Background

Measurement-based care (MBC) involves the use of simple, validated outcome measures to guide clinical decision-making and is an evidence based practice (EBP) for depression. Despite evidence supporting its effectiveness,1,2 there remains a gap in the uptake of MBC in clinical settings3. Using digital technologies to enhance the use of MBC (eMBC) can help to improve uptake by clinicians and patients and the utility of eMBC has been demonstrated in North America4. While the impact of standard MBC has been illustrated in China5, applications of eMBC in this context remain to be fully explored.

Objective

As part of the Enhanced Measurement-Based Care Effectiveness for Depression: A Canada-China Partnership (EMBED) study, this situational analysis seeks to: 1) identify contextual enablers & barriers to MBC implementation; 2) explore physician- and patient-level factors influencing MBC and eMBC implementation in community mental health centres (MHCs) in Shanghai, China. The results will inform the EMBED implementation strategy, which will be tested in a randomized controlled trial (RCT).

Methodology

We used mixed methods to develop a comprehensive understanding of the context of MBC delivery in Shanghai, China by collecting data from three MHCs. Methods included:

1) Situational Analysis Tools to understand the context of service delivery and readiness for MBC implementation
2) Quantitative Surveys with clinicians and patients to assess aspects of acceptability and feasibility of MBC and eMBC implementation, and;
3) Qualitative Interviews clinicians and Focus Groups with patients for an in-depth exploration of acceptability and feasibility of MBC and eMBC.

Surveys were analysed using descriptive statistics disaggregated by age, gender and location of participants. Interviews and focus groups were analysed using framework analysis.

Results

The results identify several barriers and facilitators to MBC and eMBC implementation in Shanghai:

Barriers

Organization and System Level

- Cost of medications and treatment
- Variation in continuity of care
- Variation in Internet availability
- Lack of use of outcome measures by clinicians

Provider

- Low current use of outcome measures
- Minimal training use of MBC
- Concerns about time and workload
- Perceived low patient capacity, efficacy, insight, and literacy
- Concerns about replacement of clinical judgement and threat to status quo

Facilitators

Organization and System Level

- Widespread use of EMR

Provider

- Positive attitudes and beliefs about MBC
- Potential for patient empowerment
- eMBC seen as more acceptable than MBC

Patients

- Willingness to use MBC and eMBC
- Perceive eMBC to be convenient and efficient with potential to help improve their understanding of depression

Conclusions

This study has identified key barriers and facilitators that will inform the development of an MBC implementation strategy to be tested via an RCT in Phase 2 of EMBED. It also makes an important contribution to global evidence about MBC/eMBC implementation in several respects:

- Expanding the Evidence Base: To our knowledge it is the first such study based in China or Asia
- Focus on Digital Technology: Factors specific to eMBC implementation have been unexplored thus far
- Patient Involvement: Patient-related implementation factors are underrepresented in the literature on MBC implementation
- Equity Implications: This study identified a number of factors that might impact equitable MBC implementation, including cost, use and access to digital technology, and accessibility factors
- Potential for Scale-Up: The findings of the EMBED study may lead to scale-up of eMBC throughout Shanghai and China, and can inform scale-up to other Asia Pacific countries

References


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