Integrated behavioral health treatments: innovations to achieve population impact

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Abstract

Translational Behavioral Medicine is a journal that brings together relevant scholars and practitioners to produce articles of scientific and practical significance in a variety of fields. Here, we published a call for manuscripts detailing the study of innovations in the field of implementation of integrated care in the USA. We present 13 articles, all peer reviewed and all targeting some aspect of integrated care implementation. These articles include medical and community-based settings, as well as interventions that effectively engage peers, family members, and other social systems to support and extend care. The behavioral health conditions of interest include but were not limited to those that carry the greatest population disease burdens: depression, posttraumatic stress disorder, bipolar disorder, anxiety disorders, and substance abuse disorders. Examples of cross-cutting issues of high interest include research focused on provider and system barriers to integrated care implementation, interventions to improve the use of innovative treatments, disparities in access to care and quality of treatment, the intersection of behavioral health disorders and complex chronic conditions as it affects regimen adherence, health services organization and quality of care, policy effects, innovative methods using health information and mHealth technologies, and personalized/precision medicine. This introduction briefly summarizes some of the relevant topics and background literature. We close with an eye toward future research activities that will continue to advance the field and offer directions to stimulate new research questions in the area.

Keywords

Integrated care, Collaborative care, State of science

CALL FOR PAPERS

We produced a call for a special issue of *Translational Behavioral Medicine* that focused on the methods and programs by which we translate evidence generated by those early randomized trials into practice for integrated care. For this special issue, the focus is original, high-impact research and systematic reviews providing insights into innovative methods for effectively integrating mental health services into nonspecialty care settings that achieve significant population health outcomes, both international and domestic. This includes implementations in medical and community-based settings, as well as implementations that effectively engage peers, family members, and other social systems to support and

Implications

Practice: Implementation of collaborative or integrated care processes is feasible for primary care clinics and other settings but requires support and training and monitoring for quality improvement. The complexities of implementation can mostly be addressed with these resources.

Policy: Continuing to fund the more specific aspects of integrated care through federal and other means is important for the sustainability of these efforts.

Research: Research into other settings for integrated care, barriers, and supports for active implementation and methods of sustaining initial change are all important areas of research for future studies.

extend care. The behavioral health conditions of interest included but were not limited to those that carry the greatest population disease burdens: depression, posttraumatic stress disorder (PTSD), bipolar disorder, and anxiety disorders. Examples of cross-cutting issues of high interest include provider and system barriers to integrated care implementation, interventions to improve the use of innovative treatments, disparities in access to care and quality of treatment, the intersection of behavioral health disorders and complex chronic conditions affecting regimen adherence, health services organization and quality of care, policy effects, innovative methods using health information and mHealth technologies, and personalized/precision medicine. With an eye toward population impact, we wanted scholarship in this area to guide and inform mental health, general medical, and community-level policy as it relates to the integration of mental health services into diverse health systems and community agencies.

INTEGRATED CARE

Integrated care for mental health disorders is an evidence-based treatment strategy found in primary care and in other nonmental health settings

that targets the identification and treatment of psychological problems in the context of ongoing care and activities. Integrated care for depression is a group of treatment styles and plans, one of which is Collaborative Care Management or CoCM. Integrated care operationalizes the principles of the chronic care model to improve access to evidence-based treatments for primary care patients. Integrated care is based on six key principles: (a) based on research evidence, (b) measurement based, (c) team based, (d) population based, (e) patient centered, and (6) accountable. Meta-analysis demonstrates that integrated care is cost-effective across diverse practice settings, patient populations, and disorders. Unützer et al. conducted Project IMPACT, the *definitive* randomized effectiveness study demonstrating the effectiveness of CoCM, a specific form of integrated care, for depression [1, 2]. Other CoCM trials (e.g., PROSPECT, RESPECT, and PRISM) that were conducted at approximately the same time and targeted depression/anxiety demonstrated its effectiveness for anxiety disorders [3, 4], as well as postpartum depression [5, 6] and PTSD [7].

As is consistent with other innovations, it has taken about 17 years to shift the focus from establishing an evidence base for integrated care to innovating on how to take these evidence-based approaches and implementing them into routine practices [8]. Identifying barriers to and key strategies of implementing evidence-based integrated care approaches in real-world settings and high need populations is now a primary research and clinical focus to provide the opportunity for more patients

to access much-needed care. Table 1 and the remainder of this paper outline current and future areas of research for integrated care.

PRACTICE CONSIDERATIONS

Use technology to scale

Technology may assist in the delivery, implementation, and dissemination of mental health interventions. Telephone technologies may help depressed patients receive additional individualized support without having to leave their homes. In a study integrating technology and family therapy, depressed caregivers were linked to their family and with support outside of the home, as well as the therapist having enhanced access to both the caregivers and their family members. Caregivers in the combined family therapy and technology intervention experienced a greater reduction in depressive symptoms at 6 and 18 month follow-ups than those in other interventions [9]. Among individuals with cancer and depression, centralized telecare management paired with automated symptom monitoring resulted in improved pain and depression outcomes in cancer patients in rural areas [10].

Using technology to deliver the primary intervention has offered the possibility for existing therapies to be more accessible, as well as enabled the development of novel target interventions. Most recently, therapeutic video game technology (Project: EVO) was found to be just as effective as problem-solving therapy when it came to improving mood and self-reported function in individuals with late-life depression [11]. A study by Areal et al. found that the therapeutic video game technology (EVO)

Table 1 | Future research directions for integrated care

Area of research	Example
Practice considerations	
Technology to scale access	How can technology support but not interfere with the implementation of integrated care?
Workforce	How can strategies for education/training be incorporated into implementation science research? Can specific education/training interventions improve implementation?
Payment	What are the barriers to using existing payment mechanisms? How should existing payment models be refined to support sustained implementation?
Frameworks	What are the theoretical underpinnings of a specific intervention effort and do they mediate the overall intervention effect?
Population needs	
Addressing disparities	What are the variances in intervention effect by population or region? Why do these disparities occur and how can we alter how we deliver interventions to account for these disparities?
Integration of substance use disorder and mental health treatment	Is a combined treatment for substance use disorders and common mental health conditions implementation effective in reducing substance use and mental health outcomes? What adaptations of integrated care are needed?
Research design	
Patient engagement in design	How do patient ideas and concerns become integrated and evaluated in an integrated care research project?
Mechanisms of successful interventions	Why do interventions that are successful work? Or not work?
Importance of pragmatic studies	How can we efficiently but effectively use smaller samples and focused targeted implementation efforts to study integrated care?

and iPST, a problem-solving therapy app, had a positive impact on both depression and disability outcomes as compared to the treatment control, which was an app that provided daily health tips [12]. In addition, passive sensing technologies can be used to predict depressive mood states before the patient expresses them. A recent study found that changes in daily physical activity collected with smartphone GPS and accelerometer technology were predictive of different mood states before the patient themselves reported changes in mood [13]. This technology can promptly alert clinicians and allow for a change in treatment or expedited intervention.

Address workforce needs

An important consideration to increase the implementation of integrated care approaches is workforce training needs. Delivering care using integrated care approaches is currently a rarely part of training programs [14, 15] or practicum experiences; currently, much of this training is being acquired on the job as a best practice [16]. For example, Horevitz and Manoleas report that 66% of social work respondents reported learning the majority of the skills and competencies necessary for integrated care on the job [15]. This same study reports that the least familiar skills are also some of those that are foundational for evidence-based integrated care models, such as stepped care and behavioral activation. Similar challenges in workforce preparedness have also been identified in the psychiatric workforce, with only about half of psychiatric residency training programs offering didactic training in integrated care [17].

As evidence increases in the effectiveness of using technology to scale integrated care, such as the reports from Leung et al. and Carleton et al. in this special issue, another important workforce challenge is preparing the workforce for this shift in practice [18, 19]. Treatment Improvement Protocol (TIP) 60 released by Substance Abuse and Mental Health Services Administration (SAMHSA) summarizes the areas of technical skills that need to be developed in the workforce to take advantage of using technology as part of mental health care, including the core skills of comfort with technology and how to integrate technologies into clinical practice. This resource highlights that using digital modalities to communicate about health care and identifying which digital technologies are safe and appropriate to recommend can be nontrivial adaptations that need to take into consideration privacy. As another example, internet cognitive behavioral therapy has now been shown to be an effective strategy to improve outcomes, but using this approach requires training of the provider [18]. These approaches are needed to deliver on the promise of integrated care but will benefit from additional studies to identify

when and how to incorporate them into integrated care practice.

Given these important workforce needs, research on effective strategies to skill up the integrated care workforce will be critical. Although there has been some early work starting to define the educational needs of the integrated care behavioral health workforce [20, 21], there are important research questions about the most effective educational approaches to teach these skills. This could include more explorations of education and training as part of implementation research or the testing of specific educational strategies to teach integrated care for both clinicians in training and already practicing in the workforce.

Payment for collaborative care

Existing fee-for-service payment systems are ill aligned with and seriously inadequate to support integrated care. Lack of payment has, thus, been identified as a major barrier to sustained implementation of collaborative care [22, 23]. Recognizing the critical role of payment, several state-wide implementations of collaborative care adopted case rate or lump sum payment. Notably, Minnesota's DIAMOND initiative, a consortium among private/nonprofit payers and provider organizations, adopted a fixed monthly case rate to cover the cost of ongoing collaborative care not covered by visit-based physician payment. The Mental Health Integration Program (MHIP) in Washington State among community health centers (CHCs) was sponsored by public funding and a major Medicaid managed care plan until 2018. It adopted an annual lump sum payment to CHCs based on minimum caseload expectations, and, since 2009, withheld 25% of the payment to reward CHCs for achieving prespecified depression treatment and outcome targets [24, 25]. Starting January 2017, the federal Medicare program started reimbursing for collaborative care with additional, fee-for-service payment codes structured based on the month of care (first vs. subsequent months) and minimum accumulated minutes of care (70 min in the first month, 60 min in subsequent months with possible additional payment for increments of 30 min) [26]. Little empirical data at the national level have been published, but it is believed that adoption of the Medicare codes has been lackluster [27]. A qualitative study based on interviews with 12 health care organizations and 2 payer organizations regarding the adoption of these codes revealed difficulties in workflow changes, both clinical and billing related [28]; for example, discussing possible cost-sharing with patients and obtaining consent to information sharing with other providers, tracking the accumulation of time in direct patient encounters (by all providers) over a month, and revenue transfer between departments (mainly primary care and psychiatry) [28]. While these difficulties are not

insurmountable, system-level barriers, such as payment codes not consistently offered by all payers and uncertainty regarding the financial sustainability of billing for these codes, constitute more fundamental barriers.

Further refinements of the Medicare codes are expected in coming years, as well as increased provision of coverage for collaborative care by private payers. Research examining early experience with the Medicare codes and financial implications for health care provider organizations and payers (e.g., potential cost-savings as a result of covering collaborative care) is needed to support stakeholder decision-making in this area. Another area of investigation concerns payment innovations that do not directly target collaborative care and, yet, at least conceptually, are highly aligned with collaborative care implementation. One example is Accountable Care Organizations (ACOs) that hold health care organizations accountable for the quality and total health care costs of a defined patient population [29]. As rules for the Medicare ACO program continue to evolve toward increased accountability by accelerating the move to two-sided risks (i.e., ACOs sharing in financial losses, as well as savings), embedded incentives for behavioral health integration and for collaborative care implementation are arguably stronger [30]. Future research should continue to monitor ACO implementation of collaborative care, processes and outcomes, and lessons learned.

Frameworks for real-world integrated care

In the implementation of integrated care in primary care, a plethora of models and approaches are being adopted and experimented with, many without solid evidence of effectiveness. If models developed out of high-quality randomized trials are considered “gold standard,” approaches adopted in real practices reflect resource constraints, as well as preferences and feasibilities dictated by local circumstances. Two prominent questions are: first, can we identify “lighter” versions of integrated care that fall short of the gold standard and still achieve minimum acceptable effectiveness and cost-effectiveness? And, second, how do we guide primary care practices in adopting such lighter models and in incrementally improving and enhancing their implementation? Three papers in the current issue directly address these two questions. In particular, Stephens et al. [31] developed and assessed a framework of core principles and mapped structures and processes to encompass different models of integrated behavioral health care in primary care. This framework provides a shared community definition and standards for a state-wide initiative to advance behavioral health integration in primary care. The continuum-based framework reported on in Goldman et al. [32] was specifically in response to the needs of small primary care practices (or, more generally,

practices with limited resources) and defined eight domains of integrated care and subdomains representing graded stages of implementation. Williams et al. [33], on the other hand, proposes practical and measurable definitions for three interrelated components of integrated care (and of chronic condition management in general), namely care coordination, care management, and case management, in an effort to facilitate implementation, fidelity assessment and improvement, and continued development of integrated care approaches.

These three studies address the second question posed above (“how to guide primary care practices in adopting and incrementally enhancing integrated care models”) by developing unifying frameworks as a compass for practice reorganization. While such efforts are incredibly valuable, lighter versions that result from such frameworks are potentially large in number and the evidence base for them remain weak [34]. Since many of these versions have emerged or will emerge in real-world implementation, observational studies, rather than randomized trials with factorial designs, may hold promise for rigorous evidence that also capture the variety of naturally occurring integrations. One social science method, Qualitative Comparative Analysis (QCA) [35, 36], may be especially well suited to identify lighter versions that are associated with improvements in patient outcomes. Unlike regression-based analysis that assumes independent effects of factors, QCA identifies combinations (or configurations) of factors contributing to an outcome. In addition, it identifies potentially multiple configurations that represent alternative paths to the outcome, a property known as equifinality [37]. Both of these features are highly aligned with the need to identify alternative, lighter versions of integrated care (defined by combinations of components, structures, and processes) that are causally associated with improvement in clinical and other patient outcomes.

ADDRESSING POPULATION NEEDS

Ameliorate disparities

In spite of the tremendous mental health need, many adults with depression do not receive mental health care. Barriers continue to include affordability, availability (i.e., supply of health care resources in a given area), accessibility, acceptability, and accommodation [38]. These factors contribute to the pervasive disparities that remain among minority ethnic/racial, gender, sexual orientation, language, and age groups. In New York City, among adults with depression, only 38% had mental health treatment in the past year [39]. A recent analysis using a representative population sample of older adults and disaggregating racial/ethnic groups found significant differences in rates of depression among ethnic and racial groups [40]. The increasing awareness of the disparities has led to opportunities and

innovations that promote the integration of mental health into nonmental health sites and strategies to design programs that address as many barriers as possible.

The integration of mental health into primary care has taken steps to reduce barriers to accessibility and acceptability. The widespread use of the Patient Health Questionnaire (PHQ-9) has contributed to improved detection and measurement-based care in multiple languages, reducing barriers to medication treatment among individuals who speak a language other than English. Yet, barriers remain and include: (a) the availability of trained providers in general and those who speak languages other than English and (b) challenges facing individuals with multiple comorbidities.

Yet, it is not all bleak. Investigators have identified innovations emerging that offer ways of addressing need. They include embedding mental health in new settings (e.g., senior centers), integration across service sites, and using alternative providers (e.g., lay people) [41]. To address need among vulnerable older adults, mental health education, screening, and therapy have been integrated into elder justice services and senior centers implemented by the New York City Department for the Aging and funded by ThriveNYC in New York City. The New York State Office of Mental Health has funded demonstration programs that have “triple partnerships” of mental health, substance use disorder, and aging services providers to reduce the silos that limit care and address the unmet needs of older adults who require these services.

Integration of substance use disorder and mental health treatment

For a variety of policy and payment reasons, silos between the systems of care that address substance use disorders and mental health disorders have evolved with many barriers to integration of treatment. Yet, co-occurrence between mental health disorders and substance use disorders is common. Integrated care approaches in which whole person care is delivered appear to be an ideal approach to address this common challenge. However, few studies have addressed how to effectively use an integrated care approach to address co-occurring conditions.

To address this research gap, the National Institute of Mental Health (NIMH) has recently funded four studies as part of the large Helping to End Addiction Long-term initiative. These studies were funded specifically to explore how a collaborative care approach could be optimized to address opioid use disorder (OUD) and co-occurring common mental health disorders in primary care. The studies were required to address key research questions, including how to use pragmatic designs and deployment-focused interventions that are feasible to implement in existing clinical practice

settings, how to serve diverse patient populations (e.g., racial and ethnic minorities and pregnant women), how to implement in clinics with known variation in implementation readiness and existing site resources, what are the costs and cost-effectiveness of the collaborative care approach, how to streamline workflows through routine screening and efficient referral pathways to medication-based treatment for OUD and mental health treatment, and how to reduce the alarming rates of mortality associated with OUD. The four funded studies plan to use providers with diverse backgrounds and training (e.g., nurses vs. medical assistants) in key behavioral health care manager roles, use different approaches to identifying patients in need of treatment, use different strategies for care delivery (in person and telephone), and address different co-occurring disorders (anxiety, depression, and PTSD). The focus on hybrid design to test both effectiveness and implementation strategies will likely continue to be a strategic approach as we try to close the gap from protocols to practice. The opportunity to compare the different strategies that the research groups took may also have important implications for how to continue to adapt integrated care approaches and inform future studies in this important population.

RESEARCH DESIGN

Patient engagement in designing interventions

It is a widely accepted premise that community-academic partnerships yield more effective research designs, relevant interventions, and increase sustainability. And yet, often the “end user” is not involved. This omission may reflect the lack of recognition of the importance of individual and community participation in the design and implementation of interventions. In addition, researchers may face pragmatic barriers (e.g., difficulty recruiting depressed individuals to participate) and funding limitations (e.g., the financial limits on pilot projects) that affect the timeline of intervention development. Recognizing the importance of a deployment model, NIMH has placed a priority on bringing information about typical patients, providers, settings, and multiple stakeholder groups into intervention development and testing. This emphasis is embedded into the NIMH strategic plan for community-based interventions.

This emphasis on the integration of individual and community perspectives is echoed in studies that have found that mental health research translates more easily to real health care settings when patients are emotionally and intellectually involved in the research question and have an understanding of their role within the process [42]. Implementing a user-centered design can improve the integration of evidence-based practices in such services [43]. Examples of this approach include receiving input

from patients on research design (as part of the research team) or activities in which patients and providers work alongside one another to create changes to service design or delivery [44]. Researchers have found that once patient engagement becomes practice, it also leads to further patient participation by creating a culture of collaboration and reducing the power dynamic between providers and their patients. As a result, patient engagement is associated with improved outcomes for depression and anxiety in adults, thus making it a priority in the design of mental health intervention research.

Mechanisms of successful interventions

Understanding intervention effectiveness is the first step toward translating evidence-based integrated care models into everyday practice. For successful studies, we need to identify the mechanisms of effect of those interventions. The mediational and moderating variables selected and tested become incredibly important to future research, and that kind of research is just now being conducted and published. Mechanistic analyses of this type often get swallowed in the press of other competing activities, as they are complex and require key statistical applications, as well as clear thinking about the application of a theoretical model [45]. However, research focused on mechanisms of action of integrated care implementation is key toward a next generation of effectiveness studies that are even more powerful than the initial generation. A good recent example is a study that was done in New York, identifying several key mechanisms of action for collaborative care in practice settings [39].

IMPORTANCE OF PRAGMATIC STUDY DESIGN

Investigators should consider recent contributions to study design to strengthen intervention research and to use the most rigorous design possible while still taking into account real-world requirements and constraints. In a recent webinar, Curran et al. articulated designs like the hybrid effectiveness design, which accounts for constraints on sample size and control group assignment while allowing for clear rigorous evaluation of outcomes [46, 47]. These and other design features and statistical approaches are necessary to move the field forward with speed but scientific quality and could be considered for funding and collaboration in multiple settings.

Use of this issue

We propose that the contents of this special issue be seen as an initial foray into the diversity of issues that need to be studied in integrated care. We hope that the contents of this special issue published in *Translational Behavioral Medicine* will act as a stimulus to others to contribute to some of these research ideas. There are many unanswered questions

about the implementation of integrated care in the USA, and we want to see more contributions to that literature. We hope that this content will suggest ideas and stimulate funders and investigators to pursue them. Finding a home in *Translational Behavioral Medicine* for this kind of transdisciplinary and innovative research is one step in the process of translating basic treatment findings into practice and public health objectives, but it is a necessary step and one that we hope will have effects beyond this journal issue.

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Compliance with Ethical Standards

Conflicts of Interest: The authors declare that they have no conflicts of interest.

Ethical Approval: This article does not contain any studies with human participants performed by any of the authors. This article does not contain any studies with animals performed by any of the authors.

Informed Consent: This study does not involve human participants and informed consent was therefore not required.

References

- Unützer J, Katon W, Callahan CM, et al; IMPACT Investigators. Improving Mood-Promoting Access to Collaborative Treatment. Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. *JAMA*. 2002;288(22):2836–2845.
- Arean P, Hegel M, Vannoy S, Fan MY, Unützer J. Effectiveness of problem-solving therapy for older, primary care patients with depression: Results from the IMPACT project. *Gerontologist*. 2008;48(3):311–323.
- Bruce ML, Ten Have TR, Reynolds CF, III, et al. Reducing suicidal ideation and depressive symptoms in depressed older primary care patients: A randomized controlled trial. *JAMA*. 2004;291(9):1081–1091.
- Bartels SJ, Coakley EH, Zubritsky C, et al; PRISM-E Investigators. Improving access to geriatric mental health services: A randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. *Am J Psychiatry*. 2004;161(8):1455–1462.
- Grote NK, Katon WJ, Russo JE, et al. Collaborative care for perinatal depression in socioeconomically disadvantaged women: A randomized trial. *Depress Anxiety*. 2015;32(11):821–834.
- Byatt N, Moore Simas TA, Biebel K, et al. PRogram In Support of Moms (PRISM): A pilot group randomized controlled trial of two approaches to improving depression among perinatal women. *J Psychosom Obstet Gynaecol*. 2018;39(4):297–306.
- Engel CC, Oxman T, Yamamoto C, et al. RESPECT-Mil: Feasibility of a systems-level collaborative care approach to depression and post-traumatic stress disorder in military primary care. *Mil Med*. 2008;173(10):935–940.
- Morris ZS, Wooding S, Grant J. The answer is 17 years, what is the question: Understanding time lags in translational research. *J R Soc Med*. 2011;104(12):510–520.
- Eisdorfer C, Czaja SJ, Loewenstein DA, et al. The effect of a family therapy and technology-based intervention on caregiver depression. *Gerontologist*. 2003;43(4):521–531.
- Kroenke K, Theobald D, Wu J, et al. Effect of telecare management on pain and depression in patients with cancer: A randomized trial. *JAMA*. 2010;304(2):163–171.
- Anguera JA, Gunning FM, Areán PA. Improving late life depression and cognitive control through the use of therapeutic video game technology: A proof-of-concept randomized trial. *Depress Anxiety*. 2017;34(6):508–517.
- Arean PA, Hallgren KA, Jordan JT, et al. The use and effectiveness of mobile apps for depression: Results from a fully remote clinical trial. *J Med Internet Res*. 2016;18(12):e330.
- Saeb S, Lattie EG, Schueller SM, Kording KP, Mohr DC. The relationship between mobile phone location sensor data and depressive symptom severity. *PeerJ*. 2016;4:e2537.

14. Summers RF. Integrated behavioral health care and psychiatric training. *Acad Psychiatry*. 2015;39(4):425–429.
15. Horevitz E, Manoleas P. Professional competencies and training needs of professional social workers in integrated behavioral health in primary care. *Soc Work Health Care*. 2013;52(8):752–787.
16. Buche J, Singer PM, Grazier K, King E, Maniere E, Beck AJ. Primary Care and Behavioral Health Workforce Integration: Barriers and Best Practices. Available at http://www.behavioralhealthworkforce.org/wp-content/uploads/2017/02/FA2P3_Team-based-Care-Case-Studies_Full-Report.pdf. Accessibility verified June 2020.
17. Reardon CL, Bentman A, Cowley DS, et al. General and child and adolescent psychiatry resident training in integrated care: A survey of program directors. *Acad Psychiatry*. 2015;39(4):442–447.
18. Kumar V, Sattar Y, Bseiso A, Khan S, Rutkofsky IH. The effectiveness of internet-based cognitive behavioral therapy in treatment of psychiatric disorders. *Cureus*. 2017;9(8):e1626.
19. Substance Abuse and Mental Health Services Administration. *Using Technology-Based Therapeutic Tools in Behavioral Health Services*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2015 (Treatment Improvement Protocol (TIP) Series 60. HHS Publication No. (SMA) 15–4924).
20. Ratzliff A, Norfleet K, Chan YF, Raney L, Unützer J. Perceived educational needs of the integrated care psychiatric consultant. *Acad Psychiatry*. 2015;39(4):448–456.
21. Black DR. Preparing the workforce for integrated healthcare: A systematic review. *Soc Work Health Care*. 2017;56(10):914–942.
22. Curran GM, Sullivan G, Mendel P, et al. Implementation of the CALM intervention for anxiety disorders: A qualitative study. *Implement Sci*. 2012;7:1–11.
23. Palinkas LA, Ell K, Hansen M, Cabassa L, Wells A. Sustainability of collaborative care interventions in primary care settings. *J Soc Work*. 2011;11(1):99–117. doi:[10.1177/1468017310381310](https://doi.org/10.1177/1468017310381310).
24. Unützer J, Chan YF, Hafer E, et al. Quality improvement with pay-for-performance incentives in integrated behavioral health care. *Am J Public Health*. 2012;102(6):e41–e45.
25. Bao Y, McGuire TG, Chan YF, et al. Value-based payment in implementing evidence-based care: The mental health integration program in Washington state. *Am J Manag Care*. 2017;23(1):48–53.
26. Press MJ, Howe R, Schoenbaum M, et al. Medicare payment for behavioral health integration. *N Engl J Med*. 2017;376(5):405–407. doi:[10.1056/NEJMp1614134](https://doi.org/10.1056/NEJMp1614134).
27. Carlo AD, Unützer J, Ratzliff ADH, Cerimele JM. Financing for collaborative care—A narrative review. *Curr Treat Options Psychiatry*. 2018;5(3):334–344.
28. Carlo AD, Corage Baden A, McCarty RL, Ratzliff ADH. Early health system experiences with collaborative care (CoCM) billing codes: A qualitative study of leadership and support staff. *J Gen Intern Med*. 2019;34(10):2150–2158.
29. Bao Y, Casalino LP, Pincus HA. Behavioral health and health care reform models: Patient-centered medical home, health home, and accountable care organization. *J Behav Health Serv Res*. 2013;40(1):121–132.
30. Centers for Medicare & Medicaid Services. *Final Rule Creates Pathways to Success for the Medicare Shared Program*. Baltimore: Centers for Medicare & Medicaid Services; 2018.
31. Stephens et al. *Transl Behav Med*. 2020. (this issue)
32. Goldman M. A novel continuum-based framework for translating behavioral health integration to primary care settings. *Transl Behav Med*. 2020. (this issue)
33. Williams MD. Practical and measurable definitions of care coordination, care management, and case management. *Transl Behav Med*. 2020. doi:[10.1093/tbm/ibaa001](https://doi.org/10.1093/tbm/ibaa001).
34. Freed. *Transl Behav Med*. 2020. (this issue)
35. Ragin CC. *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. Chicago: University of Chicago Press; 2008.
36. Ragin CC. *Fuzzy-Set Social Science*. Chicago: University of Chicago Press; 2000.
37. Kane H, Lewis MA, Williams PA, Kahwati LC. Using qualitative comparative analysis to understand and quantify translation and implementation. *Transl Behav Med*. 2014;4(2):201–208.
38. Penchansky R, Thomas JW. The concept of access: Definition and relationship to consumer satisfaction. *Med Care*. 1981;19(2):127–140.
39. Moise N, Shah RN, Essock S, et al. Sustainability of collaborative care management for depression in primary care settings with academic affiliations across New York State. *Implement Sci*. 2018;13(1):128.
40. Hooker K, Phibbs S, Irvin VL, et al. Depression among older adults in the United States by disaggregated race and ethnicity. *Gerontologist*. 2018;59(5):886–891. doi:[10.1093/geront/gny159](https://doi.org/10.1093/geront/gny159).
41. Raue PJ, McGovern AR, Kiosses DN, Sirey JA. Advances in psychotherapy for depressed older adults. *Curr Psychiatry Rep*. 2017;19(9):57.
42. Mullins CD, Abdulhalim AM, Lavalée DC. Continuous patient engagement in comparative effectiveness research. *JAMA*. 2012;307(15):1587–1588.
43. Dopp AR, Parisi KE, Munson SA, Lyon AR. A glossary of user-centered design strategies for implementation experts. *Transl Behav Med*. 2018;9(6):1057–1064. doi:[10.1093/tbm/iby119](https://doi.org/10.1093/tbm/iby119).
44. Bombard Y, Baker GR, Orlando E, et al. Engaging patients to improve quality of care: A systematic review. *Implement Sci*. 2018;13(1):98. doi:[10.1186/s13012-018-0784-z](https://doi.org/10.1186/s13012-018-0784-z).
45. Glanz K, Rimer BK, Viswanath K, eds. *Health Behavior: Theory, Research, and Practice*. 5th ed. San Francisco: Jossey-Bass; 2015.
46. Curran GM, Bauer M, Mittman B, Pyne JM, Stetler C. Effectiveness-implementation hybrid designs: Combining elements of clinical effectiveness and implementation research to enhance public health impact. *Med Care*. 2012;50(3):217–226.
47. Landes SJ, McBain SA, Curran GM. An introduction to effectiveness-implementation hybrid designs. *Psychiatry Res*. 2019;280:112513.