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A Path to Value-Based Insurance Design for Mental Health Services

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Abstract

Background: Aligning cost of mental health care with expected clinical and functional benefits of that care would incentivize the delivery of high value treatments and services. In turn, ineffective or untested care could still be offered but at costs high enough to offset the delivery of high value care.

Aims: The authors comment on Benson and Fendrick's paper on Value-Based Insurance Design (VBID) for mental health in the September 2023 special issue of this journal. The authors also present a preliminary framework of key ingredients needed to consider VBID for mental health treatments and services.

Methods: The authors briefly review current and past efforts to contain costs and improve quality of mental health care, which include (for example) use of carve-out and carve-in programs, evaluation of cost sharing models, impact of accountable care organizations, and studying other benefit designs and impact of federal and state policies.

Results: Using PTSD as an example, key ingredients of VBID for mental health services were identified and include the following: tools for case identification and monitoring progress over time at the population level; specific treatments and services with evidence of clinical effectiveness, cost-effectiveness, and health equity; and an approach to document the specific treatment or service was delivered (versus another treatment or service that may lack evidence).

Discussion: The inability to afford mental health care is a top barrier to treatment seeking. People who do elect to spend time and money on mental health care are further disadvantaged by accessing care that is not well regulated and the quality at best is questionable. VBID could be an important lever for increasing access to and use of high value mental health care. Partnerships among the research, practice, and policy communities can help ensure research solutions meet needs of these two communities.

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Background

Aligning cost of mental health care with expected clinical and functional benefits of that care would incentivize the delivery of high value treatments and services. In turn, ineffective, untested, or undertested treatments and services could still be offered, for example, in a case where a patient or provider has a particular preference for a type of treatment, but at costs high enough to offset costs for high value care. This is the vision that Benson and Fendrick¹ and the Center for Value-Based Insurance Design² highlighted in the September 2023 special issue in the *Journal of Mental Health Policy and Economics*. Benson and Fendrick's article¹ is based on their plenary presentation at the January 2023 National Institute of Mental Health (NIMH)-National Institute on Drug Abuse (NIDA) Health Economics conference.³

Benson and Fendrick's¹ vision is a partial reality for medical care. Early successes show that reducing or eliminating co-payments for several classes of medications used to treat hypertension and diabetes was associated with no cost increases and even some cost savings from the employer and employee perspective.⁴ Other research consistently shows improvement in quality of care but with mixed results in terms of cost savings or cost neutrality.⁵ While practices that cap or increase copayments that don't differentiate among treatments and services may reduce expenditures for insurers, these approaches may also reduce the use of essential treatments that are important in treating chronic, including symptomatic, conditions. Consequently, these practices could actually increase the use of healthcare services.⁶

An example law that seeks to improve the delivery of evidence-based services comes from the Affordable Care Act (ACA). The ACA stipulates that A- and B-level recommendations from the United States Preventive Services Task Force (USPSTF) must be offered with no cost sharing in Medicare,⁷ commercial, and individual or family plans.⁸ (However, this provision may be subject to change due to litigation⁹.) In a subsequent review of the impact of this ACA mandate on many clinical services (the review did not include mental health services), Norris *et al.*¹⁰ concluded that the impacts "of cost-sharing elimination varied depending on clinical service, with a majority of findings showing increases in use. Studies that included socioeconomic status reported that those who were financially vulnerable incurred substantial increases in utilization." That is, when cost-sharing was eliminated, use of services increased particularly in low-income populations. Despite the evidence available for general medical care, less is known about the impact that eliminating or reducing cost-sharing has in the use of mental health care.

Cost Containment Strategies and Impact on Quality of Mental Health Services

Although little is known about the impact of cost-sharing models on mental health care, there have been efforts to make mental health care more affordable for decades. Research in the 1970s and 1980s found that providing more limited benefits or imposing higher cost sharing requirements was justifiable for mental health and substance use services, owing to concerns that long-term service use would drive up costs.¹¹ However, in the 1990s, researchers found that managed care's supply-side mechanisms for cost containment, such as utilization review, effectively managed costs without the need for higher cost-sharing

from patients.¹¹ This finding led to the passage of the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act (MHPAEA) in October 2008, which prevents insurers from providing less favorable benefits for mental health and addiction services than those provided for general medical care.^{11,12} However, even within the context of managed care cost containment measures, there is still a need to refine these approaches to encourage the use of high-value services and reduce the use of low-value services.

As summarized in Ettner *et al.*,¹³ carve out programs gained popularity and separately administered benefits for behavioral healthcare from medical benefits. These programs generally involve greater direct care management for each illness type (physical health by the primary insurer and behavioral health by the carve out). In contrast, carve-in plans combine mental and behavioral health benefits, where all health care services are managed under one umbrella insurance plan. While carve out plans reduced costs and increased penetration (that is the probability of any treatment), Ettner *et al.* reported that evidence is mixed about carve-outs' impact on quality. Indeed, the findings were also limited by the lack of care quality and clinical outcome data, which is a noted gap area when using claims, electronic health record, and many other administrative data sources, and where more research is needed to fill this gap and better integrate data on quality with data on cost.^{14,15} Interestingly, and as a consequence of MHPAEA, there are administrative incentives for employers and plans to move back to carve-in programs, and in doing so, Ettner *et al.*¹³ found an increase in inpatient costs and utilization for carve-in programs.

There are other methods that payers, providers, and patients use to attempt to control costs. For example, payers can negotiate directly with drug companies on price, using a tool that the Centers for Medicare & Medicaid Services (CMS) was recently given as part of the Inflation Reduction Act.¹⁶ Employers using self-insured plans can also influence price of services directly, though in an analysis comparing price of services between self- and fully insured plans, price of the services analyzed was generally higher in self-insured plans.¹⁷ Other efforts, like the development of Accountable Care Organizations (ACOs), empower providers, healthcare systems, and others involved in healthcare delivery to collectively work together and “share in the overall savings which are linked, in full or in part, to achieving population-based performance standards on quality measures and to reporting reductions in per member, per month costs.¹⁸” Wilson *et al.*'s¹⁸ review suggests these models are cost saving, but evidence of improved quality is mixed.

NIMH supports research projects that aim to improve quality of mental health services (e.g.,^{19,20}). For example, Geissler²¹ examines the role of insurance networks in facilitating guideline-concordant care. McConnell²² studies the impact of Medicaid 1115 waivers, which were implemented to improve care for children and adults with serious mental illnesses, on healthcare utilization and suicide-related behaviors. Goff and Geissler²³ examine the effects of Medicaid Accountable Care Organizations (ACOs) on behavioral health care quality and outcomes for children. Johnston²⁴ examines how the Medicare Quality Payment Program can incentivize the provision of evidence-based depression and anxiety treatment by primary care providers. However, more research is needed that makes better determinations about quality and that better nuances how high- and low-quality mental health care is financed.

Other approaches to cost containment raise deductibles via high deductible plans in efforts to protect against the need for catastrophic and expensive services. In doing so, high deductible plans create demand-side incentives to utilize services more efficiently because of greater cost sharing for patients.²⁵ While high-deductible plans are associated with overall reduction of costs, there is some evidence these plans can disproportionately reduce low value spending relative to overall spending for medical services.²⁵

Raising deductibles is a blunt instrument,²⁶ however, and not only reduce low value services but also high value services, except perhaps in all but the most urgent of circumstances. Indeed, Schilling *et al.*²⁷ found that high deductible plans were associated with a disproportionate reduction of spending for mental health services (compared to medical services), and despite the overall reduction in spending, there was an increase in spending on emergency department visits.

A Path to VBID for Mental Health Care

Key Ingredients and Research Gaps

In efforts to reduce costs associated with the delivery of high value mental health care and increase costs associated with the delivery of low value mental health services, we propose a framework to identify the key ingredient needed to more precisely adjust cost while ensuring use of necessary and high-quality mental health care. The first ingredient is an operational definition of high and low value mental health care. The VBID center²⁸ characterizes low value care as that which provides little or no benefit to patients, has the potential to cause harm, incur unnecessary cost to patients, or waste limited healthcare resources. Conversely, “[h]igh-value care means providing the best care possible, efficiently using resources, and achieving optimal results for each patient”.²⁹ Within this definition is the need for specific evidence-based treatments and services for an indicated condition that are also associated with an efficient use of resources versus an alternative (e.g., are cost-effective, cost-beneficial). The second ingredient is a tool for case identification (e.g., screening) and tool to monitor progress over time for the target population (e.g., as in measurement-based care or use of a quality measure). The third ingredient is an approach to document the delivery of that high value treatment or service versus another treatment or service. These ingredients loosely map onto the framework to categorize measures to assess the impact of low value care.³⁰

While necessary, these ingredients are not sufficient. Value-based care cannot be undertaken without addressing health equity. For example, measuring patient outcomes without considering the baseline risk level of patients can promote “perverse incentives” that lead to unintended consequences, for example, incentivizing providers to serve healthier patients.^{31,32} Models where providers or health care systems are reimbursed for certain quality improvement activities may favor those who have healthier patients and/or the resources to devote to documenting their activities.³³ Thus, any strategy to identify high and low value care should define for whom, and in what circumstances, is this care high vs low value. The strategy should also evaluate the impact on disparity reduction and ensure the strategy does not exacerbate disparities, as even many people with commercial or public insurance do not have access to high value care. For example, some quality improvement

initiatives require the collection of demographic data to track impact on health equity and ensure that more complex cases have equal access to care.³⁴

Table 1 presents a preliminary framework for how VBID could be considered for mental health treatment and services using the ingredients describe above. We select PTSD as a diagnostic example because it is a common and potentially debilitating mental illness. As reported by NIMH,⁵⁵ PTSD affects 3.6% of US adults in the past year. Approximately 1/3 of adults with PTSD experience serious impairment, 1/3 experience moderate impairment, and 1/3 experience mild impairment. Evidence-based treatments and services exist that can be delivered in both primary care and specialty settings.⁴⁰ There is also evidence that treatment is cost-effective (e.g.,⁵¹), and there are examples of alternative interventions that lack clinical trial level evidence of effectiveness but are being delivered in practice despite the lack of evidence.⁴⁶

Shared Responsibility among the Research, Practice, and Policy Communities

For VBID for MH to be realized, there should be thoughtful partnerships among the research, practice, and policy communities to (i) ensure high value mental health treatments and services can be identified, (ii) determine what structures are needed to affordably deliver evidence-based treatments, and (iii) employ approaches to monitor outcomes at a population level to help minimize common intervention drift that happens moving interventions from research to practice. Figure 1 articulates the primary responsibility for each community and identifies areas of overlap that necessitate strong partnerships.

The concept of practice-policy-research partnerships is important to define. It is critical that scientists who develop interventions consider contexts in which they will be delivered. Intervention developers should, at a minimum, collect information about the costs of services and the structures needed to facilitate implementation so that those tasked with making decisions about the value of an intervention and the return on investment can make informed decisions. Relatedly, practice and policy partners may be added to a study advisory board but may not be as truly involved as they should be in the actual science.^{56,57} An example of a research-practice partnership that led to eventual changes in practice and policy is the IMPACT Collaborative Care study.⁵⁸ Before the study was launched, the design of the service intervention was co-developed with administrators, experts in service integration and other key informants to develop a model that would be easily adopted into practice. Data on the structures needed to successfully support the model was captured throughout the study. These data were important in informing the current financing of the model that support collaborative care in practice. A similar set of partnerships occurred within the military health system, which had implemented the collaborative care model for service members with PTSD and depression in 2007 and then tested enhancements to the model in a subsequent multi-site trial.^{42,59}

Relatedly, policy makers are often in the position to quickly implement novel financing and service models before scientists have a chance to evaluate the potential impact. This can lead to funds being used to address important problems, without knowing what the impact of the model will be on access to mental health care. Early coordination with researchers to test the impact of these models on population health will identify which models are most effective

and which would benefit from redesign. Natural experiments like this were funded by NIMH in the mid to late 1990's, for instance the Colorado state alternative capitation systems study, where interrupted time series designs were applied to Colorado's reorganization of the mental health system in real time.^{60–62} NIMH's contemporary investments support projects that not only engage policy makers but also seeks to better understand the needs of policy makers and factors associated their decision making.⁶³ More studies of this nature are needed.^{20,64,65}

As the lead federal agency for research on mental health, NIMH shares responsibility with the practice and policy communities to ensure high value treatments and services are developed, tested in relevant settings, and ultimately delivered to people with mental illnesses. Examples below illustrate some ways in which research, policy, and practice partners/constituents can work together to promote the principles of high-value care.

Between Research and Practice—NIMH and other federal agencies encourage and support work that helps translate research findings into meaningful change in clinical practice, to improve patients' access to high-quality services.

To provide specific high-quality care, the research and practice communities must have tools to define and measure specific high-quality care. Measures for quality of care are developed in the field and then endorsed by governing bodies, such as National Committee for Quality Assurance (NCQA), National Quality Forum (NQF), Battelle, and CMS's Measures Under Consideration process. The endorsing process provides credibility to the measures and can help facilitate use of the measures by insurers and health care systems. Reviewing data from such measures can help patients, providers, and payers to identify high-quality services. While NIMH has existing funding announcements to bolter research in this space [20], quality measures are limited in supply and rarely used in mental health care. To help catalyze research in this area, NIMH also issued a specific funding announcement for investigators to develop outcome-focused mental health quality measures that can be submitted for endorsement to regulatory bodies with the ultimate goal of promoting the development and use of such measures to guide mental health treatment decisions.¹⁹

NIMH partners directly with other agencies to facilitate the translation of research to practice. For example, NIMH partnered with the Health Resources and Services Administration to provide implementation support, as part of HRSA's efforts to implement the collaborative care model in nurse lead health clinics.⁶⁶ NIMH and the National Institute on Drug Abuse (NIDA) partner with the Substance Abuse and Mental Health Services Administration (SAMHSA) to help facilitate research in Certified Community Behavioral Health Clinics (CCBHCs)^{67,68} and has even developed a database to help connect researchers with CCBHC practice partner.⁶⁹ NIMH also requires researchers have practice partners such that research informs practice and in turn, practice informs research such as in the first⁷⁰ and subsequent generations of the Early Psychosis Intervention Network (EPINET).⁷¹

Between Policy and Research—Translating research into clinical practice often goes together with translating research into policy. NIMH supports research that seeks to examine

the impact of policies on patient- and provider-level outcomes. NIMH frequently work with other federal agencies to identify how research can be put into policy. For example, AHRQ and the USPSTF considers input from NIMH to inform the relevant key question in the USPSTF's evidence review used for their recommendations. NIMH also provided technical assistance to CMS regarding billing codes for CoCM.⁷² NIMH supports research that directly addresses priorities outlined by groups like the USPSTF and the American College of Surgeons Committee on Trauma whose recommendations are supported by policy or practice mandates that incentivize the delivery of recommended services.^{73–75} Additionally, NIMH encourages researchers to co-design projects with policy makers and funders. Here, for example, Smelson *et al.*⁷⁶ worked with third payers a priori to design a study testing components of their intervention, MISSION. Supported by evidence from multiple clinical trials, MISSION in its full form is highly effective for people with co-occurring mental health and substance use disorders but is unaffordable. Thus, Smelson and payers agreed on informal willingness to pay thresholds, knowing that components of MISSION would be less effective (than MISSION full) but affordable to deliver in routine practice.

Between Policy and Practice—NIMH has less of a direct role in policy-practice partnerships. However, there are examples as to how such partnerships can help to advance access to effective mental health care and where research can help. The USPSTF's longstanding recommendation to screen for depression in primary care⁷⁷ and newer recommendation for anxiety disorders⁷⁸ helps encourage providers to identify new patients with these mental disorders so they can be connected to evidence based care. A- or B-level recommendations from the USPSTF alone may be insufficient to change practice, however. Rhee *et al.*⁷⁹ examined the impact of the 2009 USPSTF depression screening recommendation and noted limited improvements in depression screening, diagnosis, and provision of subsequent depression care. Rhee et al's findings suggest that despite a policy-empowered USPSTF recommendation,⁸ more solutions are needed to improve screening practices and connection to quality depression care.

In another example, Kahn *et al.*,⁸⁰ examined value-based program penalty results for hospitals in the Hospital Readmissions Reduction Program, the Hospital Value-Based Purchasing Program, and the Hospital-Acquired Condition Reduction. The authors assessed the impact of health equity risk factors at the patient and community levels on hospital penalties. They found that hospitals are being penalized for risk factors out of the hospital's control and may be worse for hospitals in underserved communities, which could further exacerbate health inequities. As Kahn et al argues, there is a need for value-based programs to account not only for hospitals' risk-adjusted performance but also for patient and community health equity risk factors – largely beyond hospitals' control – that influence patient outcomes. Though mental health care was not explicitly discussed in Kahn *et al.*, people with mental illness are historically underserved and disproportionately and adversely affected by disparities in healthcare.⁸¹ And thus, research to better understand and intervene on those modifiable risk factors could better inform how case mix adjustments are made for mental health care.

Despite a limited role in practice-policy partnerships, NIMH certainly supports policy-focused research that has direct practice relevance on topics not directly thought of

as healthcare. Specifically, a recent Notice of Special Interest (NOSI) solicits research examining the impact of policy interventions aimed at addressing social determinants of health to improve functioning and well-being for people with serious mental illnesses.⁶⁵

Discussion

Access to and use of high value mental health services continue to be major challenges in the United States.^{15,82,83} Decades of research to understand the limitations to our system of care, to develop novel implementation, system and financing models have been supported by NIMH, yet, with a few exceptions, many models are not supported or used by policy and practice. This science to services drop-off has resulted in significant quality of care challenges, and these disparities are felt deeply in communities with restricted financial resources and are faced with the decision to pay for mental health care or eat. This gap is widening.⁸⁴ Not only is there a significant economic burden associated with unmet mental health needs, but the inability to afford mental health care is a top reason for not seeking services.⁸⁵ People who do elect to spend time and money on mental health care are further disadvantaged by accessing care that is not well regulated and the quality at best is questionable. Value-Based Care Models that include support for evidence-based practices, measurement-based care and minimizes cost-sharing could be an important lever for increasing access and use of mental health care.

We acknowledge that financing is only part of a larger picture in mental health care. Barriers like access to providers trained in evidence-based treatment with availability to provide a therapeutic dose of care to a target population remain (e.g.,^{86,87}). However, these issues need not first be resolved to consider VBID for mental health, as high value services (e.g., CoCM) exist and have already been demonstrated to improve the organization of care,⁸⁸ perhaps freeing up resources and “stopping the flood” of unnecessary services⁸⁹ to increase the capacity for high value care delivery.

VBID for mental health care is highly appealing because it reduces friction between providers and patients by making high value services free or low cost, while increasing the cost of delivering low value services. While we use PTSD care as an illustration, there are others (e.g., other mental illnesses and effective service delivery models to treat those illnesses) that are ripe for integration into VBID. Further, while evidence gaps remain (e.g., lack of quality measures; documentation of a specific EBP versus another, ensuring health equity) they can be filled in concurrent with pursuing VBID for mental health services. To move the field forward, it is imperative to promote a strategic agenda that involves the research, policy, and practice partnerships to make that happen. NIMH has and will continue to support and enhance these partnerships between scientists, policy makers, and practice communities through future funding announcements and strategic partnerships with other federal agencies.

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Implications for Health Care:

VBID holds promise to make high value mental health care more affordable while discouraging low value treatments and services.

Implications for Health Policies:

While evidence gaps remain, these gaps can be filled concurrently with pursuit of VBID for mental health services.

Implications for Future Research:

This paper identifies important research opportunities to help make VBID a reality for mental health care.

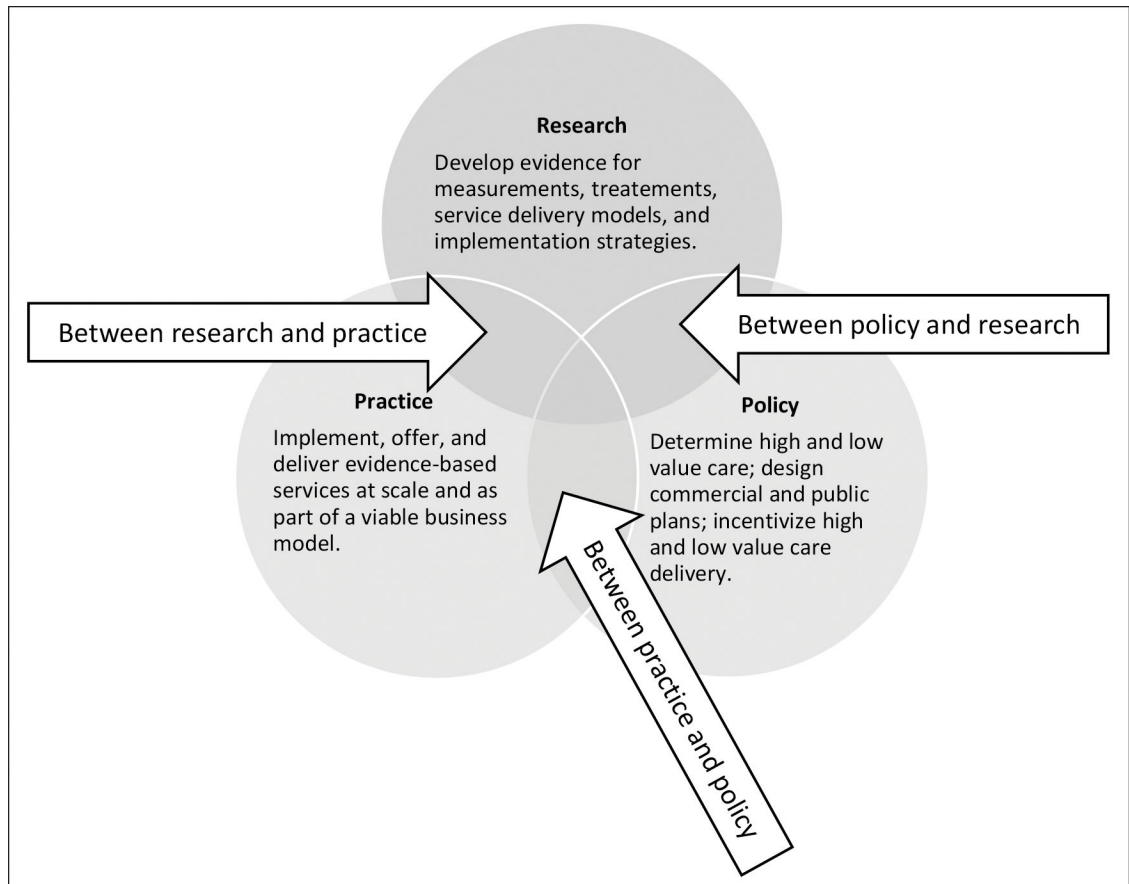


Figure 1. Primary Responsibilities of the Research, Practice, and Policy Communities and Areas Necessitating Partnerships.

Table 1.

Ingredients for VBID Readiness of Mental Health Services for PTSD.

VBID Ingredients	VBID Readiness for PTSD Treatments and Services
Valid approaches to identify patients	Yes. The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) ³⁵ and The PTSD Checklist for DSM-5 (PCL-5) ³⁶
Valid measures of improvement that can be used as part of measurement-based care	Yes. PCL-5 ³⁷
Outcome-focused quality measures that take the form of assessing the fraction of a given group of patients whose outcomes meet or exceed certain specified clinical objectives	Partially. Quality measures developed for use in the military health system, though not routinely used. ^{38,39}
Evidence-based interventions that can be delivered in practice settings	Yes for individual treatments. Individual treatments like Written Exposure Therapy (WET), Prolonged Exposure, and Cognitive Processing Therapy are examples well supported by clinical trials and recommended in clinical practice guidelines. ^{40,41} Yes for delivery models. Service delivery models like The Collaborative Care Model (CoCM), a specific and evidence-based service delivery model for primary care associated with improved outcomes, improved organization of care, and reduction disparity reduction, is well supported by clinical trials evidence and is recommended in a clinical practice guideline. ⁴⁰⁻⁴⁴
Intervention alternatives (either individual treatments or service delivery models) that are being delivered in practice, lack evidence of effectiveness (because they are ineffective or have not been rigorously tested), but could be offered with increased cost sharing	Yes for individual treatments. Individual treatment examples that lack robust evidence include Emotional Freedom Techniques (EFT), Prolonged Exposure in Primary Care (PE-PC), and Seeking Safety (SS) ^{41,45} Yes for service delivery models. Service delivery models with insufficient evidence include Primary Care Behavioral Health (PCBH) ⁴⁶
Evidence of cost-effectiveness	Yes for individual treatments. There is evidence that many evidence based treatments are cost effective and/or can be delivered efficiently. ⁴⁷⁻⁴⁹ Yes for service delivery models. CoCM in general is cost-effective and, in some cases, cost savings. ⁵⁰ Evidence that CoCM for PTSD is cost-effective is positive but test robust. ^{51-53.}
Systematic documentation that the evidence-based intervention was delivered (versus another intervention)	No for individual psychotherapies. There is no standard way to document that one specific psychotherapy was delivered versus another (e.g., WET, which is effective, versus EFT that has insufficient evidence). Billing codes (e.g., CPT codes) can document the delivery of psychotherapy in general but are not psychotherapy specific and are not designed to encourage an indicated dose of psychotherapy. Partially for service delivery models. CoCM can specifically be documented via billing code (versus generic care integration codes) in those plans that reimburse for CoCM. However, billing codes may not be a good indicator of intervention fidelity.
Evidence that the interventions promote health equity and/or are associated with reductions of health disparities	Service delivery interventions like CoCM are associated with reductions of health disparities. ⁴⁴ Evidence suggests WET is effective in diverse (to include Spanish speaking) populations. ⁵⁴