletin. In: Oversight CfClal, ed2011:13.
  59. National Committee for Quality Assurance. Patient-Centered Medical Home. 2011; <http://www.ncqa.org/tabid/631/default.aspx>. Accessed April, 14, 2011.
  60. Blount A, Kathol R, Thomas M, et al. The economics of behavioral health services in medical settings: a summary of the evidence. *Professional Psychology: Research and Practice*. 2007;38:290-297.
  61. Kautz C, Mauch D, Smith SA. *Reimbursement of mental health services in primary care settings*. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration;2008. HHS Pub. No. SMA-08-4324.
  62. Kessler R, Stafford D, Messier R. The problem of integrating behavioral health in the medical home and the questions it leads to. *Journal of Clinical Psychology in Medical Settings*. 2009;16(1):4-12.
  63. Peek CJ. Planning care in the clinical, operational, and financial worlds. In: Kessler R, Stafford D, eds. *Collaborative Medicine Case Studies: evidence in Practice*. New York: Springer; 2008.
  64. Green L, Ottosen, JM. From efficacy to effectiveness to community and back: evidence based practice vs. practice based evidence. Paper presented at the From Clinical Trials to Community: The Science of Translating Diabetes and Obesity Research conference; Jan 12–13, 2004; Bethesda, MD.
  65. Pace WD, Staton EW. Electronic data collection options for practice-based research networks. *Annals of Family Medicine*. 2005;3(suppl1):s21-s29. doi:10.1370/afm.270.
  66. NCQA. Patient-Centered Medical Home (PCMH) 2011 Draft Standards Overview2010.
  67. Solberg SS LI, Scholle SH, Asche SE, Shih SC, Pawlson LG, Thoele MJ. Practice systems for chronic care: frequency and dependence on an electronic medical record. *American Journal of Managed Care*. 2005;11(12):789-796.
  68. Solberg LA S, Pawlson LG, Scholle SH, Shih S. Practice systems are associated with high-quality care for diabetes. *American Journal of Managed Care*. 2008;14(2):85-92.
  69. Smith ML, Glass GV. Meta-analysis of psychotherapy outcome studies. *American Psychologist*. 1977;32(9):752-760.
  70. Kessler RC, Demler O, Frank RG, et al. Prevalence and treatment of mental disorders, 1990 to 2003. *N Engl J Med*. June 16, 2005 2005;352(24):2515-2523.
  71. Pincus HA, Tanielian TL, Marcus SC, et al. Prescribing trends in psychotropic medications: primary care, psychiatry, and other medical specialties. *JAMA: The Journal of the American Medical Association*. 1998;279(7):526-531.
  72. Singer S, Shortell SM. Implementing accountable care organizations: ten potential mistakes and how to learn from them. *JAMA: The Journal of the American Medical Association*. 2011;306(7):758.
  73. Fisher ES, Shortell SM. Accountable care organizations: accountable for what, to whom, and how. *JAMA: The Journal of the American Medical Association*. 2010;304(15):1715-1716.
  74. Cohen JT. A Guide to Accountable Care Organizations, and Their Role in the Senate's Health Reform Bill. *Health Reform Watch: A Web Log of Seton Hall Law School's Center for Health & Pharmaceutical Law & Policy* 2010. <http://www.healthreformwatch.com/2010/03/11/a-guide-to-accountable-care-organizations-and-their-role-in-the-senates-health-reform-bill/>.
  75. Hong BA, Robiner W. Accountable care organizations and psychology: getting on the invitation list to the party. *Clinical Psychologist*. 2011;64(3):4-7.
  76. Kathol RG, Butler M, McAlpine DD, Kane RL. Barriers to physical and mental condition integrated service delivery. *Psychosomatic Medicine*. 2010;72(6):511-518.