THINK **BIGGER** DO **GOOD**
POLICY SERIES

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

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

Summer 2020

Dear Reader,

Now is the time to solve the growing behavioral health needs in our country by advancing public policies that transform the delivery of mental health and substance use disorder services and address outdated funding mechanisms.

This paper is part of Think Bigger Do Good, a series of papers launched in 2017 through the support and leadership of the Thomas Scattergood Behavioral Health Foundation and Peg's Foundation. While the paper topics continue to evolve, our goal to develop a policy agenda to improve health outcomes for all remains constant.

In partnership with national experts in behavioral health, including our editors, Howard Goldman and Constance Gartner, we identified seven critical topics for this third series of papers. Each paper identifies the problem and provides clear, actionable solutions.

We are honored that this paper was featured at the National Academies of Sciences, Engineering, and Medicine Forum on Mental Health and Substance Use Disorders Workshop on June 3, 2020. The virtual workshop allowed for participants to explore the landscape of evolving models of care such as Accountable Care Organizations, Patient-Centered Medical Homes, Collaborative Care arrangements, and how essential components of care for mental health and substance use disorders might be induced for those care models.

We hope you join us in advocating for stronger behavioral health policies by sharing this paper with your programmatic partners, local, state, and federal decision makers, advocacy organizations, and voters. To learn more about Think Bigger Do Good and to access the other papers in the series, visit **www.thinkbiggerdogood.org**

Sincerely,

Joseph Pyle, M.A.
President
Scattergood Foundation
Founding Partner of Series

Rick Kellar, M.B.A.
President
Peg's Foundation
Founding Partner of Series

Jane Mogavero, Esq.
Executive Director
Patrick P. Lee Foundation

Tracy A. Sawicki
Executive Director
Peter & Elizabeth Tower Foundation

We would like to acknowledge the following individuals for their participation in the meeting that led to the conceptualization of the paper series.

Colleen L. Barry, Ph.D., M.P.P.
John Hopkins Bloomberg School of Public Health

Cynthia Baum-Baicker, Ph.D.
The Scattergood Foundation

Anita Burgos, Ph.D.
Bipartisan Policy Center

Thom Craig, M.P.A.
Peg's Foundation

Rebecca David, M.P.H.
National Council for Behavioral Health

Kelly Davis
Mental Health America

Lisa Dixon, M.D., M.P.H.
Columbia University, NY State Psychiatric Institute, and Psychiatric Services

Sara Dugan, Pharm.D., B.C.P.P., B.C.P.S.
Northeast Ohio Medical University

Peter Earley
Author & Journalist

Alyson Ferguson, M.P.H.
The Scattergood Foundation

Richard Frank
Harvard Medical School

Rachel Garfield, Ph.D., M.H.S.
The Henry J. Kaiser Family Foundation

Mary Giliberti, J.D.
Mental Health America

Aaron Glickman, B.A.
Perelman School of Medicine, University of Pennsylvania

Sherry Glied, Ph.D.
NYU Wagner School of Public Service

Howard Goldman, M.D., Ph.D.
University of Maryland School of Medicine

Pamela Greenberg, M.P.P.
Association for Behavioral Health and Wellness

Kimberly Hoagwood, Ph.D.
New York University School of Medicine

Michael F. Hogan, Ph.D.
Hogan Health Solutions

Chuck Ingoglia, M.S.W.
National Council for Behavioral Health

Rick Kellar, M.B.A.
Peg's Foundation

Kelly Kelleher, M.D., M.P.H.
The Research Institute at Nationwide Children's Hospital

Jennifer Mathis, J.D.
Bazelon Center for Mental Health Law

Donald Matteson, M.A.
Peter & Elizabeth Tower Foundation

Brian McGregor, Ph.D.
Satcher Health Leadership Institute, Morehouse College

Erik Messamore, M.D.
Northeast Ohio Medical University

Ben Miller, PsyD
Well Being Trust

Jane Mogavero, Esq.
Patrick P. Lee Foundation

Mark R. Munetz, M.D.
Northeast Ohio Medical University

Sandra Newman, Ph.D.
John Hopkins Bloomberg School of Public Health

Joseph Pyle, M.A.
The Scattergood Foundation

Barbara Ricci
Center for High Impact Philanthropy

Cheryl Roberts, Esq.
Greenberger Center

Victoria Romanda
Peg's Foundation

Tracy A. Sawicki
Peter & Elizabeth Tower Foundation

Lloyd Sederer, M.D.
NYS Office of Mental Health/Mailman School of Public Health

Dominic Sisti, Ph.D.
Scattergood Program for Applied Ethics in Behavioral Health Care & Perelman School of Medicine at the University of Pennsylvania

Andrew Sperling, J.D.
NAMI

Kate Williams, J.D.
The Scattergood Foundation

Glenda L. Wrenn, M.D., M.S.H.P.
180 Health Partners

Titles in the Paper Series

Editors Howard Goldman, M.D., Ph.D. and Constance Gartner, M.S.W.

America's Opioid Epidemic
Lloyd I. Sederer, M.D.

Behavioral Health and the Individual Health Insurance Market: Preserving Key Elements of Reform
Richard G. Frank, Ph.D. and Sherry A. Glied, Ph.D., M.A.

Bringing Treatment Parity to Jail Inmates with Schizophrenia
Mark R. Munetz, M.D., Erik Messamore, M.D., Ph.D., and Sara E. Dugan, Pharm.D., B.C.P.P., B.C.P.S.

Coordinated Specialty Care for First-Episode Psychosis: An Example of Financing for Specialty Programs
Lisa B. Dixon, M.D., M.P.H.

Employing People with Mental Illness in the 21st Century: Labor Market Changes and Policy Challenges
Richard G. Frank, Ph.D. and Sherry A. Glied, Ph.D., M.A.

Fentanyl and the Evolving Opioid Epidemic: What Strategies Should Policymakers Consider?
Colleen L. Barry, Ph.D., M.P.P.

Improving Outcomes for People with Serious Mental Illness and Co-Occurring Substance Use Disorders in Contact with the Criminal Justice System
Glenda L. Wrenn, M.D., M.S.H.P., Brian McGregor, Ph.D., and Mark R. Munetz, M.D.

Medicaid's Institutions for Mental Diseases (IMD) Exclusion Rule: A Policy Debate
Jennifer Mathis, J.D., Dominic A. Sisti, Ph.D. and Aaron Glickman, B.A.

Meeting the Needs of Justice-Involved People with Serious Mental Illness within Community Behavioral Health Systems
Natalie Bonfine, Ph.D., Amy Blank Wilson, Ph.D., L.S.W., and Mark R. Munetz, M.D.

Redesigning Federal Health Insurance Policies to Promote Children's Mental Health
Kimberly Hoagwood, Ph.D., Kelly Kelleher, M.D., M.P.H, and Michael F. Hogan, Ph.D.

Policy and Practice Innovations to Improve Prescribing of Psychoactive Medications for Children
Kelly J. Kelleher, M.D., M.P.H., David Rubin, M.D., M.S.C.E., Kimberly Hoagwood, Ph.D.

Suicide Is a Significant Health Problem
Michael F. Hogan, Ph.D.

The Current Medicaid Policy Debate and Implications for Behavioral Healthcare in the United States
Rachel Garfield, Ph.D., M.H.S. and Julia Zur, Ph.D.

Youth Suicide Is Increasing: Modest Actions Taken Now Can Save Lives
Michael F. Hogan, Ph.D.

Find the papers online at **www.thinkbiggerdogood.org**

Psychiatric Services

We are grateful for the partnership that allows this paper and others to appear in Psychiatric Services, a peer-reviewed monthly journal of the American Psychiatric Association. Content can be viewed at **ps.psychiatryonline.org**.

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

Emma E. McGinty, Ph.D., M.S.

Associate Professor
Department of Health Policy and Management
Johns Hopkins Bloomberg School of Public Health
bmcginty@jhu.edu

Gail L. Daumit, M.D., M.H.S.

Professor of Medicine
Division of General Internal Medicine
Johns Hopkins School of Medicine
gdaumit@jhmi.edu

1 Introduction

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).

Depression is a leading cause of disability in the United States and worldwide.

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 healthcare (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 at the end of the document.)

2 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.

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.

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).

3 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 be able to employ patient-centered care plans, provide self-management support, and link patients to social services.

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.

4 Policies to Support Integrated Care: Lessons Learned and Next Steps

Integrated Care Policy: What Have We Tried?

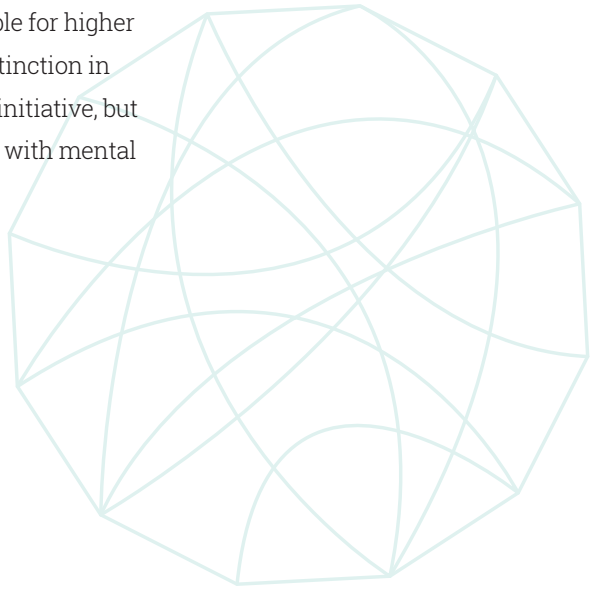
To date, integrated care policies have focused on overcoming payment barriers. Care processes central to integrated care—such as care management—have not historically been reimbursed by insurers, a major impediment to scale-up. To address this issue, in 2017 the Center for Medicare and Medicaid Services 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.

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).

To date, integrated care policies have focused on overcoming payment barriers.

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 healthcare 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.

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).

One study found that integrated management of behavioral health and general medical benefits in Illinois Medicaid decreased behavioral health costs without affecting service utilization.

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.

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 (CPC+) initiative, which includes health IT development for primary care practices implementing advanced PCMHs with integrated behavioral healthcare, 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).

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.

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

Telehealth and mobile health (mHealth) applications may ease workforce shortages and facilitate integrated care by reducing the need for in-person services.

General medical practices attempting to integrate behavioral healthcare cite lack of available specialists as a barrier (60). Common policy tools, such as loan repayment programs, for addressing healthcare 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.

.

6 Conclusion

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.

References

1/ 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. Available here https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf.

2/ 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 37:199–222, 2015.

3/ Parker R, Aithal GP, Becker U, et al: Natural history of histologically proven alcohol-related liver disease: a systematic review. J Hepatol 71:586–593, 2019.

4/ Mueser KT, McGurk SR: Schizophrenia. Lancet 363:2063–2072, 2004.

5/ Dasgupta N, Beletsky L, Ciccarone D: Opioid crisis: no easy fix to its social and economic determinants. Am J Public Health 108:182–186, 2018.

6/ McGinty EE, Baller J, Azrin ST, et al: Quality of medical care for persons with serious mental illness: a comprehensive review. Schizophr Res 165:227–235, 2015.

7/ 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 375:1014–1028, 2010.

8/ Friedrich MJ: Depression is the leading cause of disability around the world. JAMA 317:1517, 2017.

9/ Olfson M, Gerhard T, Huang C, et al: Premature mortality among adults with schizophrenia in the United States. JAMA Psychiatry 72:1172–1181, 2015.

10/ Rx Awareness. Atlanta, Centers for Disease Control and Prevention, 2020. Available here https://www.cdc.gov/rxawareness/index.html. Accessed March 6, 2020.

11/ Druss BG: The mental health/primary care interface in the United States: history, structure, and context. Gen Hosp Psychiatry 24:197–202, 2002.

12/ Goldman HH: Integrating health and mental health services: historical obstacles and opportunities. Am J Psychiatry 139:616–620, 1982.

13/ Park LT, Zarate CA Jr: Depression in the primary care setting. N Engl J Med 380:559–568, 2019.

14 / Ramanuj P, Ferenchik E, Docherty M, et al: Evolving models of integrated behavioral health and primary care. Curr Psychiatry Rep 21:4, 2019.

15 / Overbeck G, Davidsen AS, Kousgaard MB: Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. Implement Sci 11:165, 2016.

16 / Kroenke K, Unutzer J: Closing the false divide: sustainable approaches to integrating mental health services into primary care. J Gen Intern Med 32:404–410, 2017.

17 / Press MJ, Howe R, Schoenbaum M, et al: Medicare payment for behavioral health integration. N Engl J Med 376:405–407, 2017.

18 / Wagner EH, Austin BT, Von Korff M: Organizing care for patients with chronic illness. Milbank Q 74:511–544, 1996.

19 / Katon W: Collaborative depression care models: from development to dissemination. Am J Prev Med 42:550–552, 2012.

20/ Archer J, Bower P, Gilbody S, et al: Collaborative care for depression and anxiety problems. Cochrane Database Syst Rev 10:CD006525, 2012.

21 / Katon WJ, Lin EH, Von Korff M, et al: Collaborative care for patients with depression and chronic illnesses. N Engl J Med 363:2611–2620, 2010.

22/ 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 78:129–137, 2017.

23/ 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 177:1480–1488, 2017.

24/ Wood R, Wand AP: The effectiveness of consultation-liaison psychiatry in the general hospital setting: a systematic review. J Psychosom Res 76:175–192, 2014.

25/ McCance-Katz EF, Satterfield J: SBIRT: a key to integrate prevention and treatment of substance abuse in primary care. Am J Addict 21:176–177, 2012.

26/ Saitz R, Palfai TP, Cheng DM, et al: Screening and brief intervention for drug use in primary care: the ASPIRE randomized clinical trial. JAMA 312:502–513, 2014.

27/ Kaner EF, Beyer FR, Muirhead C, et al: Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev 2:CD004148, 2018.

28/ 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 166:2314–2321, 2006.

29/ 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 189:484–493, 2006.

30/ 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 9:e108114, 2014.

31/ Bao Y, Druss BG, Jung H-Y, et al: Unpacking collaborative care for depression: examining two essential tasks for implementation. Psychiatr Serv 67:418–424, 2016.

32/ Chapman E, Chung H, Pincus HA: Using a continuum-based framework for behavioral health integration into primary care in New York State. Psychiatr Serv 68:756–758, 2017.

33/ Gerrity M: Evolving Models of Behavioral Health Integration: Evidence Update 2010–2015. New York, Milbank Memorial Fund, 2016.

34/ 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 34:2150–2158, 2019.

36/ Behavioral Health Integration Services. Baltimore, Centers for Medicare and Medicaid Services, 2019. Available here https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/BehavioralHealthIntegration.pdf.

37/ Romaire MA, Keyes V, Parish WJ, et al: Impact of medical homes on expenditures and utilization for beneficiaries with behavioral health conditions. Psychiatr Serv 69:871–878, 2018.

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 17:612, 2017.

39/ Jackson GL, Powers BJ, Chatterjee R, et al: The patient centered medical home: a systematic review. Ann Intern Med 158:169–178, 2013.

40/ Sklar M, Aarons GA, O'Connell M, et al: Mental health recovery in the patient-centered medical home. Am J Public Health 105:1926–1934, 2015.

41/ Domino ME, Wells R, Morrissey JP: Serving persons with severe mental illness in primary care–based medical homes. Psychiatr Serv 66:477–483, 2015.

42/ MACRA and NCQA Recognition Programs. Washington, DC, National Committee for Quality Assurance, 2020. Available here https://www.ncqa.org/programs/health-care-providers-practices/patient-centered-medical-home-pcmh/benefits-support/macra/.

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 34:2898–2900, 2019.

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 112:124–133, 2017.

45/ Bluestein J: 21st Century Cures Act: Implications and Opportunities for States. Washington, DC, National Academy for State Health Policy, 2016. Available here https://nashp.org/21st-century-cures-act-implications-and-opportunities-for-states.

46/ Roby DH, Jones EE: Limits on same-day billing in Medicaid hinders integration of behavioral health into the medical home model. Psychol Serv 13:110–119, 2016.

47/ Behavioral Health in Primary Care. Bethesda, MD, National Association of Community Health Centers, 2018. Available here http://www.nachc.org/wp-content/uploads/2018/10/BH-Fact-Sheet-10-10-18.pdf.

48/ Kathol RG, Butler M, McAlpine DD, et al: Barriers to physical and mental condition integrated service delivery. Psychosom Med 72:511–518, 2010.

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 46:44–53, 2019.

50/ Fiscella K, Wakeman SE, Beletsky L: Buprenorphine deregulation and mainstreaming treatment for opioid use disorder: X the X waiver. JAMA Psychiatry 76:229–230, 2019.

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 379:7–8, 2018.

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 11:286–292, 2017.

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 97:84–90, 2019.

55/ Patel KK: Can alternative payment models save primary care? Lessons from Hawaii for the nation. JAMA 322:35–36, 2019.

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.

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 66:775–777, 2015.

58/ Solberg LI, Crain AL, Jaeckels N, et al: The DIAMOND initiative: implementing collaborative care for depression in 75 primary care clinics. Implement Sci 8:135, 2013.

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 13:412–420, 2015.

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 32:2005–2012, 2013.

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 28:448–462, 2019.

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 43:1217–1224, 2005.

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 55:1903–1911, 2007.

65/ Mittal D, Corrigan P, Sherman MD, et al: Healthcare providers' attitudes toward persons with schizophrenia. Psychiatr Rehabil J 37:297–303, 2014.

66/ Corrigan PW, Mittal D, Reaves CM, et al: Mental health stigma and primary health care decisions. Psychiatry Res 218:35–38, 2014.

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 46:656–679, 2019.

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 40:233–239, 2019.

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 3:1–8, 2018.

71/ Campbell AN, Nunes EV, Matthews AG, et al: Internet-delivered treatment for substance abuse: a multisite randomized controlled trial. Am J Psychiatry 171:683–690, 2014.

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 39:199–206, 2020.

73/ Alley DE, Asomugha CN, Conway PH, et al: Accountable health communities—addressing social needs through Medicare and Medicaid. N Engl J Med 374:8–11, 2016.

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 313:905–915, 2015.

75/ Mueser KT, Drake RE, Bond GR: Recent advances in supported employment for people with serious mental illness. Curr Opin Psychiatry 29:196–201, 2016.

Box 1. Key Elements of Integrated General Medical and Behavioral Healthcare

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.

Further Reading

1/ Atlantis E, Fahey P, Foster J: Collaborative care for comorbid depression and diabetes: a systematic review and meta-analysis. BMJ Open 4:e004706, 2014.

2/ Bao Y, Casalino LP, Pincus HA: Behavioral health and health care reform models: patient centered medical home, health home, and accountable care organization. Behav Health Serv Res 40:121–132, 2013.

3/ Barry CL, Stuart EA, Donohue JM, et al: The early impact of the "alternative quality contract" on mental health service use and spending in Massachusetts. Health Aff 34:2077–2085, 2015.

4/ Bazemore A, Phillips RL, Glazier R, et al: Advancing primary care through alternative payment models: lessons from the United States and Canada. J Am Board Fam Med 31:322–327, 2018.

5/ Beck A, Boggs JM, Alem A, et al: Large-scale implementation of collaborative care management for depression and diabetes and/or cardiovascular disease. J Am Board Fam Med 31:702–711, 2018.

6/ Blount FA, Miller BF: Addressing the workforce crisis in integrated primary care. J Clin Psychol Med Settings 16:113, 2009.

7/ Bluestein J: 21st Century Cures Act: Implications and Opportunities for States. Washington, DC, National Academy for State Health Policy, 2016. Available here https://nashp.org/21st-century-cures-act-implications-and-opportunities-for-states.

8/ Bodenheimer T, Wagner EH, Grumbach K: Improving primary care for patients with chronic illness. JAMA 288:1775–1779, 2002.

9/ Brown S: Excess mortality of schizophrenia: a meta-analysis. Br J Psychiatry 171:502–508, 1997.

10/ Busch AB, Huskamp HA, McWilliams JM: Early efforts by Medicare accountable care organizations have limited effect on mental illness care and management. Health Aff 35:1247–1256, 2016.

11/ Calloway MO, Morrissey JP: Overcoming service barriers for homeless persons with serious psychiatric disorders. Psychiatr Serv 49:1568–1572, 1998.

12/ Cape J, Whittington C, Bower P: What is the role of consultation-liaison psychiatry in the management of depression in primary care? A systematic review and meta-analysis. Gen Hosp Psychiatry 32:246–254, 2010.

13/ Casey DE: Metabolic issues and cardiovascular disease in patients with psychiatric disorders. Am J Med 118 (suppl 2):15S–22S, 2005.

14 / Chun-Chung Chow J, Jaffee K, Snowden L: Racial/ethnic disparities in the use of mental health services in poverty areas. Am J Pub Health 93:792–797, 2003.

15 / Cohen BE, Edmondson D, Kronish IM: State of the art review: depression, stress, anxiety, and cardiovascular disease. Am J Hypertension 28:1295–1302, 2015.

16 / Coleman K, Austin BT, Brach C, et al: Evidence on the chronic care model in the new millennium. Health Aff 28:75–85, 2009.

17 / Counts NZ, Wrenn G, Muhlestein D.: Accountable care organizations' performance in depression: lessons for value-based payment and behavioral health. J Gen Intern Med 34:2898–2900, 2019.

18 / Crowley RA, Kirschner N: The integration of care for mental health, substance abuse, and other behavioral health conditions into primary care: executive summary of an American College of Physicians position paper. Ann Intern Med 163:298–299, 2015.

19 / Daumit G, Anthony C, Ford DE, et al: Pattern of mortality in a sample of Maryland residents with severe mental illness. Psychiatry Res 176:242–245, 2010.

20/ Degenhardt L, Peacock A, Colledge S, et al: Global prevalence of injecting drug use and sociodemographic characteristics and prevalence of HIV, HBV, and HCV in people who inject drugs: a multistage systematic review. Lancet Glob Health 5:e1192–e1207, 2017.

21 / Dhar AK, Barton DA: Depression and the link with cardiovascular disease. Front Psychiatry 7:33, 2016.

22/ Doherty AM, Gaughran F: The interface of physical and mental health. Soc Psych Psych Epid 49:673–682, 2014.

23/ Domino ME, Jackson C, Beadles CA, et al: Do primary care medical homes facilitate care transitions after psychiatric discharge for patients with multiple chronic conditions? Gen Hosp Psychiatry 39:59–65, 2016.

24/ Draine J, Salzer MS, Culhane DP, et al: Roles of social disadvantage in crime, joblessness, and homelessness among persons with serious mental illness. Psychiatr Serv 53:565–573, 2002.

25/ Drake RE, Skinner JS, Bond GR, et al: Social Security and mental illness: reducing disability with supported employment. Health Aff 28:761–770, 2009.

26/ Driessen J, Zhang Y: Trends in the inclusion of mental health providers in Medicare shared savings program ACOs. Psychiatr Serv 68:303–305, 2017.

27/ Druss BG, Bornemann TH: Improving health and health care for persons with serious mental illness: the window for US federal policy change. JAMA 303:1972–1973, 2010.

28/ Durbin A, Durbin J, Hensel JM, et al: Barriers and enablers to integrating mental health into primary care: a policy analysis. J Behav Health Serv Res 43:127–139, 2016.

29/ Fortney JC, Pyne JM, Smith JL, et al: Steps for implementing collaborative care programs for depression. Pop Health Manag 12:69–79, 2009.

30/ Frank RG, Glied SA: Better but Not Well: Mental Health Policy in the United States Since 1950. Baltimore, Johns Hopkins University Press, 2006.

31/ Hall J, Cohen DJ, Davis M, et al: Preparing the workforce for behavioral health and primary care integration. Jam Bard Fam Med 28(suppl 1):S41–S51, 2015.

32/ Hamblin A, Verdier J, Au M: State options for integrating physical and behavioral health care. Baltimore, Integrated Care Resource Center, 2011.

33/ 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 32:2005–2012, 2013.

34/ Jackson GL, Powers BJ, Chatterjee R, et al: The patient-centered medical home: a systematic review. Ann Intern Med 158:169–178, 2013.

35/ Kaye S, McKetin R, Duflou J, et al: Methamphetamine and cardiovascular pathology: a review of the evidence. Addiction 102:1204–1211, 2007.

36/ Keaney F, Gossop M, Dimech A, et al: Physical health problems among patients seeking treatment for substance use disorders: a comparison of drug dependent and alcohol dependent patients. J Subst Use 16:27–37, 2011.

37/ Kirschner NM, Doherty RB: 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.

38/ Kroening-Roche J, Hall JD, Cameron DC, et al: Integrating behavioral health under an ACO global budget: barriers and progress in Oregon. Am J Manag Care 23:e303-e309, 2017.

39/ Lamb HR, Weinberger LE: Persons with severe mental illness in jails and prisons: a review. New Dir Ment Health Serv 90:29–49, 2001.

40/ Lewis VA, Colla CH, Tierney K, et al: Few ACOs pursue innovative models that integrate care for mental illness and substance abuse with primary care. Health Aff 33:1808–1816, 2014.

41/ Lin WC, Zhang J, Leung GY, et al: Chronic physical conditions in older adults with mental illness and/or substance use disorders. J Am Geriatr Soc 59:1913–1921, 2011.

42/ Lipschitz JM, Benzer JK, Miller C, et al: Understanding collaborative care implementation in the Department of Veterans Affairs: core functions and implementation challenges. BMC Health Serv Res 17:691, 2017.

43/ 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 375:1014–1028, 2010.

44/ McDowell MJ, Busch AB, Sen AP, et al: Participation in accountable care organizations among hospitals offering substance use disorder and mental health services. Psychiatr Serv 69:1131–1134, 2018.

45/ McGinty EE, Daumit GL: Epidemiology of obesity. Psychiatr Ann 41:484–488, 2011.

46/ Miller BF: When frontline practice innovations are ahead of the health policy community: the example of behavioral health and primary care integration. J Am Board Fam Med 28(suppl 1):S98–S101, 2015.

47/ O'Neill EA, Black DR: Collaborative care for individuals with bipolar disorder or schizophrenia and co-occurring physical health conditions: a systematic review. Soc Work Ment Health 15:705–729, 2017.

48/ Oldham MA, Chahal K, Lee HB: A systematic review of proactive psychiatric consultation on hospital length of stay. Gen Hosp Psychiatry 60:120–126, 2019.

49/ Osborn DP, Levy G, Nazareth I, et al: Relative risk of cardiovascular and cancer mortality in people with severe mental illness from the United Kingdom's General Practice Rsearch Database. Arch Gen Psychiatry 64:242–249, 2007.

50/ Palinkas LA, Ell K, Hansen M, et al: Sustainability of collaborative care interventions in primary care settings. J Soc Work 11:99–117, . 2011.

51/ Peikes D, Anglin G, Harrington M, et al: Independent Evaluation of Comprehensive Primary Care Plus (CPC+): First Annual Report. Princeton, NJ, Mathematica Policy Research, 2019.

52/ Peikes D, Dale S, Ghosh A, et al. The comprehensive primary care initiative: effects on spending, quality, patients, and physicians. Health Aff 37:890–899, 2018.

53/ Perkins R, Rinaldi M: Unemployment rates among patients with long-term mental health problems: a decade of rising unemployment. Psychiatr Bull 26:295–298, 2002.

54/ Randall I, Mohr DC, Maynard C: VHA patient centered medical home associated with lower rate of hospitalizations and specialty care among veterans with posttraumatic stress disorder. J Healthc Qual 39:168–176, 2017.

55/ Saha S, Chant D, McGrath J: A systematic review of mortality in schizophrenia: is the differential mortality gap worsening over time? Arch Gen Psychiatry 64:1123–1131, 2007.

56/ Sanchez K, Thompson S, Alexander L: Current strategies and barriers in integrated health care: a survey of publicly funded providers in Texas. Gen Hosp Psychiatry 32:26–32, 2010.

57/ Saraceno B, van Ommeren M, Batniji R, et al: Barriers to improvement of mental health services in low-income and middle-income countries. Lancet 370:1164–1174, 2007.

58/ Sessums LL, McHugh SJ, Rajkumar R: Medicare's vision for advanced primary care: new directions for care delivery and payment. JAMA 315:2665–2666, 2016.

59/ Shirk C: Medicaid and Mental Health Services. Washington, DC, George Washington University National Health Poicy Forum, 2008.

60/ Somers JM, Moniruzzaman A, Patterson M, et al: A randomized trial examining housing first in congregate and scattered site formats. PloS One 12(1):e0168745, 2017.

61/ Soper M: Integrating Behavioral Health into Medicaid Managed Care: Design and Implementation Lessons from State Innovators. Trenton, NJ, Center for Health Care Strategies, 2016. Available here https://www.chcs.org/media/BH-Integration-Brief_041316.pdf.

62/ Steadman HJ, Osher FC, Robbins PC, et al: Prevalence of serious mental illness among jail inmates. Psychiatr Serv 60:761–765, 2009.

63/ 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 112:124–133, 2017.

64/ Tipirneni R, Vickery KD, Ehlinger EP: Accountable communities for health: moving from providing accountable care to creating health. Ann Fam Med 13:367–369, 2015.

65/ Wilson FA, Rampa S, Trout KE, et al: Telehealth delivery of mental health services: an analysis of private insurance claims data in the United States. Psychiatr Serv 68:1303–1306, 2017.

How to use this paper to "Think Bigger" and "Do Good"

1 / **Send the paper to your local, state, and federal policy- and decision-makers**

2 / **Share the paper with mental health and substance use advocates and providers**

3 / **Endorse the paper on social media outlets**

4 / **Link to the paper on your organization's website or blog**

5 / **Use the paper in group or classroom presentations**

6 / **Reference this article as published in Psychiatric Services and cite it as follows:**
***Psychiatr Serv* 2019; 71: doi: 10.1176/appi.ps.202000183**

SCATTERGOOD
THINK|DO|SUPPORT

The Scattergood Foundation believes major disruption is needed to build a stronger, more effective, compassionate, and inclusive health care system — one that improves well-being and quality of life as much as it treats illness and disease. At the Foundation, we THINK, DO, and SUPPORT in order to establish a new paradigm for behavioral health, which values the unique spark and basic dignity in every human.

www.scattergoodfoundation.org

Peg's FOUNDATION

Peg's Foundation believes in relevant and innovative, and at times disruptive ideas to improve access to care and treatment for the seriously mentally ill. We strive to promote the implementation of a stronger, more effective, compassionate, and inclusive health care system for all. Our Founder, Peg Morgan, guided us to "Think Bigger", and to understand recovery from mental illness is the expectation, and mental wellness is integral to a healthy life.

www.pegsfoundation.org

Patrick P. Lee FOUNDATION

The Patrick P. Lee Foundation is a family foundation with two core funding areas - Education and Mental Health. The Foundation's primary investments in education are through its scholarship programs in science, technology, engineering, and math. In mental health, the Foundation's investments focus on strengthening the mental health workforce, supporting community programs and services, advocating for increased public funding, and building the mental health literacy of the community.

www.lee.foundation

PETER & ELIZABETH
TOWER FOUNDATION

As grantmaker, partner, and advocate, the Tower Foundation strengthens organizations and works to change systems to improve the lives of young people with learning disabilities, mental illness, substance use disorders, and intellectual disabilities.

www.thetowerfoundation.org