Measurement-Based Care (MBC) in Mental Health: Why, How, and What?

Highlights of suggested reading

Why should Ontario apply MBC in mental health and addictions services?

- MBC is the routine, systematic use of validated measures, such as patient-reported symptom-rating scales, before or during each clinical encounter to inform decision-making about treatment.
- Evidence over 20+ years, including many randomized controlled trials, supports the use of MBC in mental health care. It outperforms usual care, with significantly improved outcomes (e.g., response/remission rates; time to response/remission) for patients receiving psychotherapy and/or pharmacotherapy for depression, anxiety, or other conditions (Lewis et al, 2019; Fortney et al, 2015; Guo et al, 2015).
- MBC allows providers and patients to monitor response to treatment closely and collaboratively. This has benefits at various levels:
 - For patients, MBC helps them better understand the nature of their condition and monitor their own symptoms (Guo et al, 2015). It empowers patients, supporting them to attune to changes in their condition and be alert to signs of relapse (Fortney et al, 2015). By fostering communication during visits, MBC encourages patients' active involvement in their care and enhances the therapeutic relationship (Lewis et al, 2019; Scott & Lewis, 2016, and see their case example).
 - For providers, MBC supports (not replaces) clinical judgment. By adding a tool to help identify patients who are improving or deteriorating, it can alert clinicians to the need to adjust therapies sooner than they otherwise might (Aboraya et al, 2018; Scott & Lewis, 2016). In a study of MBC in psychiatric care for depression (> 6,000 patients), providers reported that routine self-reported symptom ratings were helpful in treatment decisions in 93% of visits and led to a treatment change in 40% of visits (Fortney et al, 2015). MBC facilitates the use of decision-support tools that guide evidence-based care, thus enhancing the accuracy of the clinician's judgment.
 - o For **organizations**, aggregate data from MBC provides objective measures to identify opportunities for—and to deliver and evaluate—quality improvement efforts. David Clark and colleagues analyzed public data in the UK (where care for depression and anxiety disorders now routinely includes the session-by-session collection of standardized symptom scores) to identify predictors of variation in clinical performance among area practices (Clark et al, 2017). They found, for example, that patient outcomes (improved/recovered, based on MBC data) were clearly associated with organizational variables such as wait times between referral and start of treatment and percentage of treated patients with a recorded ICD-10 code. Overall, the six predictors explained 33% of the variation in the percentage of patients who reliably improved and 22% of the variation in recovery rates.
 - o For health system oversight, MBC will allow, over time, system-level understanding of how different populations respond to treatment and what factors may influence that response. For example, while some authors suggest that MBC may help reduce health inequities by improving patient-provider communication for people in disadvantaged groups (Fortney et al, 2015; Scott & Lewis, 2016), Clark and colleagues found that social deprivation continued to negatively affect outcomes, even with routine MBC—a reality that "could possibly be mitigated by ensuring that services in social deprived areas are of high quality and adequately funded" (Clark et al, 2017).
- Although MBC is a standard of care in the routine management of chronic conditions such as diabetes
 and hypertension, it is substantially underused in mental health care despite well-documented benefits
 and feasibility and the low cost of implementation (Aboraya et al, 2018; Lewis et al, 2019). However,
 technological advances and mounting evidence may have brought us to a tipping point (Fortney et al,
 2015; Gratzer, 2019).

The cost of implementing MBC does not outweigh the benefits for patients, providers, and payers.
 Payers and accreditors will use MBC to hold providers accountable, so we need to encourage and support providers to implement MBC in clinical practice.

How is MBC being implemented in clinical practices?

- MBC is described as transdiagnostic and transtheoretical (Scott & Lewis, 2016; Lewis et al, 2019):
 Evidence suggests that clinicians can implement it regardless of their theoretical orientation, training background, or level of experience, and for a wide variety of mental health conditions, care settings, and treatment modalities.
- Key components for successful implementation have been identified (Lewis et al, 2019; Aboraya et al, 2018). The patient-reported measures used should be:
 - Relevant to clinical decision-making and sensitive to changes resulting from treatment
 - Brief and easy to use (patients can complete in 2–3 minutes)
 - Routinely administered just before or during each visit (frequent and timely)
 - Reviewed by the patient and practitioner during the visit, to collaboratively evaluate progress and inform care decisions
 - Ideally integrated into the electronic health record in real-time and paired with decisionsupport tools

What do we need to do to overcome challenges in implementing MBC?

- Barriers to implementation include concerns about paperwork burden, perceived lack of time, lack of training or incentives, perception that MBC depersonalizes care, concerns about client complexity, lack of organizational support, and patient concerns about confidentiality (Aboraya et al, 2018; Fortney et al, 2016; Scott & Lewis, 2015).
- As health systems invest further in information technology, they need to consider and emphasize MBC tools so clinicians can easily record a rating score and analyze patient outcomes over time.
- Research evaluating MBC implementation is relatively new (Lewis et al, 2019), but proposed strategies to address these challenges mirror those for quality improvement generally: training; local champions; careful selection of measures (e.g., engaging patients and practitioners in selection of measures to ensure buy-in and relevance); routine use of clinic-based supervision and feedback.

Suggested reading

- Aboraya A, Nasrallah HA, Elswick DE, Elshazly A, Estephan N, Aboraya D, et al. Measurement-based care in psychiatry—past, present, and future. Innovations in Clinical Neuroscience 2018;15(11-12):13–26.
- Clark DM, Canvin L, Green J, Layard R, Pilling S, Janecka M. Transparency about the outcomes of mental health services (IAPT approach): an analysis of public data. The Lancet. 2017 Dec 17; http://dx.doi.org/10.1016/S0140-6736(17)32133-5
- Fortney JC, Unützer J, Wrenn G, Pyne JM, Smith GR, Schoenbaum M, Harbin HT. A tipping point for measurement-based care. Psychiatric Services in Advance 2016 Sep 1. doi: 10.1176/appi.ps.201500439
- Gratzer D. Measurement-based care big idea, not-so-big reality. Reading of the Week. 17 Jan 2019. https://davidgratzer.com/category/reading-of-the-week/
- Guo T, Xiang Y-T, Xiao L, Hu C-Q, Chiu HFK, Ungvari GS, et al. Measurement-based care versus standard care for major depression: a randomized controlled trial with blind raters. American Journal of Psychiatry. 2015;172:1004–1013; doi:10.1176/appi.ajp.2015.14050652
- Lewis CC, Boyd M, Puspitasari A, Navarro E, Howard J, Kassab H, et al. Implementing measurement-based care in behavioral health: a review. JAMA Psychiatry. 2019;76(3):324-335. (Published online 2018 Dec 19) doi:10.1001/jamapsychiatry.2018.33292018
- Scott K, Lewis CC. Using measurement-based care to enhance any treatment. Cognitive and Behavioral Practice. 2015 February; 22(1): 49–59. doi:10.1016/j.cbpra.2014.01.010