

# Magellan Healthcare expands real-world impact of DCBT, while improving member access and engagement

## Executive Summary

Magellan Healthcare (Magellan) has provided nationally recognized behavioral health solutions for employers, health plans, and state and federal agencies for over 50 years. From employee assistance programs to Medicaid programs for individuals with serious mental illness, Magellan's evidence-based solutions help over 22 million members worldwide live healthy, vibrant lives.

Access to behavioral healthcare services is a growing problem in the U.S.<sup>1</sup> Since 1994, Magellan has addressed this issue with its SAMHSA-endorsed digital cognitive behavioral therapy (DCBT) modules that deliver impressive outcomes. Published randomized controlled trials have shown DCBT to be equivalent to usual therapy in mild to moderate anxiety and depression. To advance the technology on which the DCBT modules were built, Magellan collaborated with NeuroFlow, a behavioral health technology company that rebuilt Magellan's programs in a single experience that begins with assessments, directs the user to appropriate DCBT modules for their conditions, and provides additional self-help tools and crisis support. Magellan's new [Digital Emotional Wellbeing program](#), now powered by NeuroFlow, improves engagement while maintaining the clinical excellence of previous DCBT versions. Magellan, an NCQA-certified Managed Behavioral Healthcare Organization, uses these evidence-based, clinically effective DCBT programs to enhance availability of interventions for members.

## Program Outcomes

24%

reduction in depression assessment scores after completing ≥75% of MoodCalmer

41%

reduction in anxiety assessment scores after completing ≥75% of FearFighter®

124%

Increase in registrations compared to previous programs

# The Opportunity

Access to behavioral healthcare services is a growing need in the U.S.<sup>3</sup> while simultaneously the technology landscape to support access to behavioral healthcare is evolving. Today healthcare is experiencing an acceleration of the use of technology to facilitate the delivery of behavioral health interventions and new intervention modalities. The need has never been greater for adaptable technologies that increase evidence-based interventions, provide on-demand personalized health and navigation, and offer relevant solutions that engage individuals in their wellness. As a result, Magellan enhanced its proven digital cognitive behavioral therapy (DCBT) modules FearFighter®, MoodCalmer, SHADE, RESTORE®, and ComfortAble® through integration with NeuroFlow's engagement platform. The platform delivers a digital experience that empowers people to take an active role in managing their health and expands access to evidence-based intervention options.

Using Magellan's DCBT content and structure, NeuroFlow integrated the programs into their existing digital platform, including their award-winning app. The result is a single personalized experience that seamlessly guides members through their health journey. The experience begins with assessments for navigation, directs the user to appropriate DCBTs for their conditions, and provides additional self-help tools and crisis support.

In addition to providing a more comprehensive and user-friendly experience, NeuroFlow's technology feeds critical engagement and assessment data back to Magellan care management teams to monitor member wellbeing and contact individuals who indicate they are in crisis or experiencing suicidal ideation.

## Digital Cognitive Behavioral Therapy

Cognitive behavioral therapy (CBT) is a short-term intervention that behavioral health clinicians use to help individuals overcome negative thoughts and behaviors. CBT is effective for depression, anxiety disorders, alcohol and drug use problems, marital problems, eating disorders, and severe mental illness. CBT has been demonstrated to be as effective in certain conditions as other forms of therapy or psychiatric medications.

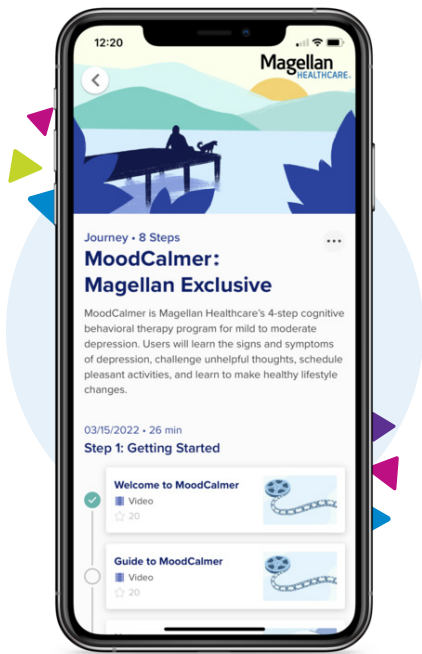
Digital CBT (DCBT)<sup>2</sup> is the implementation of CBT on a digital platform with the same core principles, language, and exercises used in live practice that include:

- Learning to recognize thought distortions
- Evaluating distortions against reality
- Gaining a better understanding of others' behavior and motivations
- Using problem-solving skills
- Developing a greater confidence in one's own abilities
- Changing behavioral patterns
- Developing coping skills

True evidence-based DCBT follows the exact CBT process, differing from [evidence-informed digital programs](#) that use some CBT practices but are not built around the intervention model.

# Our Solution

Magellan's Digital Emotional Wellbeing program is delivered through NeuroFlow's digital platform, accessible via app and website. Members can access behavioral health support 24 hours a day, seven days a week. The platform provides behavioral health content on topics like alcohol use, chronic pain, and positive psychology, in addition to Magellan's SAMHSA-endorsed, evidence-based DCBT modules. Interactive activities such as meditations, guided breathing, and journaling keep members engaged and help them develop healthy habits. The program also delivers regular clinical assessments that track members' wellbeing and clinical symptoms over time. Gamification with rewards is available for clients who wish to enhance engagement.



## Improved content delivery, targeting, and engagement

Through integration with NeuroFlow's award-winning user experience, Magellan has an enhanced ability to target its behavioral health content to the individuals who need it most. Based on a member's assessments and engagement in the platform, relevant behavioral health content is automatically recommended to them. If needed, they are enrolled in a DCBT program to address their specific behavioral health concerns.

Tailored digital experiences keep members engaged with Magellan's solution and help them better manage their wellbeing. Gamification elements and text and email reminders encourage members to make the Digital Emotional Wellbeing program a part of their daily routines. In addition to interactive elements like mood trackers and guided meditations, the program provides a breadth of behavioral health content through its Journey Gallery. The Journey Gallery allows members to explore topics like healthy living, coping with loss, and quitting tobacco, to manage a variety of life events and changes. This allows members to access the behavioral health support they need, at the level of intensity they require, while providing longitudinal insights to enable Magellan to evolve services for their members. Care managers can be empowered to understand what tools their members are using and better direct interventions.

## Timely alerts to support rising-risk

If a member's wellbeing declines significantly, the NeuroFlow platform generates two types of alerts. An at-risk alert is sent to Magellan care managers if an individual's well-being scores decline significantly from their baseline. Then Magellan care managers contact the individual to provide support and enroll them in care management. If an individual indicates thoughts of self-harm or suicide through an assessment or within a journal, the technology generates an urgent alert. Magellan's care management team responds to these alerts promptly, conducting further suicide screening and connecting members to supportive care.



NeuroFlow's enhancements to our DCBT programs help us address availability of evidence-based interventions. Bringing our behavioral health content into a single digital experience is helping us deliver the right resources to the members who need it most and at time convenient for their lifestyles.

*Caroline Carney, M.D., president of behavioral health and chief medical officer of Magellan Health*



# The Results

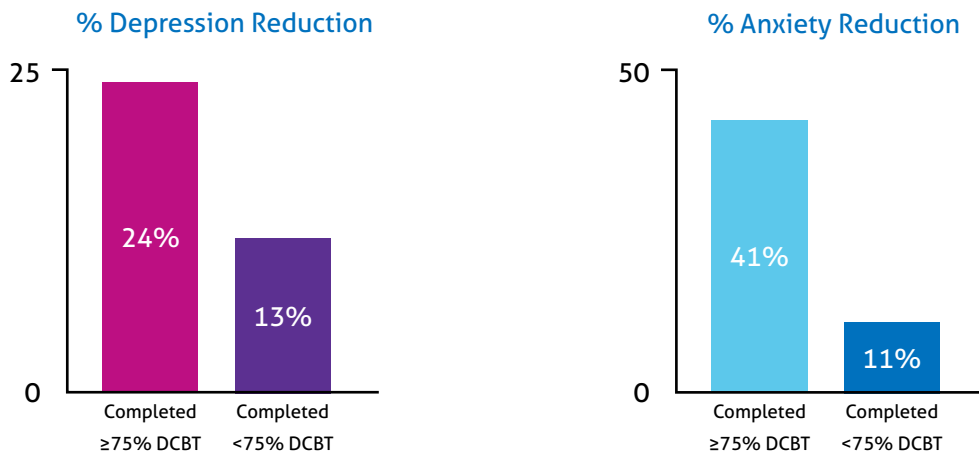
## Positive clinical outcomes

Improving the technology, increasing access to Magellan’s DCBTs and content, and embedding proven engagement strategies into the experience allowed Magellan to gather compelling, real-world evidence that reinforced the positive clinical outcomes from earlier versions of the programs.

Magellan measured outcomes based on clinical assessments like the Patient Health Questionnaire (PHQ-9), which screens for depression symptoms, and the Generalized Anxiety Disorder Assessment (GAD-7), which screens for anxiety symptoms. Scores of  $\geq 10$  points indicate clinical levels of depression or anxiety.

Individuals who completed 75% or more of MoodCalmer, the depression DCBT program, had an average 24% reduction in their PHQ-9 scores within 90 days, compared to an average 13% reduction among those who completed less of the program.<sup>4,5</sup> Individuals achieve clinically meaningful improvement when they lower their PHQ-9 or GAD-7 score by 5 points within 90 days after the initial clinical-level assessment.

More astoundingly, members who completed 75% or more of FearFighter, the anxiety-focused DCBT program,<sup>6</sup> demonstrated a 41% reduction in GAD-7 scores, compared to other DCBT users who averaged an 11% reduction in GAD-7 scores within 90 days.



In a more expansive analysis of the Digital Emotional Wellbeing program, NeuroFlow evaluated symptom reduction across all members, both DCBT and non-DCBT users. This analysis demonstrated the more members engaged with the solution, the higher their likelihood of symptom reduction ( $\geq 5$  point decrease in PHQ-9 or GAD-7 scores within 90 days of the initial assessment). Members who achieved meaningful improvement completed 1.5X more activities than those who did not achieve reduction. Activities include video content, guided meditations, journal entries, DCBT sessions and mood trackers.

## Enhanced reach and engagement

After launching Digital Emotional Wellbeing, Magellan saw an increase in registrants, up 124% over their previous programs. This increased engagement may be attributable to the wide breadth of content and services offered, ranging from low-severity resources, like content on managing work-related stress, to higher severity resources, such as the DCBT modules. Members also reported high levels of satisfaction with the Digital Emotional Wellbeing program, with 85% of survey respondents indicating they would recommend NeuroFlow to someone else.

# Conclusion

Dr. Caroline Carney, M.D., president of behavioral health and chief medical officer of Magellan Health, and a practicing psychiatrist observed that, "NeuroFlow's enhancements to our DCBT programs help us address availability of evidence-based interventions. Bringing our behavioral health content into a single digital experience is helping us deliver the right resources to the members who need it most. And now, thanks to higher engagement, more members are benefiting from the therapy-level value of our DCBT programs. We're excited to implement this solution with health plan clients this year and continue the rollout to our public sector and federal clients."

[Discover more about the Digital Emotional Wellbeing program >](#)

1. Satiani A, Niedermier J, Satiani B, Svendsen DP. Projected Workforce of Psychiatrists in the United States: A Population Analysis. *Psychiatr Serv*. 2018 Jun 1;69(6):710-713. doi: 10.1176/appi.ps.201700344. Epub 2018 Mar 15. PMID: 29540118.
2. American Psychological Association, <https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral>. Accessed May 7, 2023
3. Satiani A, Niedermier J, Satiani B, Svendsen DP. Projected Workforce of Psychiatrists in the United States: A Population Analysis. *Psychiatr Serv*. 2018 Jun 1;69(6):710-713. doi: 10.1176/appi.ps.201700344. Epub 2018 Mar 15. PMID: 29540118.
4. Paired-samples t-test, N=104, t=5.22, p<.001.
5. The effect size of PHQ-9 reduction across the entire MoodCalmer cohort was medium, with a Cohen's d of 0.45, indicating clinical significance. The effect size of PHQ-9 reduction for completionists (N=49) was also medium, with a Cohen's d of 0.56.
6. Paired-samples t-test, N=142, t=4.65, p<.001
7. The effect size of GAD-7 reduction across the entire FearFighter cohort was medium, with a Cohen's d score of 0.46. The effect size of GAD7 reduction for completionists was very large, with a Cohen's d of 1.15. The difference between "completionists" (N=25) and "others" (N=117) was statistically significant (independent-samples t-test, t=3.59, p<.001).