Feasibility and Preliminary Mental Health Outcomes of a Moderated Digital Peer Support Platform for Individuals Living with Chronic Illness

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Abstract

Background
Individuals living with chronic illness experience substantially higher rates of anxiety and depression compared with the general population. Despite these needs, access to timely behavioral health support remains limited due to workforce shortages, stigma, and structural barriers to care. Digital mental health platforms may provide accessible support for this population, but real-world feasibility and outcomes data remain limited.

Objective
This study evaluated the feasibility and preliminary mental health outcomes associated with Cabana, a digital mental health support platform offering moderated peer groups and self-guided wellness tools for individuals living with chronic illness.

Methods
This observational pre–post study analyzed real-world platform participation among Cabana users who self-identified as living with chronic illness. Participants completed self-report symptom assessments at baseline and follow-up intervals. Anxiety and depressive symptoms were measured using the Generalized Anxiety Disorder–2 (GAD-2) and Patient Health Questionnaire–2 (PHQ-2) screening instruments. Participants with at least two recorded assessments were included in the analysis. Pre–post comparisons were conducted using the earliest and most recent available scores. Analyses examined mean score changes, movement across screening thresholds, and the proportion of participants demonstrating improvement, stability, or worsening of symptoms.

Results
A total of 104 participants completed at least two assessments and were included in the analysis. Among participants who screened positive for anxiety at baseline (GAD-2 ≥3), 28% no longer screened positive at follow-up. Among participants screening positive for depression at baseline (PHQ-2 ≥3), 52% no longer screened positive at follow-up. Across the full sample, 75% of participants demonstrated stable or improved anxiety scores and 78% demonstrated stable or improved depression scores. Among individuals with baseline positive screens, statistically significant improvements were observed for both anxiety ($p = 0.015$) and depression ($p = 0.0017$).

Conclusions
Participation in the Cabana platform was associated with stable or improved anxiety and depressive symptom scores among the majority of participants over the observation period. These findings support the feasibility of moderated digital peer support platforms as a potential approach for expanding access to behavioral health support among individuals living with chronic illness.

Key Findings

- 104 participants living with chronic illness completed at least two symptom assessments during platform participation.
- Across the full sample, 75% of participants demonstrated stable or improved anxiety scores, and 78% demonstrated stable or improved depression scores over the observation period.
- Among participants who screened positive for anxiety at baseline (GAD-2 ≥3), 28% no longer screened positive at follow-up.
- Among participants who screened positive for depression at baseline (PHQ-2 ≥3), 52% no longer screened positive at follow-up.
- **These findings provide preliminary evidence supporting the feasibility of moderated digital peer support platforms as an accessible source of emotional support for individuals living with chronic illness.**

Introduction

Chronic illness represents one of the most significant public health challenges in the United States. Approximately six in ten U.S. adults live with at least one chronic condition, and four in ten live with two or more chronic diseases (Centers for Disease Control and Prevention, 2021). Beyond the physical burden of disease, chronic illness is frequently associated with substantial psychological distress. Individuals living with chronic health conditions experience significantly higher rates of depression and anxiety than the general population. Estimates suggest that approximately 20–30% of individuals with chronic illness experience clinically significant depressive symptoms, although prevalence varies across conditions and populations studied (Katon, 2011; Moussavi et al., 2007).

The psychological burden associated with chronic illness extends beyond symptom management. Many individuals report disruptions in identity, social relationships, employment, and daily functioning following diagnosis or during disease progression. Chronic illness is also associated with increased social isolation and uncertainty regarding future health outcomes, both of which are known contributors to emotional distress. The co-occurrence of chronic physical conditions and mental health symptoms has been associated with poorer health outcomes, lower quality of life, and increased healthcare utilization (Naylor et al., 2012).

Despite the high prevalence of mental health needs among individuals with chronic illness, access to behavioral health support remains limited. Structural barriers include shortages in the behavioral health workforce, geographic limitations in provider availability, stigma associated with seeking mental health treatment, and the logistical and financial burdens associated with traditional therapy models (Health Resources and Services Administration, n.d.; Substance Abuse and Mental Health Services Administration, 2023). As a result, many individuals with chronic conditions experience prolonged periods of psychological distress without timely access to supportive care.

Digital mental health platforms have emerged as a promising mechanism for expanding access to behavioral health support. These platforms can provide scalable, lower-barrier interventions that allow individuals to engage with supportive resources outside of traditional clinical settings. A growing body of evidence suggests that digital mental health interventions can produce modest but meaningful improvements in symptoms of depression and anxiety across diverse populations (Firth et al., 2017; Torous et al., 2020). However, many digital interventions rely primarily on self-guided tools or automated features, which may limit sustained engagement and social connection.

Peer-based and group-based support models may offer a particularly valuable approach for individuals living with chronic illness. Shared experience among individuals facing similar health challenges can foster social identification, normalize emotional responses to illness, and facilitate the exchange of coping strategies. Prior research has demonstrated that peer support interventions can improve depressive symptoms and enhance perceived social support in individuals with mental health conditions (Pfeiffer et al., 2011; Repper & Carter, 2011). For individuals managing chronic illness, peer-based environments may also reduce feelings of isolation and promote adaptive coping.

Cabana is a digital mental health support platform designed to provide accessible emotional support through moderated peer groups, behavioral wellness tools, and therapist-informed educational content. The platform aims to reduce barriers to behavioral health support by providing structured peer connection and guided coping resources in an accessible digital environment.

Despite the rapid expansion of digital mental health tools, relatively few studies have evaluated peer-supported digital mental health platforms in populations specifically living with chronic illness, particularly in real-world implementation settings.

The objective of the present study was to evaluate the feasibility and preliminary mental health outcomes associated with participation in Cabana among individuals living with chronic illness. Using standardized symptom screening tools, this observational analysis examined changes in anxiety and depressive symptoms among participants who completed baseline and follow-up assessments while engaging with the platform.

Methods

Platform Description

Cabana is a digital mental health support platform designed to provide accessible emotional support and behavioral wellness resources through moderated peer-based environments. The platform combines live peer support groups, self-guided coping tools, and therapist-informed psychoeducational content.

Peer groups are conducted in a moderated virtual setting and are designed to connect individuals experiencing similar life challenges. Facilitators are trained in peer support practices and behavioral health communication techniques to promote psychological safety, constructive dialogue, and supportive group interaction.

For individuals living with chronic illness, Cabana groups address topics including coping with long-term illness, emotional adjustment following diagnosis, resilience and emotional regulation, and managing social isolation associated with chronic health conditions.

In addition to peer group participation, users may access on-demand educational resources and coping exercises intended to support emotional regulation and behavioral wellness.

Study Design

This study used an observational pre-post design analyzing real-world engagement and symptom outcomes among Cabana users living with chronic illness.

Participants completed standardized self-report assessments at up to three time points during platform participation: at baseline (account creation), approximately 30 days after enrollment, and approximately 60 days after enrollment.

Participants were included in the analysis if they completed at least two assessments during the observation period. For each participant included in the analysis:

- the earliest available assessment was designated as the baseline score
- the most recent available assessment was designated as the follow-up score

This approach allowed for evaluation of symptom changes among individuals with repeated measurements while reflecting real-world engagement patterns within the platform.

Participants

Participants were individuals who enrolled in Cabana and self-identified as living with a chronic health condition during the platform onboarding process. The platform was available to users seeking emotional support related to chronic illness and related life challenges.

To be included in the analysis, participants were required to:

1. complete at least two symptom assessments during the study period
2. have both a baseline and follow-up score available for analysis

A total of 104 participants met inclusion criteria and were included in the final analytic sample.

Because the study analyzed real-world platform use, engagement levels varied across participants and were not standardized as part of the study design.

Measures

Anxiety

Anxiety symptoms were assessed using the Generalized Anxiety Disorder–2 (GAD-2) scale. The GAD-2 is a validated two-item screening instrument derived from the Generalized Anxiety Disorder–7 questionnaire and is widely used in clinical and population health settings to screen for generalized anxiety symptoms.

Scores range from 0 to 6, with higher scores indicating greater symptom severity. A score of 3 or greater is commonly used as the threshold for a positive screening result indicating clinically significant anxiety symptoms.

Depression

Depressive symptoms were measured using the Patient Health Questionnaire–2 (PHQ-2). The PHQ-2 is a validated two-item screening tool derived from the Patient Health Questionnaire–9 and is commonly used to screen for depressive symptoms in clinical and research settings.

Scores range from 0 to 6, with scores of 3 or greater indicating a positive screen for clinically significant depressive symptoms.

Statistical Analysis

Participants with at least two completed assessments were included in the analysis. Data analyzed in this study were derived from routine platform assessments collected between April 2024 and January 2025.

Analyses evaluated changes in anxiety and depressive symptoms between baseline and follow-up assessments and included:

- mean score changes between baseline and follow-up
- movement across clinical screening thresholds
- changes in symptom categories
- proportion of participants who improved, remained stable, or worsened

Pre–post differences were evaluated using paired t-tests for normally distributed measures and Wilcoxon signed-rank tests for non-normally distributed data.

Statistical significance was defined as $p < 0.05$.

Ethical Considerations

All data analyzed in this study were de-identified observational platform data collected as part of routine program evaluation. Participants provided consented to the use of de-identified data for research and evaluation purposes during platform enrollment. The study involved analysis of de-identified user data and posed minimal risk to participants.

Results

Participant Characteristics

A total of 104 participants completed at least two symptom assessments and were included in the analytic sample. Baseline symptom severity across the sample was generally mild. The mean baseline GAD-2 score was 2.50, and the mean baseline PHQ-2 score was 1.90.

At baseline, 41.3% (n=43) of participants screened positive for anxiety (GAD-2 ≥3) and 26% (n=27) screened positive for depression (PHQ-2 ≥3), indicating the presence of clinically relevant symptoms within a subset of the sample.

Because this study analyzed real-world platform participation, engagement levels varied among participants, and participation in peer support sessions was not standardized as part of the study design. Table 1 presents baseline symptom scores for the analytic sample.

Table 1. Baseline Symptom Scores (n=104)

Measure	Mean Baseline Score
GAD-2	2.50
PHQ-2	1.90

Anxiety Outcomes

Average anxiety scores, measured using the GAD-2 scale, decreased from 2.50 at baseline to 2.35 at follow-up across the full sample. Among participants who screened positive for anxiety at baseline (GAD-2 ≥3), 28% no longer screened positive at follow-up.

Across the full analytic sample, 29% of participants demonstrated improvement in anxiety scores, 46% remained stable, and 25% experienced worsening scores.

Overall, **75% of participants demonstrated stable or improved anxiety scores** over the study period. Among participants with baseline positive anxiety screens, mean scores decreased from 4.33 to 3.67, representing a statistically significant improvement ($p = 0.015$).

Depression Outcomes

Average depression scores, measured using the PHQ-2 scale, decreased from 1.90 at baseline to 1.81 at follow-up across the

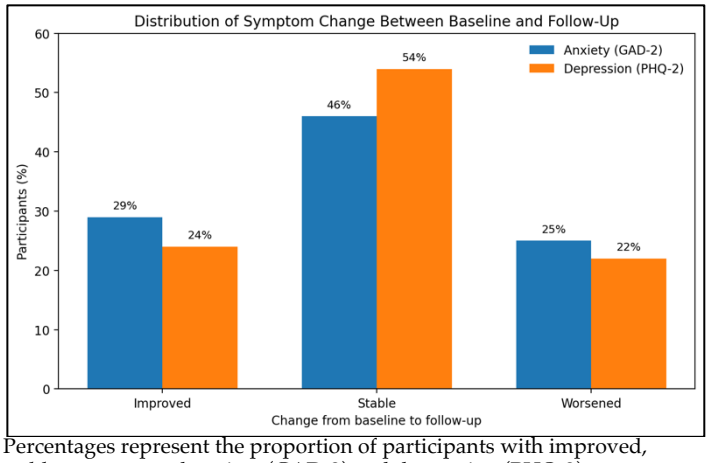
full sample. Among participants who screened positive for depression at baseline (PHQ-2 ≥3), 52% no longer screened positive at follow-up.

Across the full analytic sample, 24% of participants experienced improvement in depression scores, 54% remained stable, and 22% experienced worsening scores. Overall, **78% of participants demonstrated stable or improved depression scores** during the study period. The distribution of symptom changes across the analytic sample is illustrated in Table 2 and Figure 1.

Table 2. Distribution of Symptom Changes Between Baseline and Follow-Up (n=104)

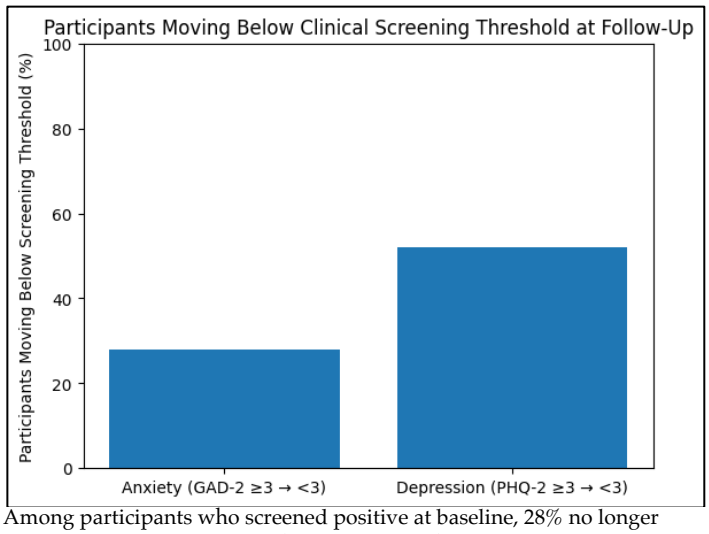
Outcome	Improved	Stable	Worsened
Anxiety	29%	46%	25%
Depression	24%	54%	22%

Figure 1. Distribution of symptom change between baseline and follow-up



Percentages represent the proportion of participants with improved, stable, or worsened anxiety (GAD-2) and depression (PHQ-2) scores across the analytic sample (N = 104).

Figure 2. Participants moving below clinical screening threshold at follow-up.



Among participants who screened positive at baseline, 28% no longer screened positive for anxiety (GAD-2 ≥3 → <3) and 52% no longer screened positive for depression (PHQ-2 ≥3 → <3) at follow-up.

Discussion

This feasibility study evaluated the implementation and preliminary mental health outcomes associated with participation in a moderated digital peer support platform designed for individuals living with chronic illness. Several key findings emerged from the analysis.

First, **the majority of participants experienced stable or improved symptoms of anxiety and depression** over the observation period. Across the full sample, 75% of participants demonstrated stable or improved anxiety scores and 78% demonstrated stable or improved depression scores. Stability in mental health symptoms may represent a meaningful outcome in populations managing chronic disease, where psychological stressors are often persistent and fluctuating.

Second, among participants who screened positive for anxiety or depression at baseline, a substantial proportion demonstrated improvement at follow-up. **Over one-quarter of participants with elevated anxiety symptoms and more than half of those with elevated depressive symptoms no longer screened positive at follow-up.** These findings suggest that participation in moderated peer support environments may be associated with reductions in self-reported symptoms among individuals experiencing higher levels of distress.

Third, **the results support the feasibility of digital peer-supported mental health platforms** as a potential mechanism for expanding access to emotional support among individuals living with chronic illness. Participants were able to engage with moderated peer groups and digital coping resources without the structural barriers commonly associated with traditional mental health services, including provider availability, scheduling constraints, and geographic limitations.

The observed patterns of improvement are broadly consistent with prior research examining peer support interventions in mental health contexts. Peer-based models may improve psychological outcomes through several mechanisms, including normalization of illness experiences, opportunities for social identification with others facing similar challenges, and the exchange of practical coping strategies. Prior meta-analyses have found that peer support interventions can produce modest improvements in depressive symptoms while increasing perceived social support and reducing feelings of isolation (Pfeiffer et al., 2011; Repper & Carter, 2011). For individuals managing chronic illness, these mechanisms may be particularly relevant given the social and emotional disruptions frequently associated with long-term health conditions.

In addition to peer interaction, digital delivery may contribute to engagement by reducing barriers to participation. Digital platforms allow individuals to access supportive environments from their homes, potentially lowering stigma associated with seeking mental health support and enabling participation among individuals who might otherwise lack access to behavioral health resources.

Taken together, **these findings suggest that moderated digital peer support environments may complement traditional behavioral health services for individuals living with chronic illness.** Rather than replacing clinical care, such platforms may provide accessible early support and ongoing emotional connection that can help individuals navigate the psychosocial challenges associated with long-term health conditions.

These findings also contribute to the emerging literature examining digital peer-supported mental health models. While many digital mental health tools rely primarily on self-guided content or automated interventions, peer-supported

environments may offer additional benefits through social connection and shared experience. Future research should further examine how moderated peer support models compare with other digital mental health approaches in terms of engagement, retention, and clinical outcomes.

Limitations

This study has several limitations that should be considered when interpreting the findings.

First, the study used an observational pre–post design without a control group, which limits the ability to draw causal conclusions regarding the relationship between platform participation and changes in mental health symptoms. Improvements observed in symptom scores may reflect a range of factors beyond platform engagement, including natural symptom fluctuation over time or external life circumstances.

Second, participants self-selected into the platform, which may introduce selection bias. Individuals who choose to engage in digital mental health support platforms may differ from the broader population of individuals living with chronic illness in ways that influence engagement or outcomes, such as motivation to seek support or comfort with digital tools.

Third, the sample size was modest, and follow-up assessments were limited to approximately 60 days. Longer observation periods and larger samples would be necessary to better understand the durability of symptom changes and the potential long-term impact of peer-supported digital interventions.

Fourth, engagement with the platform varied across participants, and exposure to peer support groups and digital resources was not standardized as part of the study design. As a result, the analysis does not evaluate dose–response relationships between platform use and symptom changes.

Finally, anxiety and depressive symptoms were measured using brief screening instruments (GAD-2 and PHQ-2) rather than comprehensive diagnostic assessments. While these tools are widely used in both clinical and research settings, they provide a limited measure of symptom severity and should be interpreted as indicators of screening-level changes rather than clinical diagnoses.

Future research should examine digital peer-supported mental health platforms using larger samples, longer follow-up periods, and controlled study designs to better understand their potential role in supporting individuals living with chronic illness.

Conclusion

This study provides preliminary evidence supporting the feasibility of a moderated digital peer support platform designed for individuals living with chronic illness. Participation in Cabana was associated with stable or improved anxiety and depressive symptom scores for the majority of participants over the observation period, with notable improvements among individuals who screened positive for symptoms at baseline.

These findings suggest that moderated digital peer support environments may offer a scalable approach for expanding access to emotional support for individuals managing chronic health conditions. By combining peer connection with accessible digital delivery, such platforms may help address gaps in behavioral health support that persist within traditional care models.

Further research using larger samples, longer follow-up periods, and controlled study designs will be necessary to better understand the potential role of digital peer-supported mental health interventions in supporting the psychological well-being of individuals living with chronic illness.

Disclosure

This study was conducted using observational platform data from Cabana. The authors are affiliated with Cabana. The analysis was conducted for research and program evaluation purposes using de-identified participant data.

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