

# Integrating Mental Health and Addiction Treatment Into General Medical Care: The Role of Policy

Emma E. McGinty, Ph.D., M.S., and Gail L. Daumit, M.D., M.H.S.

Interventions that integrate care for mental illness or substance use disorders into general medical care settings have been shown to improve patient outcomes in clinical trials, but efficacious models are complex and difficult to scale up in real-world practice settings. Existing payment policies have proven inadequate to facilitate adoption of effective integrated care models. This article provides an overview of evidence-based models of integrated care, discusses the key elements of such models, considers how existing policies have fallen short, and outlines future policy strategies.

Priorities include payment policies that adequately support structural elements of integrated care and incentivize multidisciplinary team formation and accountability for patient outcomes, as well as policies to expand the specialty mental health and addiction treatment workforce and address the social determinants of health that disproportionately influence health and well-being among people with mental illness or substance use disorders.

*Psychiatric Services in Advance* (doi: 10.1176/appi.ps.202000183)

Mental illnesses and substance use disorders, known as behavioral health conditions, are significantly undertreated in the United States. About one in every five U.S. adults experience mental illness each year, but in 2018 only 43% of adults with mental illness ages 18 and older received any mental health treatment and only 11% of people with substance use disorders received any addiction treatment (1). Mental illness and substance use disorders are highly comorbid with one another and with general medical conditions, such as cardiovascular and liver disease (1–3). These comorbidities occur along complex and bidirectional pathways involving a range of factors, including but not limited to biological mechanisms, metabolic side effects of psychotropic medications, and shared risk factors, such as poverty (4, 5). Despite the high comorbidity of general medical illnesses, they are frequently undertreated among people with behavioral health conditions (6, 7). Suboptimal care for people with behavioral health conditions has major public health implications. Depression is a leading cause of disability in the United States and worldwide (8). People with serious mental illnesses, such as schizophrenia, bipolar disorder, and major depressive disorder, die 10–20 years prematurely, compared with the overall population, primarily due to cardiovascular disease (9). From 1999 to 2017, more than 200,000 people died from opioid overdose deaths in the United States (10).

Despite the high burden of behavioral health conditions and their comorbidities, the U.S. specialty mental health and addiction treatment systems have historically operated outside the general medical system (11). This fragmentation

is an important driver of undertreatment, and development and implementation of models for integrating general medical and behavioral health care (hereafter referred to as integrated care) have been a priority in the clinical and health policy communities for decades (12). Progress has been made: most mental health services are now delivered in primary care settings (13). However, integrated care models shown to be effective in clinical trials have not been widely implemented outside demonstration programs funded through grants or other time-limited mechanisms (14–16). Policy barriers, particularly lack of adequate financing mechanisms, are cited as a major impediment to integrated care (17). However, payment policy initiatives designed to facilitate integration have to date proved inadequate, failing to translate into widespread adoption of evidence-based integrated care models or significant improvements in care access, care quality, or health outcomes among people with mental illness or substance use disorders.

This article has three objectives. First, to briefly summarize the evidence surrounding models for integrating behavioral health services into primary care and other general medical settings. Although integrated care can be based in either general medical or specialty behavioral health settings, we limit our scope to models based in general medical settings, which are the focus of a larger body of research and implementation efforts. Second, we delineate core components of integrated care. Third, we consider how existing policies have fallen short and discuss policy options for overcoming remaining barriers to care integration.

(Because the literature informing this article was more extensive than could be included in the published reference list, we have included a list for further reading in an online supplement to this article.)

Editor's Note: This article is part of the Think Bigger, Do Good series commissioned by the Thomas Scattergood Behavioral Health Foundation, Peg's Foundation, the Patrick P. Lee Foundation, and the Peter & Elizabeth Tower Foundation. The full series can be viewed at [www.ThinkBiggerDoGood.org](http://www.ThinkBiggerDoGood.org).

## MODELS FOR INTEGRATING BEHAVIORAL HEALTH INTO GENERAL MEDICAL CARE

Most integrated care interventions shown in clinical trials to improve treatment delivery and patient outcomes implement variations of the collaborative care model. Collaborative care is based on Wagner and colleagues' (18) chronic care model, which has been shown to improve chronic illness care through use of a team-based, proactive, and population-oriented approach to identifying and treating chronic disease. In collaborative care, primary care physicians work with a care manager and a consulting psychiatrist to proactively identify, treat, and monitor people with behavioral health conditions (19). Key elements include population-based patient identification; continual symptom monitoring using an electronic registry, measurement-based care to track treatment response and identify patients who are not improving, and a stepped-care approach to systematically adjust treatment for patients who are not meeting targets (19). A large and conclusive body of evidence from randomized clinical trials supports the beneficial effects of collaborative care for depression care access and quality and patient outcomes (20). Smaller bodies of literature support the efficacy of this model for anxiety (20) and comorbid general medical conditions (21), and limited evidence suggests that collaborative care may also improve outcomes for people with bipolar disorder, schizophrenia, alcohol use disorder, or opioid use disorder (22, 23).

A much more limited body of research suggests that less complex consultation-liaison approaches to integrated care and approaches that use screening, brief intervention, and referral to treatment (SBIRT) may also have benefits, but the quality of the evidence is low and results are mixed. Some studies suggest that consultation-liaison models, broadly defined as models in which a process exists for general providers to consult behavioral health specialists, can improve depression outcomes and reduce length of general medical inpatient stays among adults with mental illness (24). The screening- and referral-based SBIRT has predominantly been used for alcohol and other substance use problems. SBIRT uses validated screening measures to identify patients and stratify them by level of risk (25). Patients with low-risk substance use behaviors receive brief behavioral therapy or motivational enhancement interventions designed to increase motivation for behavior change. High-risk patients also receive these brief interventions and are then referred to specialist treatment. To date, SBIRT has

mostly been tested in primary care and emergency department settings, with mixed results. A high-quality randomized clinical trial found no effects of SBIRT on days of alcohol or drug use at 6-month follow-up

(26). However, a 2018 systematic review found moderate-quality evidence supporting the idea that brief interventions delivered in primary care or emergency department settings can reduce alcohol consumption behaviors (27).

## KEY ELEMENTS OF INTEGRATED CARE

General medical settings can implement a range of care integration strategies somewhere on the spectrum between the complex, multicomponent collaborative care model and the simpler SBIRT model. Although there is considerable interest in understanding which elements of integrated care models are essential to improving care delivery and patient outcomes, studies seeking to identify key ingredients have had inconclusive results. Two meta-analyses published in 2006 of 37 collaborative care clinical trials suggested that employing a care manager with mental health training and frequent psychiatrist supervision of the care manager were associated with better patient outcomes (28, 29). However, a 2014 meta-regression of 74 collaborative care clinical trials failed to identify an association between these or any other specific model elements and changes in patients' depressive symptoms; systematic identification of patients with depression was associated with increased antidepressant use (30). A study of collaborative care implemented in 2008–2010 in Washington State found that rapid patient engagement by the care manager and timely psychiatric consultation for patients whose depressive symptoms did not improve were associated with clinically significant improvements in depression (31).

In the absence of robust quantitative evidence, we draw upon a richer body of qualitative and expert consensus-based work to propose key elements of integrated care (15, 16, 32, 33). In Box 1, we propose a set of elements derived from Chapman and colleagues' (32) continuum-based framework for behavioral health integration into primary care. Within this framework, we delineate process-of-care elements versus structural elements. The structural elements support the process elements—e.g., a population-based patient registry and decision-support protocols facilitate implementation of measurement-based care.

The extant research demonstrates that models that include all or most of these components are effective, but it provides little insight into whether a smaller subset of elements might be equally effective or, even if less effective than a comprehensive collaborative care-type model, still yield benefits above and beyond usual (nonintegrated) care. This

question is particularly critical for small- or low-resource practices, where the financial investment needed to implement a comprehensive model may not be feasible.

The subset of elements most likely to be feasible in low-resource settings (flagged with asterisks in Box 1) revolves around identification and referral of patients with behavioral health needs. Low-resource settings should be able to institute standard screening for behavioral health issues and use a low-tech registry—e.g., a spreadsheet—to document patients who screen positive and track that those patients have been referred to specialty behavioral health services and also that they have actually connected with specialty services after referral. Low-resource settings should also be able to employ patient-centered care plans, provide self-management support, and link patients to social services. Leaders in the development and implementation of collaborative care have suggested that feasibility of systematic screening in low-resource or small primary care practices could be enhanced through use of self-administered measures and that small practices could direct patients to Web-based self-management resources rather than providing such interventions in-house (16). It is also possible that insurers might take on some elements of integrated care, such as case management. Additional research is needed to build evidence regarding whether and how SBIRT and other referral-based models that are better suited for lower-capacity practice settings can improve care and outcomes among people with behavioral health conditions.

## **POLICIES TO SUPPORT INTEGRATED CARE: LESSONS LEARNED AND NEXT STEPS**

### **Integrated Care Policy: What Have We Tried?**

To date, integrated care policies have focused on overcoming payment barriers. Care processes central to integrated care—such as care management—have not historically been reimbursed by insurers, a major impediment to scale-up. To address this issue, in 2017 the Center for Medicare and Medicaid Services introduced behavioral health integration billing codes allowing general medical providers to bill Medicare; the codes have also been adopted by some state Medicaid and commercial plans for care planning and management services (17). However, uptake has been low: during 2017–2018, only 0.1% of Medicare beneficiaries with mental illness or substance use disorders received a service billed to one of the new integration codes (34). One likely driver of low uptake is that in order to bill, practices must have multiple integrated care process and structure elements already in place (35, 36). In addition, the entire reimbursement flows to the general medical provider that does the billing. In the absence of colocation, this one-sided payment structure places an administrative burden on practices to set up ledger transfers, contracts, or other arrangements to pay behavioral health partners (35). This issue is primarily relevant for single-specialty practices, although even multispecialty practices, including both

general medical and behavioral health providers, have cited as an administrative hurdle the need to set up ledger transfer or other strategies to facilitate within-organization financial transfers (35).

Similar types of relatively modest payments—generally in the range of \$20–\$200 per-beneficiary per-month—to cover care management or other previously nonbillable integrated care activities have also failed to result in meaningful behavioral health integration in federal patient-centered medical home (PCMH) demonstration programs, including the Comprehensive Primary Care (CPC) and Multi-Payer Advanced Primary Care demonstrations (37, 38). PCMHs aim to implement the chronic care model to improve treatment of chronic conditions, including but not limited to mental illness and substance use disorders, and although they are not focused specifically on behavioral health, they include many of the core process and structure elements in Box 1 (39). The limited available evidence suggests that PCMHs have the potential to improve care for people with mental illness (40, 41). Like collaborative care, the PCMH model has struggled with scale-up. The National Commission for Quality Assurance (NCQA) created a PCMH recognition program in 2008 and currently recognizes about 13,000 U.S. primary care practices as PCMHs. The 2015 Medicare Access and CHIP Reauthorization Act created a financial incentive for obtaining this recognition: clinicians practicing in NCQA-recognized PCMHs are eligible for higher fee-for-service Medicare payments (42). In 2017, NCQA introduced a Distinction in Behavioral Health Integration Program as part of its PCMH recognition initiative, but the degree of adoption and effects on care and outcomes among people with mental illness or substance use disorders are unknown.

Like PCMHs, accountable care organizations (ACOs) are not specifically designed to integrate general medical and behavioral health services but have the potential to facilitate such integration, in this case through shared savings and (in two-sided risk arrangements) losses tied to achievement of targets involving quality of care and health care spending. However, the evidence suggests that ACOs have had limited to no impact on care for people with behavioral health conditions (43, 44). Frequently cited weaknesses in existing ACO models are limited inclusion of behavioral health specialty providers and lack of alignment between payments and behavioral health performance metrics (43).

Multiple existing policies operate as barriers to care integration. The federal 21st Century Cures Act of 2016 clarified that federal law does not prohibit organizations or individual clinicians from billing Medicaid for both a primary care service and a mental health service delivered to a single patient on the same day (45). Despite the federal clarification, same-day billing limits persist in many state laws. In the most recent review of state Medicaid laws available, which was conducted in 2015, a total of 24 state Medicaid programs prohibited some or all settings and provider types from same-day billing (46). Since the

clarification to federal law in 2016, some states have introduced and passed legislation to do away with state prohibitions, but they persist in multiple states (47).

Insurance carve-out arrangements, in which behavioral health benefits are administered by an organization different from the one that administers general medical benefits, are commonly cited as a barrier to integrated care delivery. Importantly, “carve-in” arrangements, in which a single organization manages both general medical and behavioral health benefits but still uses internally segregated budgets and separate adjudication practices for general medical and behavioral health claims, have also been cited as impeding integration (48). Multiple state Medicaid plans are considering eliminating carve-outs, although evidence on the effects of doing so on care delivery and patient outcomes is limited. One study found that integrated management of behavioral health and general medical benefits in Illinois Medicaid decreased behavioral health costs without affecting service utilization (49). Other policy barriers exist for specific behavioral health conditions—for example, federal laws limiting primary care physicians’ ability to prescribe opioid agonist medications to treat opioid use disorder (50, 51). Although we recognize the significance of such policies, a comprehensive assessment of condition-specific policies is outside the scope of this article.

#### **Integrated Care Policy: What Have We Learned?**

Payment policies have to date fallen short of incentivizing widespread adoption of integrated care. Evidence points to a need for multipayer financing arrangements that support not only process-of-care elements but also structural elements of integrated care, adequately incentivize participation of both general medical and specialty mental health providers, and hold multidisciplinary teams accountable for improved care and health outcomes among persons with mental illness or substance use disorders.

Reimbursement mechanisms that provide modest per-beneficiary per-month payments for integrated behavioral health activities appear to be inadequate to cover the costs associated with structural integrated care elements. Difficulty paying for behavioral health staff and lack of needed health information technology (IT) infrastructure are consistently identified as barriers (15, 37, 48). Health IT is critical, because clinical information systems underpin the process-of-care elements included in evidence-based integrated care models. The federal Comprehensive Primary Care Plus initiative, which includes health IT development for primary care practices implementing advanced PCMHs with integrated behavioral health care, may yield important insights into the types of IT systems best suited to supporting integrated care. Financing of structural elements of integrated care could also be achieved through bundled payments; the American College of Physicians has recommended separate prospective bundled payments for structural and process-of-care elements (52).

Neither general medical nor specialty mental health providers are currently held accountable for “whole person”

health outcomes among persons with behavioral health conditions. Value-based financing arrangements structured so that both general medical and specialty mental health providers are subject to the same incentives could address these issues. One approach is to strengthen ACOs through increased inclusion of behavioral health specialists in ACO networks and by aligning payment with behavioral health performance measures. Hub-and-spoke models may also facilitate integrated care. Vermont’s hub-and-spoke Medicaid health home program, in which specialty addiction treatment programs serve as “hubs” that collaborate with primary care and other general medical “spokes”—with payment following directly from Medicaid to both hubs and spokes—has increased delivery of buprenorphine for treatment of opioid use disorder (53, 54).

Ideally, all these payment policy options need to be multipayer so that integrated care can be implemented practicewide versus only for a subset of insured patients. There are many common elements across effective integrated general medical-behavioral health models and other chronic care model-informed efforts, such as PCMHs. Lessons learned from the various alternative payment models being tested by public and private insurers to incentivize primary care redesign in alignment with the chronic care model could yield important insights for optimal payment policies to support integrated care (55). The Affordable Care Act Medicaid Health Home Waiver provides opportunity for integrated care payment innovation by giving states flexibility in designing payment methodology to support implementation of health home programs for subsets of high-cost, high-need Medicaid beneficiaries (56). As of November 2019, a total of 13 states had used this waiver to support integration of behavioral health services into general medical settings (56). Importantly, it is unclear whether any of these models will overcome what Pincus and colleagues (57) termed the “cost-effectiveness conundrum” of integrated care models, which require significant up-front investments and, by design, identify previously unmet patient needs, which require additional services; as noted above, this conundrum is particularly salient to small, single-specialty groups and low-resource settings.

#### **Integrated Care Policy: What’s Next?**

Policies to fund integrated care are necessary but not sufficient to spread implementation of effective integrated care models. This point is illustrated by Minnesota’s DIAMOND initiative, which is often held up as a model for collaborative care scale-up. DIAMOND is a multipayer initiative that finances collaborative care through bundled payments designed to cover both structural and process-of-care elements, and the initiative also provides intensive training and an electronic registry to participating practices (58, 59). Although DIAMOND facilitated adoption of collaborative care, it had no effects on depression outcomes (59). This illustrates the challenges to replicating the beneficial effects of integrated care models shown to improve patient

**BOX 1. Key elements of integrated general medical and behavioral health care****Panel A: process-of-care elements**

- \*1. Proactive and systematic patient identification and connection to evidence-based treatment:** Systematic screening of the entire patient panel using validated tools and a standard protocol for initiating treatment.
- 2. Team-based care by general medical and specialty behavioral health providers:** Structured and regular communication and collaboration processes, such as standing meetings and case reviews.
- 3. Information tracking and exchange among providers:** Systematic tracking of patient information (e.g., diagnoses, treatment plans, and treatment response) shared across general medical and behavioral health providers.
- 4. Continual care management:** Ongoing, proactive follow-up of patients.
- 5. Measurement-based, stepped care:** Longitudinal measurement of patients' response to treatment and a stepped-care approach to adjust or intensify treatment when measurements show that a patient is not meeting targets.
- \*6. Self-management support:** Culturally appropriate strategies to help patients and caregivers understand and manage health condition(s)—for example, motivational interviewing and brief behavioral counseling.
- \*7. Linkages with community and social services:** Linking patients to services in the community, particularly services addressing social determinants of health, such as housing and vocational services.
- 8. Systematic quality improvement:** Longitudinal measurement of practice- and provider-level performance metrics and use of these metrics to inform quality improvement—for example, through approaches such as audit-and-feedback.

**Panel B: structural elements**

- 1. Multidisciplinary care team:** A team comprising general medical and specialty behavioral health clinicians with the credentials and expertise necessary to provide evidence-based care for the target population. Inclusion of a care manager, often a nurse or social worker, likely enhances successful collaboration.
- 2. Clinical information systems:** All care team members should have access to the following:
  - \*a. Population-based patient registry:** The registry should longitudinally track screening, diagnoses, services, and treatment response for the entire patient panel.
  - b. Shared electronic health records (EHRs):** All care team members should have access to the EHR.
  - c. Inpatient and emergency department utilization data:** A system for real-time monitoring of inpatient and emergency department utilization.
  - d. Quality improvement data:** A system tracking practice- and provider-level performance metrics.
- \*3. Patient-centered care plan:** A care plan jointly developed by the care team and the patient, with individualized treatment goals.
- 4. Decision-support protocols:** Standard protocols for delivery of evidence-based treatment.
- 5. Financing mechanisms:** Mechanisms to adequately reimburse providers for the process-of-care elements in Panel A and the costs associated with creating and maintaining the structural elements of integrated care in Panel B.

\*Elements that may be most feasible for low-resource settings.

outcomes in clinical trials and the need to address remaining barriers. We posit two policy priorities: workforce and social determinants of health.

General medical practices attempting to integrate behavioral health care cite lack of available specialists as a barrier (60). Common policy tools, such as loan repayment programs, for addressing health care workforce gaps may help increase recruitment into the field, but significant expansion will likely require increasing insurance payment for behavioral health services to levels that allow organizations to offer compensation high enough to incentivize people to choose behavioral health careers (61). Siloed general medical and specialty mental health training impedes integration (62). Institutional or graduate medical education accreditation policies could require general medical clinicians to demonstrate key behavioral health competencies and vice versa. Such competencies are critical, given studies showing that general medical providers' discomfort with and potential bias toward patients with behavioral health conditions can translate into suboptimal care (63–67). Policies could also require training in team-based and integrated care for both professions. Telehealth and mobile health (mHealth) applications may ease workforce shortages and facilitate

integrated care by reducing the need for in-person services (68, 69). Although robust discussion of the many policy issues surrounding expansion of these strategies (70) is outside the scope of this piece, policies supporting scale-up—for example, insurance reimbursement policies for “telemental” health services and evidence-based behavioral health mHealth applications, such as the Food and Drug Administration–approved prescription digital therapeutic reSET (71)—could support integration.

Finally, it is critical to address social factors that underlie and exacerbate poor health outcomes among people with mental illness and substance use disorders. Integrated care models should go beyond the current focus on general medical-behavioral health integration and also consider integration of social services. ACOs and the more recent accountable health community model may serve as avenues for social service integration (72, 73). Societywide policies strengthening the social safety net are needed, as are policies targeting people with behavioral health conditions specifically, such as state laws allocating resources to evidence-based supportive housing and employment programs (74, 75) or insurance reimbursement mechanisms to pay for these services.

## CONCLUSIONS

Integrated care models shown to improve health outcomes among people with mental illness or substance use disorders in clinical trials are complex and challenging to scale up in real-world settings. Payment policies are needed that adequately support both process-of-care and structural elements of integrated care, that incentivize multidisciplinary team formation and accountability for patient outcomes, and that expand the behavioral health workforce and address the social determinants of health that prevent many people with behavioral health conditions from accessing, engaging in, and realizing the full benefits of treatment.

## AUTHOR AND ARTICLE INFORMATION

Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health (McGinty), and Division of General Internal Medicine, Johns Hopkins School of Medicine (Daumit), Baltimore. Send correspondence to Dr. McGinty (bmcginty@jhu.edu).

The authors gratefully acknowledge support from the Thomas Scatergood Behavioral Health Foundation and from the National Institute of Mental Health (grant P50MH115842).

The authors report no financial relationships with commercial interests.

Received March 23, 2020; revision received April 05, 2020; accepted April 23, 2020; published online June 4, 2020.

## REFERENCES

- Key Substance Use and Mental Health Indicators in the United States: Results From the 2018 National Survey on Drug Use and Health. HHS pub no PEP19-5068, NSDUH Series H-54. Rockville, MD, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, 2019. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUH-NationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>
- Janssen EM, McGinty EE, Azrin ST, et al: Review of the evidence: prevalence of medical conditions in the United States population with serious mental illness. *Gen Hosp Psychiatry* 2015; 37:199–222
- Parker R, Aithal GP, Becker U, et al: Natural history of histologically proven alcohol-related liver disease: a systematic review. *J Hepatol* 2019; 71:586–593
- Mueser KT, McGurk SR: Schizophrenia. *Lancet* 2004; 363:2063–2072
- Dasgupta N, Beletsky L, Ciccarone D: Opioid crisis: no easy fix to its social and economic determinants. *Am J Public Health* 2018; 108:182–186
- McGinty EE, Baller J, Azrin ST, et al: Quality of medical care for persons with serious mental illness: a comprehensive review. *Schizophr Res* 2015; 165:227–235
- Mathers BM, Degenhardt L, Ali H, et al: HIV prevention, treatment, and care services for people who inject drugs: a systematic review of global, regional, and national coverage. *Lancet* 2010; 375:1014–1028
- Friedrich MJ: Depression is the leading cause of disability around the world. *JAMA* 2017; 317:1517
- Olfson M, Gerhard T, Huang C, et al: Premature mortality among adults with schizophrenia in the United States. *JAMA Psychiatry* 2015; 72:1172–1181
- Rx Awareness. Atlanta, Centers for Disease Control and Prevention, 2020. <https://www.cdc.gov/rxawareness/index.html>. Accessed March 6, 2020
- Druss BG: The mental health/primary care interface in the United States: history, structure, and context. *Gen Hosp Psychiatry* 2002; 24:197–202
- Goldman HH: Integrating health and mental health services: historical obstacles and opportunities. *Am J Psychiatry* 1982; 139:616–620
- Park LT, Zarate CA Jr: Depression in the primary care setting. *N Engl J Med* 2019; 380:559–568
- Ramanuj P, Ferenchik E, Docherty M, et al: Evolving models of integrated behavioral health and primary care. *Curr Psychiatry Rep* 2019; 21:4
- Overbeck G, Davidsen AS, Kousgaard MB: Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. *Implement Sci* 2016; 11:165
- Kroenke K, Unutzer J: Closing the false divide: sustainable approaches to integrating mental health services into primary care. *J Gen Intern Med* 2017; 32:404–410
- Press MJ, Howe R, Schoenbaum M, et al: Medicare payment for behavioral health integration. *N Engl J Med* 2017; 376:405–407
- Wagner EH, Austin BT, Von Korff M: Organizing care for patients with chronic illness. *Milbank Q* 1996; 74:511–544
- Katon W: Collaborative depression care models: from development to dissemination. *Am J Prev Med* 2012; 42:550–552
- Archer J, Bower P, Gilbody S, et al: Collaborative care for depression and anxiety problems. *Cochrane Database Syst Rev* 2012; 10:CD006525
- Katon WJ, Lin EH, Von Korff M, et al: Collaborative care for patients with depression and chronic illnesses. *N Engl J Med* 2010; 363:2611–2620
- Kilbourne AM, Barbaresso MM, Lai Z, et al: Improving physical health in patients with chronic mental disorders: twelve-month results from a randomized controlled collaborative care trial. *J Clin Psychiatry* 2017; 78:129–137
- Watkins KE, Ober AJ, Lamp K, et al: Collaborative care for opioid and alcohol use disorders in primary care: the SUMMIT randomized clinical trial. *JAMA Intern Med* 2017; 177:1480–1488
- Wood R, Wand AP: The effectiveness of consultation-liaison psychiatry in the general hospital setting: a systematic review. *J Psychosom Res* 2014; 76:175–192
- McCance-Katz EF, Satterfield J: SBIRT: a key to integrate prevention and treatment of substance abuse in primary care. *Am J Addict* 2012; 21:176–177
- Saitz R, Palfai TP, Cheng DM, et al: Screening and brief intervention for drug use in primary care: the ASPIRE randomized clinical trial. *JAMA* 2014; 312:502–513
- Kaner EF, Beyer FR, Muirhead C, et al: Effectiveness of brief alcohol interventions in primary care populations. *Cochrane Database Syst Rev* 2018; 2:CD004148
- Gilbody S, Bower P, Fletcher J, et al: Collaborative care for depression: a cumulative meta-analysis and review of longer-term outcomes. *Arch Intern Med* 2006; 166:2314–2321
- Bower P, Gilbody S, Richards D, et al: Collaborative care for depression in primary care. Making sense of a complex intervention: systematic review and meta-regression. *Br J Psychiatry* 2006; 189:484–493
- Coventry PA, Hudson JL, Kontopantelis E, et al: Characteristics of effective collaborative care for treatment of depression: a systematic review and meta-regression of 74 randomised controlled trials. *PLoS One* 2014; 9:e108114
- Bao Y, Druss BG, Jung H-Y, et al: Unpacking collaborative care for depression: examining two essential tasks for implementation. *Psychiatr Serv* 2016; 67:418–424
- Chapman E, Chung H, Pincus HA: Using a continuum-based framework for behavioral health integration into primary care in New York State. *Psychiatr Serv* 2017; 68:756–758
- Gerrity M: Evolving Models of Behavioral Health Integration: Evidence Update 2010–2015. New York, Milbank Memorial Fund, 2016
- Cross DA, Qin X, Huckfeldt P, et al: Use of Medicare's behavioral health integration service codes in the first two years: an observational study. *J Gen Intern Med* (Epub ahead of print, Dec 16, 2019)

35. Carlo AD, Corage Baden A, McCarty RL, et al: Early health system experiences with collaborative care (COCM) billing codes: a qualitative study of leadership and support staff. *J Gen Intern Med* 2019; 34:2150–2158
36. Behavioral Health Integration Services. Baltimore, Centers for Medicare and Medicaid Services, 2019. <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/BehavioralHealthIntegration.pdf>
37. Romaine MA, Keyes V, Parish WJ, et al: Impact of medical homes on expenditures and utilization for beneficiaries with behavioral health conditions. *Psychiatr Serv* 2018; 69:871–878
38. Zivin K, Miller BF, Finke B, et al: Behavioral health and the Comprehensive Primary Care (CPC) Initiative: findings from the 2014 CPC behavioral health survey. *BMC Health Serv Res* 2017; 17: 612
39. Jackson GL, Powers BJ, Chatterjee R, et al: The patient centered medical home: a systematic review. *Ann Intern Med* 2013; 158: 169–178
40. Sklar M, Aarons GA, O'Connell M, et al: Mental health recovery in the patient-centered medical home. *Am J Public Health* 2015; 105: 1926–1934
41. Domino ME, Wells R, Morrissey JP: Serving persons with severe mental illness in primary care-based medical homes. *Psychiatr Serv* 2015; 66:477–483
42. MACRA and NCQA Recognition Programs. Washington, DC, National Committee for Quality Assurance, 2020. <https://www.ncqa.org/programs/health-care-providers-practices/patient-centered-medical-home-pcmh/benefits-support/macra>. Accessed March 7, 2020
43. Counts NZ, Wrenn G, Muhlestein D: Accountable care organizations' performance in depression: lessons for value-based payment and behavioral health. *J Gen Intern Med* 2019; 34:2898–2900
44. Stuart EA, Barry CL, Donohue JM, et al: Effects of accountable care and payment reform on substance use disorder treatment: evidence from the initial 3 years of the alternative quality contract. *Addiction* 2017; 112:124–133
45. Bluestein J: 21st Century Cures Act: Implications and Opportunities for States. Washington, DC, National Academy for State Health Policy, 2016. <https://nashp.org/21st-century-cures-act-implications-and-opportunities-for-states>. Accessed Feb 28, 2020
46. Roby DH, Jones EE: Limits on same-day billing in Medicaid hinders integration of behavioral health into the medical home model. *Psychol Serv* 2016; 13:110–119
47. Behavioral Health in Primary Care. Bethesda, MD, National Association of Community Health Centers, 2018. <http://www.nachc.org/wp-content/uploads/2018/10/BH-Fact-Sheet-10-10-18.pdf>. Accessed Feb 28, 2020
48. Kathol RG, Butler M, McAlpine DD, et al: Barriers to physical and mental condition integrated service delivery. *Psychosom Med* 2010; 72:511–518
49. Xiang X, Owen R, Langi FLFG, et al: Impacts of an integrated Medicaid managed care program for adults with behavioral health conditions: the experience of Illinois. *Adm Policy Ment Health Ment Health Serv Res* 2019; 46:44–53
50. Fiscella K, Wakeman SE, Beletsky L: Buprenorphine deregulation and mainstreaming treatment for opioid use disorder: X the X waiver. *JAMA Psychiatry* 2019; 76:229–230
51. Samet JH, Botticelli M, Bharel M: Methadone in primary care: one small step for Congress, one giant leap for addiction treatment. *N Engl J Med* 2018; 379:7–8
52. Kirschner NM, Doherty RB: A System in Need of Change: Restructuring Payment Policies to Support Patient-Centered Care: A Position Paper of the American College of Physicians. Philadelphia, American College of Physicians, 2006
53. Brooklyn JR, Sigmon SC: Vermont hub-and-spoke model of care for opioid use disorder: development, implementation, and impact. *J Addict Med* 2017; 11:286–292
54. Rawson R, Cousins SJ, McCann M, et al: Assessment of medication for opioid use disorder as delivered within the Vermont hub and spoke system. *J Subst Abuse Treat* 2019; 97:84–90
55. Patel KK: Can alternative payment models save primary care? Lessons from Hawaii for the nation. *JAMA* 2019; 322:35–36
56. Health Home Information Resource Center. Baltimore, Centers for Medicare and Medicaid Services, 2020. <https://www.medicaid.gov/resources-for-states/medicaid-state-technical-assistance/health-home-information-resource-center/index.html>. Accessed Feb 28, 2020
57. Pincus HA, Jun M, Franx G, et al: How can we link general medical and behavioral health care? International models for practice and policy. *Psychiatr Serv* 2015; 66:775–777
58. Solberg LI, Crain AL, Jaekels N, et al: The DIAMOND initiative: implementing collaborative care for depression in 75 primary care clinics. *Implement Sci* 2013; 8:135
59. Solberg LI, Crain AL, Maciosek MV, et al: A stepped-wedge evaluation of an initiative to spread the collaborative care model for depression in primary care. *Ann Fam Med* 2015; 13:412–420
60. Buche J, Singer PM, Grazier K, et al: Primary Care and Behavioral Health Workforce Integration: Barriers and Best Practices. Ann Arbor, MI, Behavioral Health Workforce Research Center, 2017
61. Hoge MA, Stuart GW, Morris J, et al: Mental health and addiction workforce development: federal leadership is needed to address the growing crisis. *Health Aff* 2013; 32:2005–2012
62. Shalev D, Docherty M, Spaeth-Rublee B, et al: Bridging the behavioral health gap in serious illness care: challenges and strategies for workforce development. *Am J Geriatr Psychiatry* 2019; 28: 448–462
63. Tai-Seale M, Bramson R, Drukker D, et al: Understanding primary care physicians' propensity to assess elderly patients for depression using interaction and survey data. *Med Care* 2005; 43:1217–1224
64. Tai-Seale M, McGuire T, Colenda C, et al: Two-minute mental health care for elderly patients: inside primary care visits. *J Am Geriatr Soc* 2007; 55:1903–1911
65. Mittal D, Corrigan P, Sherman MD, et al: Healthcare providers' attitudes toward persons with schizophrenia. *Psychiatr Rehabil J* 2014; 37:297–303
66. Corrigan PW, Mittal D, Reaves CM, et al: Mental health stigma and primary health care decisions. *Psychiatry Res* 2014; 218:35–38
67. Stone EM, Chen LN, Daumit GL, et al: General medical clinicians' attitudes toward people with serious mental illness: a scoping review. *J Behav Health Serv Res* 2019; 46:656–679
68. Staeheli M, Aseltine RH Jr, Schilling E, et al: Using mHealth technologies to improve the identification of behavioral health problems in urban primary care settings. *SAGE Open Med* 2017; 5: 2050312117712656
69. Myers CR: Using telehealth to remediate rural mental health and healthcare disparities. *Issues Ment Health Nurs* 2019; 40:233–239
70. Lerman AF, Kim D, Ozinal FR, et al: Telemental and telebehavioral health considerations: a 50-state analysis on the development of telehealth policy. *Telehealth Med Today* 2018; 3:1–8
71. Campbell AN, Nunes EV, Matthews AG, et al: Internet-delivered treatment for substance abuse: a multisite randomized controlled trial. *Am J Psychiatry* 2014; 171:683–690
72. Murray GF, Rodriguez HP, Lewis VA: Upstream with a small paddle: how ACOs are working against the current to meet patients' social needs. *Health Aff* 2020; 39:199–206
73. Alley DE, Asomugha CN, Conway PH, et al: Accountable health communities—addressing social needs through Medicare and Medicaid. *N Engl J Med* 2016; 374:8–11
74. Stergiopoulos V, Hwang SW, Gozdzik A, et al: Effect of scattered-site housing using rent supplements and intensive case management on housing stability among homeless adults with mental illness: a randomized trial. *JAMA* 2015; 313:905–915
75. Mueser KT, Drake RE, Bond GR: Recent advances in supported employment for people with serious mental illness. *Curr Opin Psychiatry* 2016; 29:196–201