

## Objective:

Increase access to behavioral health programs at The Villages Health by proactively engaging patients in their behavioral health and improving population-wide identification of behavioral health needs.

# **OVERVIEW**

The Villages Health serves over 55,000 residents of The Villages retirement community and is on a mission to create "America's Healthiest Hometown." The Florida-based health system takes a holistic approach to healthcare, providing primary care, specialty care, and wellness activities to foster healthy aging. To underscore their commitment to addressing mental health needs comprehensively and proactively, The Villages Health partnered with NeuroFlow, a behavioral health technology and analytics company.

More than 20% of adults 55 and older experience a mental health concern.¹ Depression in particular is prevalent among aging populations who are more likely to experience social isolation, loss of loved ones, or chronic conditions. That is why behavioral health is an integral part of care at The Villages Health and a key area of innovation.

The Villages Health expanded their behavioral health care services in September 2021 by implementing a psychiatric collaborative care model to coordinate care between behavioral health and primary care teams. This program, called Tandem Care, allows providers to address behavioral health in the primary care setting, keeping high quality care centralized and tightly coordinated. As a leader in this space, The Villages Health is more effectively identifying and supporting patients with comorbidities, which is particularly prevalent in this Medicare population. As a result, The Villages Health supports more patients than traditional psychiatry alone,<sup>2</sup> and that has contributed to cost of care reductions as high as 39%. The partnership with NeuroFlow aims to amplify this success, specifically through engaging more patients in need of behavioral health support and contributing to a rich partnership.

45,000

Behavioral health activities completed by patients on NeuroFlow's platform in a 6-month period 17%

Of patients who registered for NeuroFlow had scores indicating clinical levels of depression and anxiety 24%

Of a subset of patients who had not previously been referred to The Villages BH program were identified with depression symptoms via NeuroFlow.



# THE SOLUTION

The Villages Health understood that with the right tools it could better support patients enrolled in its industry-leading behavioral health programs and also improve access to these programs through always-on digital support and timely identification. The health system rolled NeuroFlow out to 5,000 Medicare Advantage patients, some of whom were already enrolled in behavioral health programs while others were not. The platform supports patients in between appointments and surfaces changes in behavioral health severity. Critically, through its automated triage engine, NeuroFlow helps The Villages Health further understand behavioral health risk within their population, deliver high quality care when patients need it most, and mitigate costs through early interventions.

For patients enrolled in programs like Tandem Care, NeuroFlow's engagement platform reinforces in-person sessions digitally. Educational resources on topics such as depression, loneliness, and anxiety help patients take a more active role in their behavioral health between appointments. Remote assessments and behavioral trackers enable real-time patient monitoring outside of clinical settings. This data is fed back to The Villages Health so that clinicians can provide more targeted care.

For patients not enrolled in behavioral health programs, engaging in assessments and activities through NeuroFlow provides important visibility to providers, alerting them when patients' behavioral health declines and offering digital resources in real-time. Because behavioral health acuity can change suddenly, an early warning system is key. NeuroFlow alerts help providers flag patients who may benefit from enrollment in Tandem Care or other programs. Identifying behavioral health needs proactively connects patients to care quickly, rather than waiting to surface these needs at an annual appointment.

Response Services—NeuroFlow's team of trained, crisis response professionals—is available for all The Villages Health patients who are eligible for NeuroFlow. When

patients trigger alerts indicating suicidal ideation, Response Services provides prompt, high-touch interventions and connects patients to appropriate referral pathways.

The combination of patient engagement, real-time analytics, and high-touch suicide prevention help the health system enhance its robust behavioral health services, establish a critical safety net for high-risk patients, and prioritize resources across a complex population.

# THE RESULTS

The Villages Health, in partnership with NeuroFlow, analyzed engagement and impact among patients who used the platform continuously for six months. The study analyzed 1,350 patients who registered for NeuroFlow, tracking their activity on the platform as well as their clinical severity. In addition, NeuroFlow analyzed a smaller subset of patients who were not previously enrolled in a behavioral health program. Comparing The Villages Health diagnostic data to NeuroFlow assessment data, NeuroFlow looked to identify additional patients who may have hidden behavioral health needs.

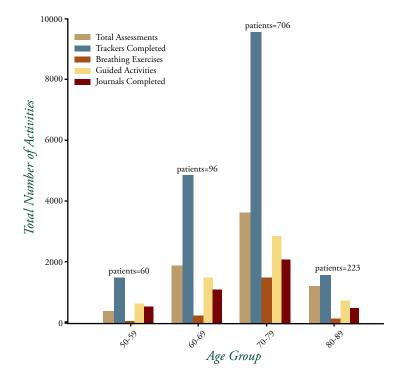
## Older Patients Are Highly Engaged With Digital Behavioral Health

Patients who were a part of the 1,350-person cohort analyzed in this study completed over 45,000 behavioral health activities during the six-month period. Interestingly, the most engaged age group was 70- to 79-year-old patients, bucking the common assumption that older adults are less likely to use digital health solutions. Trackers, which allow patients to log subjective scores for sleep, pain, and mood, were the most popular activity across age groups. Behavioral health assessments, like the Patient Health Questionnaire-9, which screens for depression and suicidal ideation, were the next most engaged with activity.

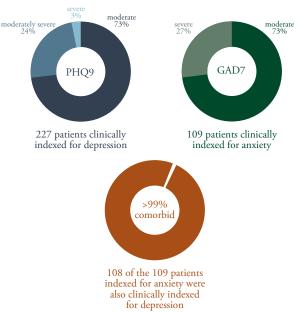
## Patients Exhibited Anxiety And Depression Symptoms

Analyzing NeuroFlow-administered PHQ-9 and GAD-7 assessments during the six-month period, The Villages Health found that 17% of the patients experienced depression or anxiety symptoms. Over 99% of the patients who had anxiety symptoms also had comorbid depression symptoms. With these insights, The Villages Health was able to deliver appropriate care while patients continued to engage with NeuroFlow resources in between appointments.

## Patient Engagement by Age Group



## Depression and Anxiety Severity Among Clinically Indexed Patients



# The Villages Health Identified Additional Patients in Need of Support

Identifying behavioral health needs at scale is challenging, because patients may experience stigma or discomfort voicing such concerns. To demonstrate how The Villages Health surfaced previously hidden behavioral health needs using NeuroFlow, analysts compared patient diagnostic data and NeuroFlow data. They looked for patients who were not enrolled in behavioral health programs but were active in NeuroFlow for six months. The exercise revealed that 24% of this smaller subset had clinical levels of behavioral health needs that were not previously documented. These added insights empowered The Villages Health to proactively support these patients before their conditions worsened.

"We are encouraged by some of the early successes of this program," says Dr. Jeffrey Lowenkron, Chief Medical Officer at The Villages Health. "We're actively working to understand more explicitly how our patients benefited from NeuroFlow, and then will seek to expand that benefit and other potential benefits. This is part of the commitment The Villages and NeuroFlow share, ensuring that patients receive high quality, holistic care that drives measurable results."

 $<sup>1.\</sup> https://www.cdc.gov/aging/pdf/mental\_health.pdf$ 

<sup>2.</sup> https://thevillageshealth.com/wp-content/uploads/2023/05/Mental-Health-Month-Editorial.pdf7;2(12):e0000922. doi: 10.1371/journal.pgph.0000922. PMID: 36962884; PMCID: PMC10021753.