CANMAT

CANMAT 2023 UPDATE:
CLINICAL GUIDELINES FOR THE MANAGEMENT OF MDD IN ADULTS

QUESTION 5:

How is Treatment Monitored?

What is measurement-based care (MBC)?

An evidence-based practice consisting of 3 main components

Regular use of **validated outcome scales** during patient encounters

Scale scores are **reviewed** with patients

Used with **clinical assessment** to support **collaborative decision-making**

CANMAT

MBC, measurement-based care.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

What are the benefits of MBC?

MBC is an integral component of collaborative care

- Improves **adherence** to pharmacotherapy
- Enhances **patient engagement** in psychotherapy
- Identifies **non-responders**
- Enhances the **therapeutic alliance**
- Increases **clinical objectivity**
- Improves **patient insight** and communication
- Provides **assessment continuity** across clinical settings and providers

LoE, Level of Evidence — Level 1 — Level 2 — Level 3 — Level 4

MBC, measurement-based care.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

Validated rating scales for MBC

Outcome	Clinician-rated scales	Patient-rated scales
Symptoms/ severity	• Hamilton Depression Rating Scale (HAM-D, HAM-7) • Montgomery Åsberg Depression Rating Scale (MADRS) • Inventory for Depressive Symptomatology (IDS) • Columbia Suicide Severity Rating Scale (C-SSRS)** • Dimensional Anhedonia Rating Scale (DARS)	• Beck Depression Inventory II (BDI-II)* • Clinically Useful Depression Outcome Scale (CUDOS) • Patient Health Questionnaire (PHQ-9) • Patient Rated Outcome Measurement Information System (PROMIS) • Quick Inventory for Depressive Symptomatology, Self-Rated (QIDS-SR) • Suicidality Scale**

Patient-rated scales are well correlated with clinician-rated scales and take less time to administer

*Copyright may require a fee for clinical use.

**Scales can help assess suicide ideation, but they cannot reliably predict suicide attempts or behaviours; when scales for suicide risk are used, the results should be promptly reviewed and followed up with clinical assessment if scores indicate risk. Scales are examples for illustrative purposes and are not specifically endorsed by CANMAT. MBC, measurement-based care.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

CANMAT

Validated rating scales for MBC (cont'd)

Outcome	Clinician-rated scales	Patient-rated scales
Functioning	• Multidimensional Scale of Independent Functioning (MSIF) • Social and Occupational Functioning Assessment Scale (SOFAS) • WHO Disability Assessment Scale (WHO-DAS)	• Lam Employment Absence and Productivity Scale (LEAPS) • Sheehan Disability Scale (SDS)* • WHO-DAS, self-rated • Work and Social Adjustment Scale (WSAS)*
Quality of life	• Quality of Life Interview (QOLI)*	• EuroQoL-5D (EQ-5D) • Quality of Life, Enjoyment and Satisfaction Questionnaire (QLESQ)*
Side effects	• UKU Side Effect Rating Scale • Toronto Side Effects Scale	• Frequency, Intensity and Burden of Side Effects Rating (FIBSER)

*Copyright may require a fee for clinical use.

Scales are examples for illustrative purposes and are not specifically endorsed by CANMAT. MBC, measurement-based care.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

CANMAT

Limitations of MBC

- Like laboratory tests, MBC results must be **considered within the context of clinical assessment and care**
- Scale scores **may not reflect a patient's clinical state** (e.g., due to cognitive bias, over-reporting or under-reporting)
- Patients may **over-rely on a number** and not on their more complex issues
- For these reasons, **scales should complement**, not replace, the clinical interview

CANMAT

MBC, measurement-based care.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

Recommendations for monitoring treatment

Summary Recommendations*	Level of Evidence
• Use validated rating scales for MBC	
• Obtain laboratory and imaging tests only when clinically indicated	
• Monitor weight, glucose, and lipid profiles at baseline and every 6 months when prescribing medications associated with weight gain	

LoE, Level of Evidence  Level 1  Level 2  Level 3  Level 4

*Recommendations for principles of care generally have Level 3 or Level 4 evidence.
MBC, measurement-based care.
Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

CANMAT

What are operational definitions for improvement, response, and remission?

Clinicians and patients may not recognize lack of response or remission, highlighting importance of MBC

Early improvement: reduction of **≥20%** from baseline (**within 2 to 4 weeks** of treatment initiation)

Response: ≥50% improvement from baseline

Symptom remission: achievement of a **specific threshold** on a scale (e.g., ≤7 on the HAM-D, ≤10 on the MADRS, ≤4 on the PHQ-9)

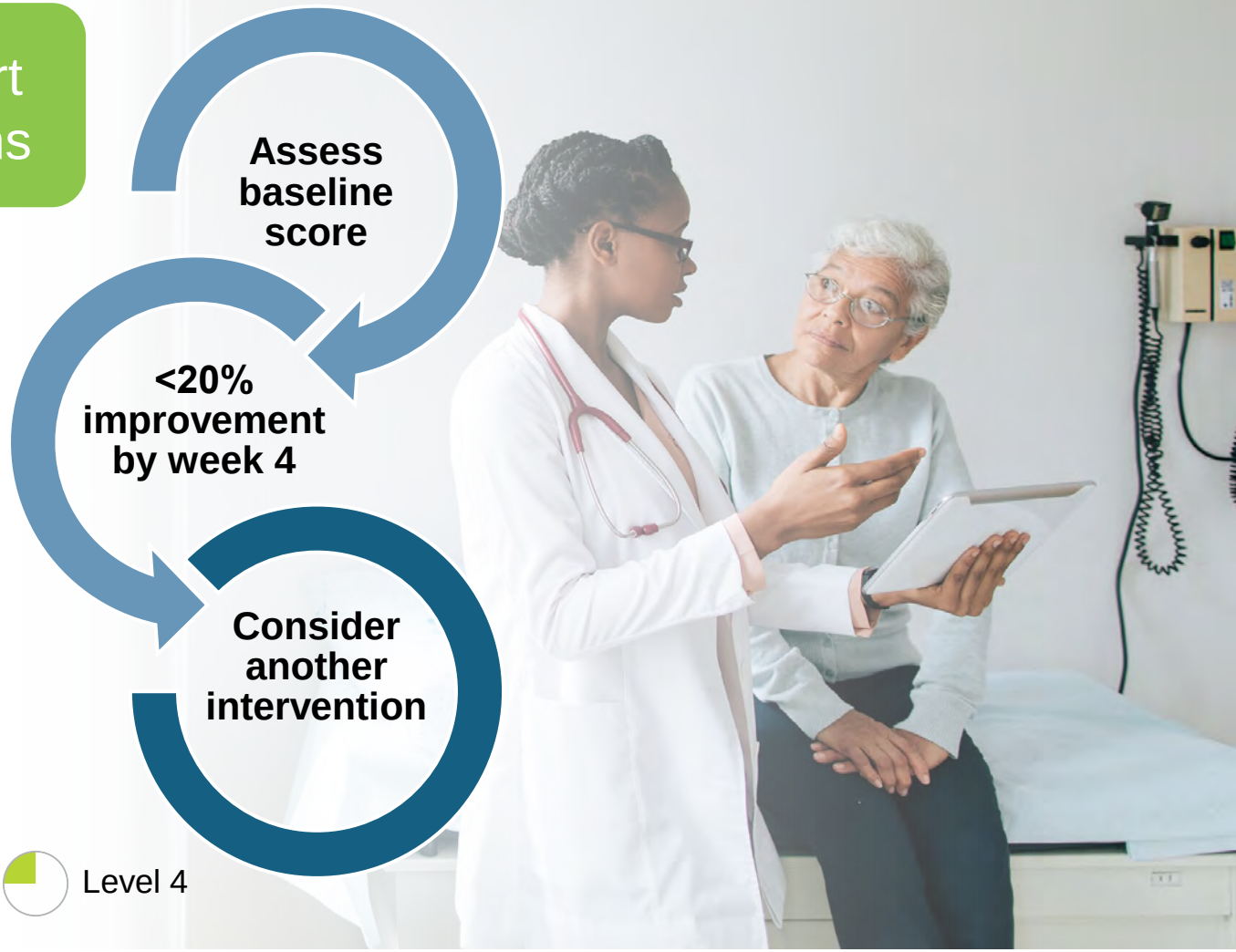
HAM-D, Hamilton Depression Rating Scale; MADRS, Montgomery Åsberg Depression Rating Scale; MBC, measurement-based care; PHQ, Patient Health Questionnaire.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

Using MBC in medication algorithms

Integration of total scale scores can support clinical assessment and treatment decisions

- **Lack of early improvement** (i.e., <20% reduction in symptom score at 2 to 4 weeks) is **strongly associated** with **nonresponse** at later time points
- Should **trigger consideration** of dose optimization or switching



LoE, Level of Evidence Level 1 Level 2 Level 3 Level 4

MBC, measurement-based care.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

Using MBC in medication algorithms (cont'd)

Individual vs. total scale scores

Total scale score is a useful **proxy for overall severity** (e.g., PHQ-9 score of 4 indicates symptom remission)

Individual item scores may inform on **specific residual symptoms** to address (e.g., rating of 3 on PHQ-9 insomnia item)

Examining **both** total and individual item scores can **comprehensively assess symptom profiles** and **tailor treatment plans**

Concept of **recovery** extends **beyond symptom relief** (i.e., it includes **functional outcomes** and **quality of life**)

CANMAT

PHQ, patient health questionnaire.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

Clinician perceived barriers to implementation of MBC

Workflow: MBC takes too much **time, training** and opportunity costs with changing **clinic workflows**

Efficacy: Scales may **not capture important aspects** of a clinical situation

Completing scales may **interfere with the therapeutic alliance**

Language and **cultural** barriers

MBC, measurement-based care.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

How is MBC implemented?

Practical tips for incorporating MBC in clinical settings

Use **simple, free** PROMs

Email scales to patients prior to visits

Ask patients to complete scales in **waiting room**

Mobile and internet **apps**

Document scores in **EMR**

Frequency: A key component of MBC involves **longitudinally tracking scale scores**

Acute phase

- **Every 2 to 4 weeks** when active treatment decisions are being made

Maintenance phase

- Less frequently to minimize frustration with repeated testing

CANMAT

EMR, electronic medical record; MBC, measurement-based care; PROM, patient-reported outcome measure.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

What laboratory tests should be monitored during treatment?

No routine tests are necessary but CBC and TSH are low-cost tests that may help rule out medical conditions that present with depressive symptoms

Other baseline tests (blood, imaging, ECG) should only be considered if history/exam indicates clinical suspicion

No routine lab tests are recommended to monitor antidepressant treatment except in specific situations (e.g., LFTs if pre-existing liver disease, electrolytes in elderly patients)

Regular monitoring of weight, glucose and lipid profiles is recommended because weight gain is common in depression as a symptom and medication side effect

Periodic urinalysis is recommended in patients on longer-term ketamine/ esketamine treatment

LoE, Level of Evidence — Level 1 — Level 2 — Level 3 — Level 4

CBC, complete blood cell count; ECG, electrocardiography; LFT, liver function test; TSH, thyroid stimulating hormone.

Lam RW, Kennedy SH, Adams C, et al. Can J Psychiatry. 2024 Sep;69(9):641-87.

CANMAT