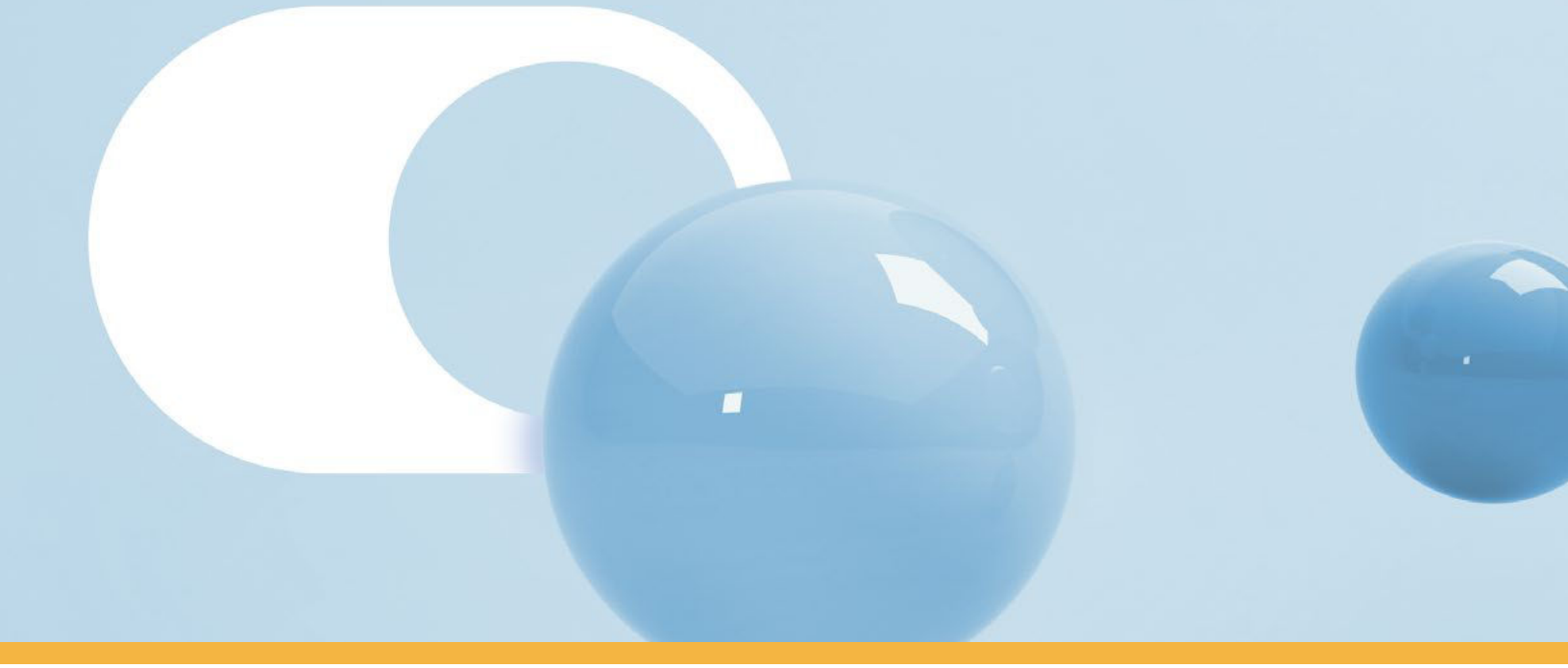
# **Measuring Our Way to Well**—A Measurement-Based Response to the Mental Health Crisis

**By Michael Boroff, PsyD**
Mental Health Program Manager, Crossover Health



crossover

# More than a year and a half into the COVID-19 pandemic, the demand for clinically effective mental health services in the US continues to outpace supply.

> **A recent study by the Kaiser Family Foundation found that two out of every five adults are suffering from moderate to severe mental health issues.[1] Mental health professionals are feeling the pressure to keep up—in a just-released American Psychiatric Association (APA) poll, 68% say their wait lists have grown longer and 46% report feeling burned out, up from 41% just a year ago.[2]**

Employers—striving to support employee mental wellbeing while managing a historic rate of resignations[3] and associated productivity losses—have invested in a wide range of solutions, from mindfulness apps to onsite counseling services.[4-6] In the heat of this crisis, employers find themselves choosing between solutions that offer scale but have little to no evidence that they're effective, and traditional models that simply cannot meet the rise in demand. With hundreds of solutions in the market, how does an employer know which one provides the access they need, balanced with the trusted outcomes they deserve to best help their employees best manage their mental health?

With the goal of advancing an approach to evidence-based care that can *both* increase capacity for mental health providers as well as achieve measurement-based outcomes, Crossover conducted an in-depth evaluation of the mental health model we use in our employer-sponsored health centers. The study found that our care model yielded significantly better outcomes in fewer visits than alternative approaches. This leads us to conclude that measurement-based care that engages and empowers patients will be the most effective therapy for addressing the escalating mental health crisis. As the practical extension of evidence-based care, measurement-based care gives providers real-time, actionable feedback on how their patient is doing, the type of patient-provider alliance that is being formed during the course of therapy, and how that care is impacting health outcomes.

# Measurement-based care leads to measurably better outcomes.

Tracking progress on any measure begins with setting a baseline. And yet, only 14% of mental health providers reported regular use of standardized progress measures and 62% have never used them.[7] At Crossover, every mental health visit begins with members answering a standard set of questions including those that measure wellbeing, medication use, symptoms of depression and anxiety, social functioning, and alcohol and drug use. Therapists continually measure progress using this data to inform their approach to care and guide discussions with members around treatment goals and expectations. This measurement-based approach, made possible with a tool developed by Tridiuum—an industry-leading digital platform for behavioral health assessment— enables patients and therapists to work together in a more productive way, using patient-reported information to set goals and track progress.[8]

To evaluate the effectiveness of our approach, we compared the clinical outcomes of 3,071 members receiving mental health care from Crossover clinicians between February 1, 2021 and July 31, 2021, to a sample of over 47,000 non-Crossover patients drawn from Tridiuum's comprehensive database of 6.6 million assessments and 2 million patients who most closely matched the characteristics of our members (we refer to this comparative sample here as the "community").

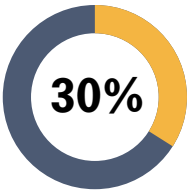
**MEASUREMENT-BASED APPROACH**


of providers nationally use standardized progress measures

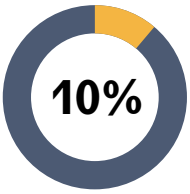
of Crossover providers use standardized progress measures

# The study results showed Crossover to be significantly more effective than the community in improving overall mental health outcomes.

**COMPOSITE (BHI) SCORE**




Crossover members' average BHI score improved 30% from baseline




the community's average BHI score improved 10% from baseline

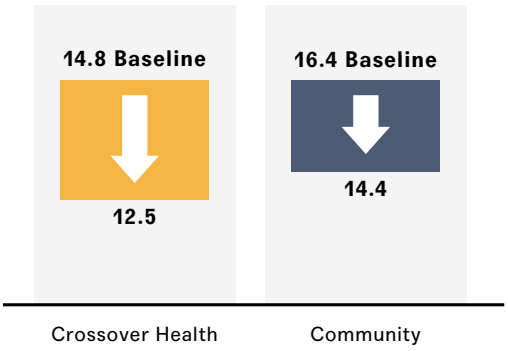
**Specifically, our findings revealed the following:**

**Overall mental health.** Using the six-question Behavioral Health Index (BHI)—a composite score developed by Tridiuum based on the tenets of measurement-based care[9]—we find that over the course of treatment, Crossover members saw significantly greater improvement in their overall mental health status than those who received care in the community. The composite BHI score is on a scale of 0 to 100, where 0 to 25 indicates mild mental health issues, 26 to 75 indicates moderate mental health issues, and over 76 indicates severe mental issues. Crossover members' average BHI score improved 30% from baseline—from 52.2 to 36.8 at the end of their treatment—compared to just 10% improvement in the community (53 to 47.9).

**Treatment effectiveness.** By tracking changes in members' clinical scores at every visit, we measure the effectiveness of our treatment in benefiting members. This is a well-validated indicator of whether a particular approach to treatment is yielding positive clinical results.[10] For this measure, an effect size of 0 to 0.30 indicates poorly effective care, 0.30 to 0.49 indicates care with low effectiveness, 0.50 to 0.79 indicates care with moderate effectiveness, and 0.8 or higher indicates highly effective treatment. On average, we found that the effect size for the Crossover population was very good (0.7)—and compares well to treatment effectiveness in the community (0.6).

**TREATMENT EFFECT SIZE**

## ANXIETY | GAD-7 RESULTS




**Anxiety.** We also use the well-validated Generalized Anxiety Disorder-7 (GAD-7) questionnaire to assess a member's clinical status for anxiety.[11] A score of 5 to 10 indicates mild anxiety, 11 to 15 indicates moderate anxiety, and over 16 indicates severe anxiety. Among members with moderate or higher anxiety, we saw scores decrease from 14.8 at baseline to 12.5 at the end of the episode of care—an improvement of 0.4 per month. This compares well to care received in the community with average GAD-7 scores of 16.4 at baseline and 14.4 at the end of treatment.

**Depression.** To assess depression, we rely on the well-validated Patient Health Questionnaire-9 (PHQ-9).[12] A score of 5 to 9 indicates mild depression, 10 to 14 indicates moderate depression, 15 to 19 indicates moderately severe depression, and over 20 indicates severe depression. Among Crossover members with moderately severe depression, scores improved from 15.4 to 10.6 at the end of their treatment, a clinically significant improvement of 0.92 per month. As with anxiety, this compares well to the average in the community of 16.56 at baseline and 11.30 at the end of treatment.

## DEPRESSION | PHQ-9 RESULTS

# Harnessing the power of therapeutic alliance.

At Crossover, our approach to integrated, team-based care is rooted in the belief that care should be relational, not transactional, and should be personalized for and guided by our members. Research consistently backs this up, showing that a healing relationship[13] and positive therapeutic alliance[14] between doctor and patient lead to patient improvement over the course of treatment. To ensure this member-therapist bond is strong, we employ standard therapeutic alliance measures to regularly evaluate whether a member feels understood, is able to discuss what's important to them, and agrees with the treatment plan. Positive therapeutic alliance scores confirm member-therapist alignment while poor scores offer real-time feedback that something isn't working. This opens up the door to discussion, and in some cases suggests the need for a new therapist.

At every visit, we measure therapeutic alliance with a 3-item questionnaire adapted from the validated Session Rating Scale (SRS). Rated on a scale of 0 to 15, a score between 11 and 14 alerts the therapist to review treatment goals and expectations at that same visit, while scores below 11 are flagged for review by clinic leadership. During the study period, the average therapeutic alliance score for Crossover members was 13.3, indicating a favorable member-therapist relationship (compared with 12.7 in the community). For the study duration, average therapeutic alliance scores improved by 0.5 per month, showing a positive feedback loop was driving steady progress.

For both therapist and member, the therapeutic alliance measure is invaluable in keeping the patient voice at the center of care. As Crossover psychologist Alison Bateman noted:

> **"Sometimes, I'll get a 15 [highest score for Therapeutic Alliance] consistently, then get an 'agree' instead of 'strongly agree' on one of the related questions about therapeutic alliance, and it's a great segue to discuss how treatment is feeling, if I'm missing something, or how I can be a better therapist for them."**

This feeling of alliance and trust also contributes to member satisfaction. Over the course of our study, member satisfaction for mental health care was excellent, with an average score of 94.6% on a scale of 0-100% from the member satisfaction survey and an NPS score of 87.7 (notably higher than other clinical organizations.[15]

# Setting achievable goals for patients improves access for everyone.

The goal of value-based care is that value be demonstrated, and this must go beyond physical health to include mental health. At Crossover, we believe therapy should be structured and time-limited, with measurable goals and milestones—not free-form with no end point for the member. While some mental health conditions do require ongoing (and sometimes lifetime) management, many do not. In service of this goal and knowing we can always do better for our members and employers, we use data at both the population and organization levels to evaluate our model, identify and scale best practices, and find ways to achieve the same or better clinical results more efficiently.

During the study interval, we found that Crossover providers were able to achieve significantly better overall mental health outcomes and comparable outcomes for anxiety and depression in an average of just over six visits. Across the industry, lack of standardized measurement and goal-setting have led to an open-ended approach to therapy, where people managing conditions such as anxiety or depression may have anywhere from 6–12, or even a lifetime of visits ahead of them. At Crossover, we know that achieving efficiency in time-to-outcomes not only benefits our members in getting them to their mental health goals quicker, but it leads to improved access for all at a time when that access is in dangerously short supply. In fact, our study showed that the average time from booking an appointment to first visit with a Crossover mental health provider was 6.6 days, compared to an ever-rising national average of 48 days.[16]

**AVERAGE WAIT TIME FROM BOOKING UNTIL FIRST VISIT**

Outcomes transparency is critical for validating and comparing the plethora of mental health solutions that have flooded the market. It is also the basis for driving meaningful outcomes for patients. Crossover puts measurement at the forefront of care because it enables a culture of continuous improvement that inspires and motivates all of us to do better and be better.

What does that mean for employers? Employers managing through the epidemic of mental health issues faced by their employees are actively seeking solutions that can provide access while also demonstrating health improvement at scale. Measurement-based care is the key to achieving these urgent objectives. It allows us to understand the impact of evidence-based practice, offering providers real-time, actionable feedback on how their patient is doing, the degree of alliance being formed during the course of treatment, and how that care is impacting health outcomes. By implementing measurement-based care consistently across our employer-sponsored health centers, Crossover is setting a new standard of care within the employer health service industry.

## With measurement-based care, we can do better and be better.

# About Michael Boroff, PsyD

Michael is a licensed clinical psychologist with 15 years of experience. He currently serves as the Mental Health Program Manager for Crossover Health, overseeing the mental health program across the country. Prior to joining Crossover, he worked for Kaiser Permanente, the Los Angeles County Department of Mental Health, and the Alameda County Public Health Department. He has experience working with patients from a wide range of ages, backgrounds, and mental health conditions. In particular, Dr. Boroff has extensive experience in treating depression, anxiety, trauma, obsessive compulsive disorder, and relationship concerns. He works collaboratively with patients to create treatment plans that move them toward their goals. He utilizes approaches from Cognitive Behavioral Therapy, Mindfulness, Acceptance and Commitment Therapy, and Emotionally Focused Therapy.

Dr. Boroff completed his pre-doctoral internship and post-doctoral fellowship at Children's Hospital and Research Center, Oakland.

# About Crossover Health:

Crossover Health is the leader in delivering value-based hybrid care. The company's national medical group delivers at scale Primary Health—a proven care model driven by an interdisciplinary team comprised of primary care, physical medicine, mental health, health coaching, and care navigation. With a focus on wellbeing and prevention that extends beyond traditional sick care, Crossover builds trusted relationships with its members and flexibly surrounds them with care—in person, online and anytime—based on member preference. Combined with a sophisticated approach to data analytics that incorporates of social determinants of health, Crossover delivers concrete results and measurable value for employers, payers, and most importantly, members. Together we are building health as it should be and engaging a community of members to live their best health.

Are you interested in learning more about Crossover Health's innovative Primary Health model that brings together virtual and in-person healthcare?

Visit **crossoverhealth.com**, follow us on social media **@crossoverhealth**, or contact us at **connect@crossoverhealth.com** to learn more.

# Sources


1. Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021). The Implications of COVID-19 for Mental Health and Substance Use – Issue Brief – 9440-03. https://www.kff.org/report-section/the-implications-of-covid-19-for-mental-health-and-substance-use-issue-brief/

2. American Psychological Association. “Demand for Mental Health Treatment Continues to Increase, Say Psychologists.” Press Release, October 19, 2021. https://www.apa.org/news/press/releases/2021/10/mental-health-treatment-demand

3. Thompson, Derek. “The Great Resignation is Accelerating.” The Atlantic, October 15, 2021. https://www.theatlantic.com/ideas/archive/2021/10/great-resignation-accelerating/620382/

4. Wright, J. R., Hagg, H. K., Watts, S. A., Nelson, R. S., Keller, J. M., Taylor, K., & Bravata, D. M. Integrating behavioral health services at employer-sponsored health clinics: A descriptive analysis. Families, systems & health : the journal of collaborative family healthcare. 2020; 38(4), 346–358. https://doi.org/10.1037/fsh0000545

5. Bravata DM, Watts SA, Keefer AL, et al. Prevalence, Predictors, and Treatment of Impostor Syndrome: a Systematic Review. J Gen Intern Med. 2020;35(4):1252-1275. https://pubmed.ncbi.nlm.nih.gov/31848865/

6. Madhusudhan, D., Glied, K., Nguyen, E., Rose, J. and Bravata, D., 2020. Real-world Evaluation of a Novel Technology-enabled Capnometry-assisted Breathing Therapy for Panic Disorder. Journal of Mental Health & Clinical Psychology, 4(4), pp.39-46. https://www.mentalhealthjournal.org/articles/real-world-evaluation-of-a-novel-technology-enabled-capnometry-assisted-breathing-therapy-for-panic-disorder.pdf

7. Jensen-Doss, Amanda, Becker Haimes, Emily M., Smith, Ashley M., Lyon, Aaron R., Lewis, Cara C., Stanick, Cameo F., Hawley, Kristin M. Monitoring Treatment Progress and Providing Feedback is Viewed Favorably but Rarely Used in Practice. In Administration and Policy in Mental Health Services Research. 2018 Jan; 45(1): 48-61. Accessed at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5495625/

8. Miller, S. D., Bargmann, S., Chow, D., Seidel, J., & Maeschalck, C. (2016). Feedback-informed treatment (FIT): Improving the outcome of psychotherapy one person at a time. In Quality improvement in behavioral health (pp. 247–262). Springer International Publishing. https://doi.org/10.1007/978-3-319-26209-3_16

9. Tridiuum (2021). What is the Behavioral Health Index (BHI)? - Tridiuum ONE Knowledge Base—Confluence. Tridiuum. https://polarishealth.atlassian.net/wiki/spaces/TRAIN/pages/861176074/What+is+the+Behavioral+Health+Index+BHI

10. Tridiuum (2020). What does Patient Change mean and how effective are we? - Tridiuum ONE Knowledge Base—Confluence. Tridiuum. https://polarishealth.atlassian.net/wiki/spaces/TRAIN/pages/845938689/What+does+Patient+Change+mean+and+how+effective+are+we

11. Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. Archives of Internal Medicine, 166(10), 1092–1097. https://doi.org/10.1001/archinte.166.10.1092

12. Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9. Journal of General Internal Medicine, 16(9), 606–613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

13. Scott, John G., MD, PhD, Cohen, Deborah, PhD, DiCicco-Bloom, Barbara, RN, PhD, Miller, William L., MD, MA, Stange, Kurt C., MD, PhD, Crabtree, Benjamin F., PhD. Understanding Healing Relationships. Annals of Family Medicine, 2008 Jul; 6(4): 315-322. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2478496/

14. Wienke Totura, Christine M., Fields, Sherecce A., Karver, Marc S. The Role of the Therapeutic Relationship in Psychopharmacological Treatment Outcomes: A Meta-Analytic Review. In Psychiatric Services 2018 Jan 1; 69(1): 41-47. https://pubmed.ncbi.nlm.nih.gov/28945182/

15. 2020 XMI customer ratings benchmark data is live. (2020, November 5). Qualtrics. https://www.qualtrics.com/blog/xmi-customer-ratings-benchmark-data/

16. National Council for Mental Wellbeing. “Certified Community Behavioral Health Clinics Providing Access to Mental Health, Substance Use Care During COVID-19 Pandemic.” Press Release, May 25, 2021. https://www.thenationalcouncil.org/press-releases/certified-community-behavioral-health-clinics-providing-expanded-access-to-mental-health-substance-use-care-during-covid-19-pandemic/