



Evidence Brief: Use of Patient Reported Outcome Measures for Measurement Based Care in Mental Health Shared Decision-Making

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PREFACE

The VA Evidence-based Synthesis Program (ESP) was established in 2007 to provide timely and accurate syntheses of targeted healthcare topics of particular importance to clinicians, managers, and policymakers as they work to improve the health and healthcare of Veterans. QUERI provides funding for four ESP Centers, and each Center has an active University affiliation. Center Directors are recognized leaders in the field of evidence synthesis with close ties to the AHRQ Evidence-based Practice Centers. The ESP is governed by a Steering Committee comprised of participants from VHA Policy, Program, and Operations Offices, VISN leadership, field-based investigators, and others as designated appropriate by QUERI/HSR&D.

The ESP Centers generate evidence syntheses on important clinical practice topics. These reports help:

- Develop clinical policies informed by evidence;
- Implement effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures; and
- Set the direction for future research to address gaps in clinical knowledge.

The ESP disseminates these reports throughout VA and in the published literature; some evidence syntheses have informed the clinical guidelines of large professional organizations.

The ESP Coordinating Center (ESP CC), located in Portland, Oregon, was created in 2009 to expand the capacity of QUERI/HSR&D and is charged with oversight of national ESP program operations, program development and evaluation, and dissemination efforts. The ESP CC establishes standard operating procedures for the production of evidence synthesis reports; facilitates a national topic nomination, prioritization, and selection process; manages the research portfolio of each Center; facilitates editorial review processes; ensures methodological consistency and quality of products; produces “rapid response evidence briefs” at the request of VHA senior leadership; collaborates with HSR&D Center for Information Dissemination and Education Resources (CIDER) to develop a national dissemination strategy for all ESP products; and interfaces with stakeholders to effectively engage the program.

Comments on this evidence report are welcome and can be sent to Nicole Floyd, ESP CC Program Manager, at Nicole.Floyd@va.gov.

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This topic was developed in response to a nomination by the Office of Mental Health and Suicide Prevention (OMHSP) for the purpose of reviewing the evidence on measurement based care in mental health. The scope was further developed with input from the topic nominators (*ie*, Operational Partners), the ESP Coordinating Center, and the review team.

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Operational Partners

Operational partners are system-level stakeholders who have requested the report to inform decision-making. They recommend Technical Expert Panel (TEP) participants; assure VA relevance; help develop and approve final project scope and timeframe for completion; provide feedback on draft report; and provide consultation on strategies for dissemination of the report to field and relevant groups.

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Peer Reviewers

The Coordinating Center sought input from external peer reviewers to review the draft report and provide feedback on the objectives, scope, methods used, perception of bias, and omitted evidence. Peer reviewers must disclose any relevant financial or non-financial conflicts of interest. Because of their unique clinical or content expertise, individuals with potential conflicts may be retained. The Coordinating Center and the ESP Center work to balance, manage, or mitigate any potential nonfinancial conflicts of interest identified.

EXECUTIVE SUMMARY

Key Messages

- This rapid review found no studies of the specific VA-recommended approach of using any of 4 recommended patient-reported outcome measures (PROMs) for implementing measurement based care (MBC) in the context of shared decision-making in mental health. However, we identified other promising approaches to use of PROMs for MBC in mental health.
- Inadequate measurement of MBC’s hypothesized mechanism of action (*eg*, detection of non-response and change in treatment plan) and MBC protocol fidelity are the greatest weaknesses of the evidence base.
- New research would be more meaningful if it evaluated the specific VA-recommended MBC approach, improved on identified methodological limitations, evaluated a wider range of clinically meaningful outcomes, and simultaneously compared MBC use under 2 or more implementation strategies that are feasible for a wider range of care settings.

Measurement based care (MBC) is a care delivery approach involving the regular use of standardized measures in routine mental health care to identify individuals not improving as expected and to prompt treatment changes. In the US Department of Veterans Affairs (VA), MBC is specifically defined as: (1) Collect = use of “reliable, validated, clinically appropriate measures at intake and at regular intervals”, (2) Share = “results from the measures are immediately shared and discussed with the Veteran and other providers involved in the Veteran’s Care”, and (3) Act = “Together, providers and Veterans use outcome measures to develop treatment plans, assess progress over time, and inform shared decisions about changes to the treatment plan over time”. As of January 2018, the Joint Commission requires MBC use in all mental health treatment programs accredited under behavioral health standards both within and outside of VA. As MBC delivery has varied widely and shown equally variable clinically meaningful effects across studies, guidance is needed on which specific delivery approaches may operate most effectively and why.

This rapid evidence synthesis builds on recent conflicting reviews by adding 14 new studies and focusing on the subset of approaches with the most clinically meaningful and highest-strength evidence and with the most relevance to the specific approach currently recommended by VA.

Despite the large volume of new studies, identification of the most promising delivery approaches for VA remains difficult, because the methodological quality of the evidence remains low, no studies were in Veterans, no studies evaluated the specific approach currently recommended by VA, and effects on other important clinical outcomes, patient satisfaction with

Background

The ESP Coordinating Center (ESP CC) is responding to a request from the Office of Mental Health and Suicide Prevention (OMHSP) for an evidence brief on measurement based care (MBC) practices in mental health care, specifically in the context of using standardized patient-reported outcome measures in shared decision-making with individual Veterans. Findings from this evidence brief will be used to inform guidance for MBC within the VHA.

Methods

To identify studies, we searched MEDLINE®, Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, and other sources up to August 2018. We used prespecified criteria for study selection, data abstraction, and rating internal validity and strength of the evidence. See our PROSPERO protocol for our full methods.



care processes, and adverse effects or unintentional consequences remain unknown. The greatest weaknesses of this evidence are that 1) it lacks measurement of the hypothesized mechanism of action (eg, detection of non-response and change in treatment plan) and 2) it lacks information about MBC protocol fidelity.

The most promising MBC approach we identified was when MBC was used in a single Norwegian general outpatient psychiatric clinic in the course of an intense implementation strategy including extensive training provided by the PROMs tool creators, use of technology-assisted automated risk scoring, and strong management advocacy including moral and financial support for providers (48% vs 33%; OR 1.91; 95% CI 0.88 to 4.15; P = 0.1025; NNT = 7, Executive Summary Table). Key strengths of this study that increase our confidence that the mechanisms of effect could be specifically attributed to MBC are that it took extra measures to minimize confounding due to therapist variability and clients' pretreatment distress levels and better protected against lack of blinding by using an independent outcome assessment measure. However, its use of a not-yet-VA-recommended assessment tool and an intense implementation facilitation strategy raises concerns about the feasibility of its widespread use across VA nationally in different clinical settings with variable resources.

The effects of MBC on suicide behavior, functioning, and quality of life are largely unknown. In addition to clinical outcomes, although it has been suggested that MBC has the potential to improve patient satisfaction with care and treatment adherence, and to reduce no-shows and drop-outs, to date there is limited randomized controlled trial evidence to support these proposed benefits.

The potential benefits of MBC have been best shown in populations with anxiety and/or depressive disorders. MBC has also shown some promise in couples' therapy and in inpatient treatment of eating disorders, but not for outpatient treatment of eating disorders, the specific symptoms of schizophrenia, or for patients in severe psychiatric crisis seeking emergency help. We found no studies of MBC in PTSD, bipolar disorder, or for suicide prevention.

MBC is a complex, multicomponent, multidisciplinary, and nuanced care delivery process that can represent a major change to practice. However, it is inherently difficult to study because there are so many more sources of heterogeneity and confounding – system, provider, patient, MBC approach – than with a single intervention, such as with a new antidepressant. New research would be more meaningful if it adequately addressed a broader range of sources of confounding, demonstrated that MBC shortened time to identifying patients at risk of important below-expected progress, and improved the types of treatment plan changes made in the context of shared decision-making using a wider range of instruments (ie, VA-recommended instruments) and under implementation strategies that are feasible for a wider range of care settings.

Executive Summary Table: Summary of Findings

Key Question 1: Effectiveness of Measurement Based Care Delivery Practices	
E	<p><i>Clinically Significant Improvement in Overall Distress</i></p> <p>54% of studies reported a clinically meaningful response with MBC. Best evidence from Brattland et al 2018 with 93% PCOMS administration fidelity.</p> <p>Evidence: 13 RCTs¹⁻¹³</p>

E *Suicide Behavior, Functioning, and Quality of Life*
MBC improved quality of life in 1 of 3 studies. No studies reported on suicide behavior and functional outcomes.
Evidence: 3 RCTs¹⁴⁻¹⁶

E *Satisfaction with Care*
Improvement in satisfaction in a study of patients with schizophrenia or related psychotic disorders and no change or decreased satisfaction in 2 studies of patients with primarily anxiety and/or depressive disorders.
Evidence: 3 RCTs¹⁵⁻¹⁷

≈ *No-shows, Drop-outs, Medication Adherence*
No change in attendance rates in 4 studies. No studies reported on no-shows or medication adherence.
Evidence: 4 RCTs^{10,14,18,19}

Key Question 2: Adverse Effects and Unintended Consequences of Measurement Based Care

? *Unknown*
Evidence: None

Key Question 3: Outcomes of Measurement Based Care Delivery Practices in Specific Populations

á *Couples Therapy*
Improved rate of reliable or clinically significant change with MBC.
Evidence: 2 RCTs^{2,9}

E *Eating Disorders*
Increased rates of clinically significant improvement in inpatient care and improved dietary restriction behaviors in outpatient individual CBT, but no improvement in outpatient group psychotherapy.
Evidence: 3 RCTs^{10,14,19}

E *Schizophrenia*
Improvement in quality of life, patient satisfaction, and health and social needs, but not schizophrenia symptoms.
Evidence: 1 RCT¹⁶

â *Severe Psychiatric Crisis*
Less improvement in outcomes patients receiving MBC.
Evidence: 1 RCT²⁰

Abbreviations: RCT=randomized controlled trial; MBC=measurement based care; CBT=cognitive behavioral therapy; PCOMS=Partners for Change Outcome Management System