



VNS Health

Vitalic



# White Paper

An Innovative Approach to Proactively Identifying and Treating Unmet Behavioral Health Needs to Reduce Unnecessary Medical Costs in a Medicare Advantage Population: Pilot Study Findings

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# Executive Summary

## Background

Individuals with multiple chronic conditions are at high risk for depression.<sup>1</sup> This heightened risk is compounded for older adults and people with disabilities, who are also less likely to receive behavioral health (BH) services despite being high utilizers of medical care.<sup>2,3</sup> Prior research indicates that the annual cost for Medicare recipients with chronic medical conditions and comorbid depression is 50.6% higher, or \$7,940, compared to those without depression, with costs driven more by general healthcare costs than mental health care.<sup>4</sup> From the payer's perspective, proactively identifying, screening, and treating patients with potentially undiagnosed depression presents not only a challenge but also an opportunity for achieving the Triple Aim of improving patient outcomes, enhanced care experience, and lower cost of care.<sup>5</sup>

Vitalic Health is a behavioral health (BH) company launched in 2024 in partnership with VNS Health, a non-profit organization that administers Medicare Advantage plans to older adults and individuals with disabilities throughout New York State. Vitalic specializes in proactive treatment of mental health conditions using an innovative data-driven “phase-based care” (PBC) approach,<sup>6,7</sup> collaborating with VNS Health to screen Medicare Advantage clients for depression, anxiety, and social isolation – potentially impacting medical costs, including emergency department visits and hospitalization. Once identified and screened, under the PBC approach, patients engage in a remotely delivered “acute phase clinic” (APC) for approximately 12 weeks, involving coaching/case management, cognitive-behavioral therapy, and medication management with a multidisciplinary team comprised of psychiatrists, psychiatric advanced practice nurses, social workers, and professional coaches – all with specialized skills in geriatrics. Rapid engagement is prioritized to combat lengthy wait times and inadequate treatment intensities.

## Objective

This paper describes Vitalic's clinical model and characteristics of the initial cohort of patients enrolled during the first 6 months of the program. We also present early findings on: patient-reported symptoms of depression and anxiety; changes in rates of all-cause hospital admission and emergency department (ED) use; and early indicators of changes to risk adjustment factor (RAF) calculations resulting from new psychiatric diagnoses.

## Methods

This pilot study employed a pre-post design to examine changes in symptoms of depression and anxiety, rates of inpatient hospital admission and ED visits, and qualification for selected Hierarchical Condition Categories (HCCs) related to psychiatric conditions. We examined associations between reductions in depression and anxiety symptoms and changes in rates of hospital admission and/or ED use. To further contextualize the findings on patient-reported outcomes, we examined patient testimonials collected for operational purposes and triangulated quantitative findings with these individual patient stories.



## Results

Findings on the characteristics of the first 143 enrolled patients and outcomes of the first 70 graduates of Vitalic suggest that the pilot phase of the program was successful in engaging a cohort of clinically complex Medicare Advantage beneficiaries with depression, anxiety or social stressors in phased-based care delivered remotely by an interdisciplinary BH team. Vitalic graduates showed significant improvement in depression and anxiety symptoms, with a corresponding trend toward lower rates of hospital admission and ED use. Among Vitalic graduates, newly identified cases of psychiatric conditions that were previously undetected qualified more patients for HCCs for Major Depression (155) and Bipolar Disorders (154). These newly identified HCCs will ultimately be reflected in more complete RAF score calculations for health plan members.

## Conclusion

This proof-of-concept study demonstrates that Medicare Advantage beneficiaries – including dually eligible beneficiaries and individuals with long-term disabilities – with chronic medical conditions and depression, anxiety or social stressors can be proactively identified and rapidly engage in phased-based care delivered remotely by an interdisciplinary BH team. The Vitalic model is feasible and holds promise for improving patient-centered BH outcomes while also providing financial benefit to Medicare Advantage plans managing the care of adults of all ages with complex medical and BH needs.



# Introduction

Individuals with multiple chronic conditions are at high risk for depression.<sup>1</sup> This heightened risk is compounded for older adults and people with disabilities, who are also less likely to receive behavioral health services despite being high utilizers of medical care.<sup>2,3</sup> In the older adult population, less than 50% of individuals with depression are identified in primary care,<sup>8</sup> with only 20% of those patients effectively treated.<sup>9</sup> Prior research indicates that the annual cost for Medicare recipients with chronic medical conditions and comorbid depression is 50.6% higher, or \$7,940, compared to those without depression, with costs driven more by general healthcare costs than mental health care.<sup>4</sup> From the payer's perspective, proactively identifying, screening, and treating patients with potentially undiagnosed depression presents not only a challenge but also an opportunity for achieving the Triple Aim of improving patient outcomes, enhanced care experience, and lower cost of care.<sup>5</sup>

Vitalic Health is a behavioral health (BH) company launched in 2024 in partnership with VNS Health, a non-profit organization that administers Medicare Advantage plans to older adults and individuals with disabilities throughout New York State. Vitalic specializes in proactive treatment of mental health conditions using an innovative data-driven “phase-based care” (PBC) approach,<sup>6,7</sup> collaborating with VNS Health to screen Medicare Advantage clients for depression, anxiety, and social isolation – potentially impacting medical costs, including emergency department

visits and hospitalization. Vitalic's adaptation of PBC included an innovative component: health plan members are proactively identified for underlying BH needs that frequently are undetected in primary care settings,<sup>8</sup> or if previously diagnosed, may be undertreated. This proactive identification is implemented using historic data on the health plan member population, including medical claims history and assessment data.

Once identified and screened, under the PBC approach, patients engage in an “acute phase clinic” (APC) for approximately 12 weeks, involving coaching/case management, cognitive-behavioral therapy, and medication management with a multidisciplinary team comprised of board-certified psychiatrists, psychiatric advanced practice nurses, social workers, and professional coaches – all with specialized skills in geriatrics. Rapid engagement is prioritized to combat lengthy wait times and inadequate treatment intensities. The Vitalic team uses four main components of PBC in the rapid engagement process: (1) multidisciplinary teams coordinated based on clinical needs; (2) weekly interdisciplinary team meetings to ensure that a team psychiatrist has reviewed and validated all newly identified psychiatric diagnoses and to adjust care plans for high-acuity patients as needed; (3) measurement-based care to inform acuity levels and progress; and (4) algorithms estimating treatment hours for acute episodes to guide staffing. Additionally, Vitalic follows the PBC guideline that about 80% of provider resources are

dedicated to new or acute patients. This is accomplished by reducing scheduling of stable patients at routine intervals. Following graduation from the acute phase, the treatment is transitioned to the primary care provider in a modified integrative care model, with continued involvement of Vitalic coaches.

Vitalic's proactive approach to patient identification and rapid engagement is distinct from usual care, where a primary care or other provider must detect a BH need, referring the patient to BH services, and the patient must overcome lengthy wait times, travel challenges and other barriers to accessing BH services in the community.<sup>10</sup> Even when a patient self-identifies as having a BH need, they might be deterred by the complexity of navigating access to BH services in the community, as well as social factors such as ageism and stigma.<sup>11-13</sup>

The central premise of Vitalic is that as individuals with previously unmet BH needs experience improvements in depression and anxiety symptoms, their capacity to engage in their healthcare and manage their health also improves.<sup>14</sup> They may be more likely to proactively engage with their primary care provider (PCP), schedule and keep appointments for annual check-ups and screenings, and seek outpatient care from their PCP in the event of acute illness.<sup>15</sup> They may also experience greater efficacy in managing their chronic conditions and engaging in positive health behaviors, such as managing their medication regimen, getting regular exercise, and adhering to dietary recommendations.<sup>16,17</sup> As patients improve in their capacity for managing their health, their risk of experiencing potentially preventable hospital admissions and emergency department visits may

decrease.<sup>8,18,19</sup> The reduction in adverse, high-cost outcomes resulting from the patient's improved efficacy in managing their health has the potential to yield significant cost-savings to the payer – particularly in a Medicare Advantage population that carries a high burden of chronic disease and multi-morbidity.

The Vitalic clinical team launched the program in December 2024 and has enrolled English- and Spanish-speaking members of VNS Health's Medicare Advantage plans who meet the eligibility criteria indicating behavioral health needs. Throughout 2025, the Vitalic team enrolled a total of 300 members living throughout the five boroughs of New York City and in Upstate New York who might otherwise face barriers accessing BH services in the community.

**This paper describes Vitalic's clinical model and characteristics of the initial cohort of patients enrolled during the first 6 months of the program. We also present early findings on patient-reported symptoms of depression and anxiety; changes in rates of all-cause hospital admission and emergency department use; and early indicators of changes to risk adjustment factor (RAF) calculations resulting from new psychiatric diagnoses.**

# Methodology

## Identification of eligible health plan members

Vitalic was piloted in a population of members of VNS Health's Medicare Advantage plans who meet one of the following criteria: (i) have an ICD-10 diagnosis code indicated in their claims history that starts with the letter "F" (F00-F99 Mental Behavioral and Neurodevelopmental Disorders), with the exception of a selected set of severe psychiatric conditions (e.g. schizophrenia, psychotic disorders); and/or (ii) have answered affirmatively to at least one question on an annual health assessment indicating depressive symptoms, anxiety symptoms, and/or social isolation. Health plan members were excluded if they: (i) had a diagnosis of Alzheimer's disease or dementia; and/or (ii) were enrolled in a hospice or palliative care program. Diagnosis codes used for inclusion and exclusion criteria use a look-back period of 2 years in the claims data. Assessment-based criteria use the most recent record within the past 2 years.

## Data sources

For operational purposes, data on demographic and clinical characteristics of eligible members were shared with the Vitalic team. The Vitalic team reached out to eligible members via telephone to offer Vitalic's services and schedule a telehealth appointment for a comprehensive evaluation with each member who consented to receive care as a patient of Vitalic. Data on outreach efforts, appointment scheduling, and assessment

information collected upon evaluation were recorded in Vitalic's electronic medical record. For analytic purposes, patient engagement and assessment data were extracted from Vitalic's electronic medical record for the initial cohort of 143 patients and were linked with data internal to VNS Health's Medicare Advantage plans, including additional member demographics, historical claims data, and service utilization.

## Analytic measures

Patient-reported symptoms of depression and anxiety were measured using the PHQ-9 and GAD-7, respectively, administered during the baseline comprehensive evaluation and at the conclusion of the acute phase of the Vitalic intervention (i.e. upon graduation). All-cause hospital inpatient admission was measured for a historical lookback period 3 months prior to the patient's enrollment in Vitalic, and for a 3-month follow-up period after the comprehensive evaluation. Emergency department (ED) visits were measured for the same 3-month lookback and follow-up periods.

To examine early indicators of improvements to risk adjustment factor (RAF) calculations resulting from new psychiatric diagnoses, we created binary measures for whether or not the patient qualified for the Hierarchical Condition Categories (HCCs) for Major Depression (HCC 155) and Bipolar Disorders (HCC 154). These measures were created for a lookback period pre-dating Vitalic enrollment and a follow-up period after the comprehensive evaluation. For the lookback



period, we used the patient's latest HCC files, which are reflective of diagnoses on claims with a service date from 2024, and supplemented these files with encounters in 2025 that predated Vitalic enrollment, identifying ICD-10 codes that qualify for the HCC of interest. For the follow-up period, we further supplemented these encounters with Vitalic's internal encounters submitted to VNS Health, which will be used for risk adjustment in 2025. The internal encounters submitted by Vitalic to VNS Health may include new psychiatric diagnoses that were previously undetected and will newly qualify the patient for either HCC 155 or HCC 154.

### **Analytic methods**

Descriptive analyses were conducted to examine pre-post changes in symptoms of depression and anxiety, rates of inpatient hospital admission and ED visits, and qualification for HCCs 155 and 154. We examined associations between reductions in depression and anxiety symptoms and changes in rates of hospital admission and/or ED use. To further contextualize the findings on patient-reported outcomes, we examined patient testimonials collected for operational purposes and triangulated quantitative findings with these individual patient stories. The Vitalic clinical team collected the patient testimonials as a convenience sample to support operational needs.



# Results

## Patient engagement

Trained screeners contacted health plan members who met the Vitalic eligibility criteria to discuss physical, social, and emotional challenges. Those with identified issues were offered a behavioral health evaluation. The initial evaluation included a structured assessment via tele-video or telephone and rating instruments including the PHQ-9,<sup>20</sup> GAD-7,<sup>21</sup> and The DeJong Loneliness Scale.<sup>22</sup> Based on the assessment results, interventions were offered utilizing a multi-disciplinary team of coaches, psychotherapists, and medical providers appropriate to each patient's needs. Repeated assessments were taken throughout the course of the intervention to track changes in symptoms.

Between December 2024 and July 2025, 1,630 patients were contacted by Vitalic's engagement specialists. Of those, 298 patients expressed interest in participating in an initial evaluation, and 143 enrolled in treatment. Out of this group, 70 patients completed at least two treatment sessions, either "graduating" or discontinuing by week 12 without further engagement. The 70 graduates were enrolled in the Acute Phase Clinic (APC) for an average of 94.1 days (standard deviation = 25.5; median = 89.5), approximately 12 weeks. Patients were assigned to a "low" acuity group with PHQ9 scores < 14 (N=38), while high acuity patients had scores >= 15 (N=32).

## Cohort characteristics

Demographic and clinical characteristics of the patient cohort enrolled within the first 6 months of Vitalic's launch (N=143)

were similar to those of the larger eligible population (Table 1). Vitalic patients were an average age of 66 years old, somewhat lower than the mean age of 71 in the eligible population, although the age range was similar. Fifty-eight percent of Vitalic patients were female. Vitalic expanded the program's language offerings to include Spanish by the fourth month of the pilot; 17% of enrolled patients were Spanish-speakers compared to 3% of the eligible population. The geographic distribution of the Vitalic cohort was similar to that of the larger eligible population, although it was noted that the engaged cohort had a disproportionate number of members living in the Bronx – 32% compared to 22% in the non-engaged eligible population.

The level of clinical complexity of the Vitalic cohort was similar to that of the larger eligible population, with high prevalence of chronic conditions common in the Medicare Advantage and dually-eligible populations. The most common chronic conditions included: hypertension (71%); diabetes (47% of the cohort); rheumatoid arthritis / osteoarthritis (42%); chronic kidney disease (32%); asthma (25%); chronic ischemic heart disease (19%); heart failure (14%); and chronic obstructive pulmonary disease (11%). The cohort had an average of 4.4 chronic condition diagnoses (median=4); the number of chronic conditions ranged from 0 to 14. The mean Medicare Part C risk score was 1.32, indicating higher average costs than the general Medicare Advantage population. However, the standard deviation in risk score was 1.09, and scores ranged from 0.19 to 7.98, indicating a wide range in clinical complexity.

**Table 1. Demographic and Clinical Characteristics of Vitalic Cohort vs. Eligible Non-Enrolled Health Plan Members**

	<b>Vitalic Patient Cohort (N=143)</b>	<b>Eligible Members, Not Enrolled (N=3,128)</b>
Age, mean (SD)	65.8 (12.1)	71.0 (10.8)
Median	67.6	70.7
Range	26.2 - 90.0	25.0 - 105.5
Female	58%	58%
Race		
Black or African American	25%	21%
White	14%	13%
Asian	0%	6%
Other	4%	4%
Unknown	58%	57%
County		
Bronx	32%	22%
Brooklyn	20%	30%
Manhattan	13%	10%
Queens	17%	22%
Other	18%	16%
Language		
English	83%	94%
Spanish	17%	2.9%
Other	0.7%	2.7%

	Vitalic Patient Cohort (N=143)	Eligible Members, Not Enrolled (N=3,128)
# Months Enrolled in Health Plan, mean (SD)	12.5 (11.5)	12.4 (15.3)
Median	9.1	8.2
Range	0 – 73.1	0 – 103.5
Medicare Part C Risk Score, mean (SD)	1.32 (1.09)	1.36 (1.15)
Median	1.08	1.05
Range	0.19 – 7.98	0.0 – 21.63
# Chronic Conditions, mean, (SD)	4.4 (2.8)	4.0 (2.7)
Median	4.0	4.0
Range	0 – 14.0	0 – 14.0
Hypertension	71%	69%
Diabetes	47%	53%
Rheumatoid Arthritis / Osteoarthritis	42%	35%
Chronic Kidney Disease	32%	25%
Asthma	25%	16%
Chronic Ischemic Heart Disease	19%	22%
Heart Failure	14%	15%
Chronic Obstructive Pulmonary Disease	11%	10%
Stroke / Transient Ischemic Attack	7%	4%
Cancer	7%	7%

Note: SD=standard deviation.

## Changes in Mental Health-Related Patient-Reported Outcomes

The initial cohort of Vitalic graduates (N=70) showed improvements in PHQ-9 and GAD-7 scores from the baseline assessment to the discharge assessment (Table 2). The average PHQ-9 score decreased by 3.78 points from baseline to discharge, while the average GAD-7 score decreased by 2.72 points.

**Table 2. Change in Patient-Reported Outcomes from Baseline to Discharge (N=70)**

	Baseline Assessment	Discharge Assessment	Change in Mean Score	P-value
PHQ-9				
Mean (SD)	9.59 (6.71)	5.81 (5.85)	-3.78	<0.001
Median	9.00	4.00		
GAD-7				
Mean (SD)	7.79 (5.98)	5.07 (5.62)	-2.72	0.003
Median	7.00	3.00		

Note: SD=standard deviation.

## Changes in Rates of Inpatient Hospital Admission and Emergency Department (ED) Visits

The percentage of Vitalic graduates with at least one event in the look-back and follow-up periods decreased from 4.3% to 2.9% for inpatient hospital admission and from 17.1% to 12.9% for ED use (Table 3). These results did not reach statistical significance, likely due to the small number of events detected during these timeframes.

**Table 3. Change in Rates of Inpatient Hospital Admission and ED Visits (N=70)**

	3-Month Period Pre-Enrollment	3-Month Period Post-Enrollment	P-value
# with at Least One Inpatient Hospital Admission	4.3% (freq=3)	2.9% (freq=2)	>0.9
# with at Least One ED Visit	17.1% (freq=12)	12.9% (freq=9)	0.5

Note: freq=# of patients with an event.

Additional trends were observed when examining rates of hospital admission and ED visits by subgroups categorized on symptom severity. In particular, 17 patients comprised a subgroup that began with moderate/severe depression symptoms (PHQ-9  $\geq 10$ ) and transitioned to mild/moderate symptoms (PHQ-9  $< 10$ ). In this subgroup, 41% had either an inpatient admission or an ED visit in the 3 months prior to enrolling in Vitalic. In the 3-month period following enrollment, only 18% of patients in this subgroup had one of these events.

## Changes in Calculation of Risk Adjustment Factor (RAF) Scores

In the cohort of 70 graduates, more individuals qualified for the HCCs for Major Depression (155) and Bipolar Disorders (154) after their comprehensive evaluation with the Vitalic team (Table 4). In the 3-month period prior to Vitalic enrollment, 32.8% of the cohort qualified for HCC 155, either due to receiving the HCC in the previous calendar year or having a claim in the preceding months that contained an ICD-10 code for an HCC-qualifying diagnosis. After 3 months of engaging in Vitalic, 48.6% of the cohort qualified for HCC 155. This increase was driven by encounters submitted by Vitalic that included ICD-10 codes for Major Depression for patients that were previously undiagnosed. This increase in HCC 155 qualification bordered on statistical significance, suggesting that this improved detection of depression could yield significant increases in HCC 155 detection as the Vitalic population expands. A more modest, but notable, increase in HCC 154 detection could also be observed as the Vitalic team identifies previously undetected cases of Bipolar Disorder.

**Table 4. Change in Rates of Qualification for Selected Psychiatric HCCs (N=70)**

	3-Month Period Pre-Enrollment	3-Month Period vPost-Enrollment	P-value
Qualifying Encounter for HCC Major Depression, Moderate or Severe (155)	32.8% (freq=23)	48.6% (freq=34)	0.06
Qualifying Encounter for HCC Bipolar Disorders (154)	1.4% (freq=1)	4.3% (freq=3)	0.6

Note: freq=# of patients qualifying for the HCC of interest.



## Individual Patient Experiences

Individual patient stories collected for operational purposes were examined to provide context for observed changes in depression and anxiety symptoms. For example, Vitalic provided care to a patient in her 70s who suffered from Major Depression, with a baseline PHQ-9 score of 16 (moderately severe) and GAD-7 of 6 (mild). She was socially isolated and grieving the recent loss of two close relatives. She had multiple physical comorbidities, including but not limited to cardiac conditions, obesity, and arthritis, and was mostly sedentary. Her treatment with Vitalic included individual psychotherapy, grief counseling, behavioral activation with exercise prescription, medication management coordinated with cardiac conditions, and integration with primary care. Her PHQ-9 score decreased from 16 to 2, and her GAD-7 score decreased from 6 to 0, indicating clinical remission. The patient spoke of her experience with Vitalic:

**“I went from feeling like I had nothing left to live for to planning my first vacation in years. The therapy didn’t just help with my sadness - it gave me back my life and my future.”**

**(Female patient in her 70s)**

In another example, a Spanish-speaking patient in her 80s and her daughter both said to the Vitalic team that they “saved her life.” While the patient’s depression and anxiety symptoms were mild at baseline (PHQ-9 = 3, GAD-7 = 5), the patient suffered from extreme social isolation and frailty, which was exacerbated by the Covid-19 pandemic, and had not left her home in over two years. The combination of the patient’s social isolation and mild anxiety symptoms signaled a need for behavioral health services, and the Vitalic team subsequently uncovered that her underlying depression was likely masked by cultural factors and low self-reporting. She received a comprehensive psychiatric evaluation conducted in Spanish. After agreeing to “try one session” with a bilingual clinician, she engaged in psychotherapy gradually. Her treatment with Vitalic included behavioral activation focused on previous meaningful activities, family involvement, and activity scheduling for social reintegration. The patient’s PHQ-9 and GAD-7 scores decreased to 0 and 3, respectively. The patient’s daughter reported:

**“I have my mom back again. She’s the person she used to be before COVID - active, happy, social. I thought I’d lost her forever.”**

**(Daughter of patient in her 80s)**

Vitalic has also supported patients in improving relationships with family members as part of their treatment journey. A patient in his 60s with obsessive compulsive disorder was estranged from his adult son, and was considered at high risk for psychiatric crisis intervention. His treatment with Vitalic included cognitive behavioral therapy, weekly symptom monitoring, care coordination and social reconnection support. His PHQ-9 score decreased from 10 to 3, and his GAD-7 score decreased from 14 to 2. He was able to reconnect with his son, and reported to Vitalic:

**“I have my son back in my life. I couldn’t let him see how I was living before. Now he comes over for dinner every Sunday. The therapy didn’t just help my OCD - it gave me my family back.”**

**(Male patient in his 60s)**

Another patient story illustrates how the Vitalic team works with patients to implement individually tailored lifestyle changes, including exercise, to improve the patient’s mental health. A medically complex patient in her 40s with obesity, diabetes, heart failure and mobility limitations had been homebound, and had moderate/severe depression and anxiety symptoms. She was fearful of engaging in exercise due to her cardiac condition. The Vitalic team coordinated with the patient’s cardiologist and provided psychoeducational interventions to help the patient distinguish between anxiety and cardiac symptoms and learn about safe heart rate parameters. Interventions included mental health coaching, behavioral activation with progressive exercise goal setting, continued health literacy support, and relapse prevention for depression and anxiety symptoms. The patient’s PHQ-9 score decreased from 15 to 0, and her GAD-7 score decreased from 12 to 2. She reported to Vitalic:

**“For a whole year, I thought my heart would give out if I moved too much. I didn’t understand that staying still was actually hurting me. Now I know the difference between my anxiety and my heart, and I’m walking every day. I even went outside - something I thought I’d never do again.”**

**(Female patient in her 40s)**



# Discussion

Findings on the characteristics of the first 143 enrolled patients and outcomes of the first 70 graduates of Vitalic suggest that the pilot phase of the program was successful in three main areas. First, Vitalic was able to engage a population of Medicare Advantage plan members with a high burden of chronic disease, with a relatively high number of medical comorbidities, as well as members who may face difficulties accessing BH services in the community. It is noteworthy that 17% of the enrolled cohort was Spanish-speaking, compared to only 3% of the eligible but non-enrolled population. Upon expanding the program offerings to Spanish-speakers, the Vitalic team hired Spanish-speaking engagement specialists and clinical staff. This allowed for dedicated workflows to engage Spanish-speaking members, including the outreach script, comprehensive evaluation and treatment sessions conducted in Spanish. The successful engagement of Spanish-speaking patients suggests that Vitalic's clinical model has the potential to help members overcome language barriers affecting the ability to access effective BH treatment in the community.

The geographic reach of the program was also notable. Specifically, the engaged cohort had a disproportionate number of members living in the Bronx – 32% compared to 22% in the non-engaged eligible population. The Bronx has historically faced a shortage of BH services in the community, high prevalence of individuals with serious psychological distress,<sup>23</sup> high rates of psychiatric hospitalization compared to

other counties in New York City,<sup>24</sup> and social determinants affecting access to healthcare.<sup>25,26</sup> A prior study of mental health service use in New York City found that, among the city's five boroughs, the Bronx had the lowest service utilization rates among those in distress.<sup>27</sup> Vitalic's remote footprint in the Bronx demonstrates that the program has the potential to engage individuals living in areas with poorer access to community-based BH services, removing access barriers by providing care via telehealth modalities. This finding holds promise for Vitalic's potential reach in other geographic areas where older adults may face difficulties accessing BH services, such as rural areas, whether due to a shortage of providers or transportation barriers.

Second, members engaged in the program showed clinically meaningful improvement in patient-reported depression and anxiety symptoms, measured by the PHQ-9 and GAD-7. These improvements were supported by patient stories highlighting how the Vitalic team individually tailors social and behavioral interventions based on the patient's needs. The findings also offered signals toward an association between improvement in depression symptoms and reductions in ED visits and hospitalizations. Among the 17 patients who transitioned from moderate/severe symptoms to mild/moderate symptoms, the use of either inpatient or ED services declined from 41% to 18%. This trend was not statistically significant, likely due to small sample sizes. However, the findings show promise for the ability of Vitalic to facilitate larger-scale

reductions in hospital admission and ED visits as the population expands and is followed for a longer period of time.

Third, Vitalic's services have the potential to facilitate improvement in payment levels by the Centers for Medicare and Medicaid Services (CMS) to the health plans by identifying cases of psychiatric conditions that were previously undetected, thus qualifying more members for psychiatric HCC codes. Vitalic's workflow includes a weekly review of patient diagnoses with a board-certified geriatric psychiatrist to ensure validity of diagnoses. Newly identified cases of psychiatric conditions that were previously undetected qualify more members for HCCs for Major Depression (155) and Bipolar Disorders (154), which will ultimately be reflected in more complete RAF score calculations for health plan members. Improved RAF score calculations can potentially lead to more appropriate payment levels to the health plans for managing the care of members whose clinical complexity is compounded by their psychiatric conditions.

A notable feature of the Vitalic program is the broad age span of engaged patients, ranging from young adults with long-term disabilities to older adults with frailty and mobility challenges. The population of VNS Health plan members who meet the Vitalic eligibility criteria includes beneficiaries of Medicare Advantage plans – who qualify for Medicare either due to being older than age 65 or due to long-term disability – as well as integrated plans for dually eligible beneficiaries with both Medicare and Medicaid benefits. Although Vitalic is a

geriatric-focused model of care, findings from this pilot study indicate that the phase-based approach and proactive case identification can be tailored to a wide range of individual needs. As the Vitalic cohort expands, future research could compare the impacts of Vitalic on different age groups and segments of the Medicare Advantage-only and dually eligible populations.

## Limitations

Some limitations of this pilot study should be noted. The sample size of the initial cohort of graduates is relatively small, and the follow-up period is limited to three months after the comprehensive evaluation. As Vitalic continues to expand the patient cohort and more time passes since the initial program launch, it will be feasible to implement a more robust quasi-experimental study design to conduct a formal evaluation of the program's impacts on patient outcomes and Medicare costs. Additionally, individual patient stories were derived from patient testimonials generated for operational reporting purposes, rather than a standard qualitative investigation. A subsequent evaluation could include a qualitative component to more systematically assess patient perspectives on the care they receive from Vitalic.



# Conclusion

This proof-of-concept study demonstrates that Medicare Advantage beneficiaries – including dually eligible beneficiaries and individuals with long-term disabilities – with chronic medical conditions and depression, anxiety or social stressors can be proactively identified and rapidly engage in phased-based care delivered remotely by an interdisciplinary BH team. Those who engage with Vitalic showed a significant improvement in depression and anxiety symptoms, supported by individually tailored behavioral and social interventions. More than half of the high-acuity patients transitioned to low-acuity with engagement in Vitalic, with a corresponding trend toward lower rates of hospital admission and ED use.

Our findings show that Vitalic’s approach is feasible and likely effective. Future program enhancements could facilitate reaching a target of at least 75% of high-acuity patients transitioning to low-acuity. These enhancements may include: greater focus on rapid medication management in the high-acuity group; engagement with family members to support adherence; and integration of artificial intelligence models to improve case identification and individualized care planning. Increasing the rate of transition from high to low acuity could result in further reduction of high-cost medical encounters and future cost-savings to Medicare Advantage plans. Additionally, the study findings provide an early signal that the new identification of psychiatric conditions may improve future RAF score calculations for Vitalic patients, resulting in

improved beneficiary-level payment by CMS to the Medicare Advantage plan.

In conclusion, the Vitalic model shows promise for improving patient-centered BH outcomes and care experiences, while also providing financial benefit to Medicare Advantage plans managing the care of adults of all ages with complex medical and BH needs. Vitalic’s novel approach is therefore consistent with the Triple Aim of achieving improved patient outcomes, enhanced care experiences, and reduced costs.<sup>5</sup> As the Vitalic cohort expands, further research will examine longer-term impacts of the program on patient outcomes and costs of care.



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