

Measurement-Based Care

Measurement based care (MBC)

[noun]



The practice of a client regularly completing standardized outcome measures that capture information about a client's mental health status to inform treatment planning, monitor progress, and evaluate treatment outcomes.

Also known as routine outcome monitoring, patient-reported outcome measures, progress monitoring, feedback-informed treatment.

Research evidence on mental health outcomes

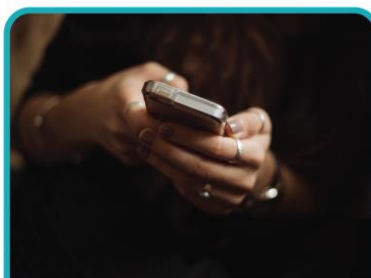
Providers tend to overestimate client improvement and underestimate client deterioration in mental health services. Measurements can help guide clinical judgement.

Measurement based-care



40%
improvement in
client outcomes

Lambert et al., 2018



2.1x
increase in number of
improved clients

Lambert et al., 2018



52%
reduction in time for clients
to respond to treatment

Guo et al., 2015

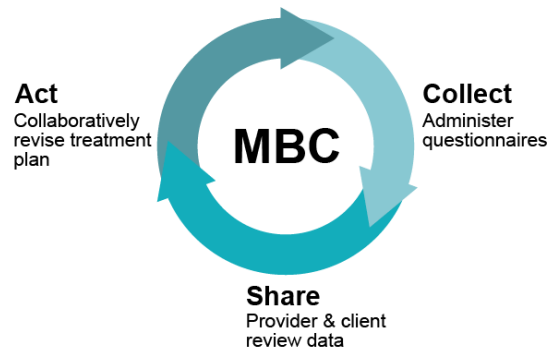
Lambert et al. (2018). Collecting and delivering progress feedback: A meta-analysis of routine outcome monitoring.
Guo et al. (2015). Measurement-based care versus standard care for major depression: A randomized controlled trial with blind raters.

For youth and young adults

- Youth and young adults are known to have poorer responses to mental health treatment than adults.ⁱ
- In a study of adolescents aged 12-17 years with depression, only 43-60% of adolescents responded to Cognitive Behavioral Therapy.ⁱⁱ
- In another study of young people with anxiety and/or depression under the age of 21, 33-40% of young people showed improvement.ⁱ
- More recent work found two-thirds of young people aged 12-30 years experienced persistent functional impairment or deterioration during 2 years of community mental health treatment, highlighting the need to use measurement-based care to monitor outcome and personalize treatment.ⁱⁱⁱ

Measurement-based care involves^{iv}

- Collecting data through standardized, validated assessments
- Sharing and reviewing data between a provider and client
- Acting on this data by collaboratively revising the treatment plan, if needed



Measurement-based care data can be used to

MBC Data

Individual Data

- Monitor client progress
- Inform treatment planning between provider & client
- Inform discharge planning

Group Data

- Inform service planning
- Evaluate treatment outcomes
- Meet reporting requirements
- Advance research

Benefits of measurement-based care



Benefits for providers & clinics

- Reduces deterioration by 4-8%^v
- Reduces treatment duration and cost.^{vi} Youth treated at community sites using MBC improved faster than youth at sites that did not use MBC.^{vii}
- Reduces client drop-out,^{viii,ix} especially for clients who are deteriorating.^v
- Provides early detection of off-track cases.^x
- Enhances the therapeutic relationship.^x



Benefits for clients^x

- Enhances the therapeutic relationship and promotes client-centred care.
- Validates the way a client is feeling.
- Uses a whole-person approach using multiple scales to evaluate various health domains.
- Helps the client communicate more effectively with providers
- Helps the client become more knowledgeable about their conditions and aware of changes in their mental health.
- For clients that are deteriorating or have no change: Provides early detection so that the treatment plan can be modified and the client can get on track.
- For clients that are improving: Helps clients recognize early improvements they may otherwise not have noticed, making them feel more hopeful and optimistic.

How to make measurement-based care more effective in practice



- Must use as more than a one-time screen.^x
- Greater benefits of MBC are seen when clients are assessed frequently and in conjunction with a visit.^x
- Feedback is given on progress and trends over time, not just current client status.^{xi}
- Must use reliable and sensitive instruments to assess clients.^x
- Must use client-reported scales over provider ratings.^{xi}
- Data should be easily accessible during client visits and easy to interpret. For example, classifications of results into clinically meaningful categories (improvement, deterioration) is helpful.^x

References

- ⁱ Bear, H. A., Edbrooke-Childs, J., Norton, S., Krause, K. R., & Wolpert, M. (2020). Systematic review and meta-analysis: Outcomes of routine specialist mental health care for young people with depression and/or anxiety. *Journal of the American Academy of Child and Adolescent Psychiatry*, 59(7), 810–841. <https://doi.org/10.1016/j.jaac.2019.12.002>
- ⁱⁱ March, J., Silva, S., Petrycki, S., Curry, J., Wells, K., Fairbank, J., Burns, B., Domino, M., McNulty, S., Vitiello, B., Severe, J., & Treatment for Adolescents With Depression Study (TADS) Team (2004). Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents With Depression Study (TADS) randomized controlled trial. *JAMA*, 292(7), 807–820. <https://doi.org/10.1001/jama.292.7.807>
- ⁱⁱⁱ Iorfino, F., Carpenter, J. S., Cross, S. P., Crouse, J., Davenport, T. A., Hermens, D. F., Yee, H., Nichles, A., Zmicerevska, N., Guastella, A., Scott, E. M., & Hickie, I. B. (2022). Social and occupational outcomes for young people who attend early intervention mental health services: a longitudinal study. *The Medical Journal of Australia*, 216(2), 87–93. <https://doi.org/10.5694/mja2.51308>
- ^{iv} Lewis, C. C., Boyd, M., Puspitasari, A., Navarro, E., Howard, J., Kassab, H., Hoffman, M., Scott, K., Lyon, A., Douglas, S., Simon, G., & Kroenke, K. (2019). Implementing measurement-based care in behavioral health: A review. *JAMA Psychiatry*, 76(3), 324–335. <https://doi.org/10.1001/jamapsychiatry.2018.3329>
- ^v Lambert, M.J., Whipple, J.L., Hawkins, E.J., Vermeersch, D.A., Nielsen, S.L., Smart, D.W. (2003). Is it time for clinicians to routinely track patient outcome? A meta-analysis. *Clinical Psychology Science and Practice*, 10(3), 288–301. <https://doi.org/10.1093/clipsy.bpg025>
- ^{vi} Delgadillo, J., Overend, K., Lucock, M., Groom, M., Kirby, N., McMillan, D., Gilbody, S., Lutz, W., Rubel, J. A., & de Jong, K. (2017). Improving the efficiency of psychological treatment using outcome feedback technology. *Behaviour research and therapy*, 99, 89–97. <https://doi.org/10.1016/j.brat.2017.09.011>
- ^{vii} Bickman, L., Kelley, S. D., Breda, C., de Andrade, A. R., & Riemer, M. (2011). Effects of routine feedback to clinicians on mental health outcomes of youths: results of a randomized trial. *Psychiatric services (Washington, D.C.)*, 62(12), 1423–1429. <https://doi.org/10.1176/appi.ps.002052011>
- ^{viii} Lambert, M.J., Whipple, J.L., Vermeersch, D.A., Smart, D.W., Hawkins, E.J., Nielsen, S.L., Goates, M. (2002). Enhancing psychotherapy outcomes via providing feedback on client progress: A replication. *Clinical Psychology & Psychotherapy*, 9(2), 91-103. <https://doi.org/10.1002/cpp.324>
- ^{ix} Janse, P. D., de Jong, K., Veerkamp, C., van Dijk, M. K., Hutschemaekers, G., & Verbraak, M. (2020). The effect of feedback-informed cognitive behavioral therapy on treatment outcome: A randomized controlled trial. *Journal of consulting and clinical psychology*, 88(9), 818–828. <https://doi.org/10.1037/ccp0000549>
- ^x Fortney, J. C., Unützer, J., Wrenn, G., Pyne, J. M., Smith, G. R., Schoenbaum, M., & Harbin, H. T. (2017). A tipping point for measurement-based care. *Psychiatric services (Washington, D.C.)*, 68(2), 179–188. <https://doi.org/10.1176/appi.ps.201500439>
- ^{xi} Knaup, C., Koesters, M., Schoefer, D., Becker, T., & Puschner, B. (2009). Effect of feedback of treatment outcome in specialist mental healthcare: meta-analysis. *The British Journal of Psychiatry*, 195(1), 15–22. <https://doi.org/10.1192/bjp.bp.108.053967>

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