Headspace Care:
Clinical Outcomes & Cost Impact Research Review

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Peer-Reviewed Clinical Outcomes

Cost Impact Analyses

Executive Summary

Headspace is committed to measuring the impact of our solutions to both prove out our value and gather learnings to support the improvement of our model. For Headspace Care, our human-to-human clinical care offering, we have conducted a variety of peer-reviewed Real World Evidence analyses and direct claims studies to better understand our impact.

Through our research studies, we have found that employers who implement Headspace Care's on-demand mental healthcare solution see significant clinical outcomes improvement, which leads to tangible cost savings for their organization.

Improved Outcomes
- **59%** of members who completed surveys either screened negative for anxiety at follow-up OR experienced a meaningful reduction
- **70%** of members who initially screened positive for depression
- at intake and completed follow-up have meaningful improvement
- **3 day** average increase in healthy mental health days. After one month of using Headspace Care, members experienced statistically significant improvements in the average number of healthy mental health days.

Lower Costs
- **15%** savings vs. benchmark for team-based care
- **17-18%** cost decrease post Headspace Care, depending on engagement
- **28%** Cost decrease for members with metabolic conditions & anxiety
- **11.3%** decrease in average monthly costs compared to pre-Headspace Care trends

Association Between Care Utilization and Anxiety

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Read the full study here

BACKGROUND:

Approximately one-third of individuals are affected by an anxiety disorder during their lifetimes, but a large portion of those affected (36.9%) are estimated to go untreated. This study aimed to examine differences in anxiety outcomes in individuals who utilized the Headspace Care platform. This study also investigated the association between levels of engagement within each care modality and odds of improving anxiety symptoms.

STUDY DESIGN:

A retrospective observational study of individuals who accessed Headspace Care.

SAMPLE SIZE:

1611 Headspace Care users aged 18 years or older who screened positive for anxiety on the 2-item Generalized Anxiety Disorder (GAD-2) intake survey.

DELIVERY OF CARE:

On-demand mental health coaching, clinical services (therapy and psychiatry), and assessments primarily via a mobile app platform.

CONCLUSIONS

Findings showed that any care modality (coaching, clinical, or team-based) on the Headspace Care platform was associated with decreases in anxiety symptoms. Those engaged in coaching reported similar decreases in anxiety symptoms as those engaged in clinical services, suggesting many members might be able to improve their anxiety through coaching alone. Engagement with multidisciplinary, team-based care (coaching + clinical) showed the greatest likelihood of decreasing anxiety symptoms

KEY RESULTS

55%

of members who completed GAD surveys at intake with Headspace Care screened positive for anxiety

59%

of members who completed surveys either screened negative for anxiety at follow-up OR experienced a meaningful reduction (>=5 point decrease in GAD-7 score) in their anxiety (GAD) scores 21

In comparison to members who did not engage in care, members who received coaching or clinical services (therapy or psychiatry) were more likely to show reductions in anxiety symptoms

Members who engaged in multidisciplinary, team-based care (coaching + clinical) showed the highest rates of improvement in anxiety symptoms

Association Between Care Utilization and Depression

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Read the full study here

BACKGROUND:

Depression is one of the most prevalent mental health conditions in the United States and is ranked second only to hypertension in its impact on longevity and quality of life in Americans. This study aimed to investigate the utilization and effectiveness of the Headspace Care platform for reducing depression symptoms.

METHODOLOGY:

Sample Size: 1,107 Headspace Care users aged 18 years or older who screened positive for depression on the PHQ-2 intake survey.

SAMPLE SIZE:

On-demand mental health coaching, clinical services (therapy and psychiatry), and self-guided content and assessments primarily via a mobile app platform.

DELIVERY OF CARE:

On-demand mental health coaching, clinical services (therapy and psychiatry), and self-guided content and assessments primarily via a mobile app platform.

CONCLUSIONS

Findings showed that any care modality on the Headspace Care platform was associated with decreases in depression symptoms. Engagement with multidisciplinary, team-based care (coaching + clinical) showed the greatest likelihood of decreasing depression symptoms.

KEY RESULTS

37%

of Headspace Care members who completed intake PHQ-2 surveys screened positive for depression

70%

of these members who initially screened positive for depression at intake and completed follow-up have meaningful improvement (either screened negative for depression at follow-up OR experienced a meaningful reduction in their depression (PHQ-2) scores)

All modalities of care show an increased chance of improvement compared to those not engaged with care services

Those engaged in multidisciplinary team-based care (therapy and coaching) had the greatest chance of depression improvement

Health-related quality of life among Headspace Care members

Read the full study here

BACKGROUND:

To better understand the impact of Headspace Care on members with subclinical symptoms, Headspace Care utilized the health-related quality of life (HRQoL) tool from the Center for Disease Control and Prevention (CDC) "Healthy Days'' measure. The "Healthy Days" measure estimates the number of recent days when a person's physical and mental health was "good" using the following questions:

1. Would you say that in general your health is excellent, very good, good, fair, or poor?

2. Now thinking about your physical health, which includes physical illness and injury, how many days during the past 30 days was your physical health not good?

3. Now thinking about your mental health, which includes stress, depression, and problems with emotions, how many days during the past 30 days was your mental health not good?

4. During the past 30 days, approximately how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

METHODOLOGY:

Sample Size: 288 members who completed the 4-item "Healthy Days" measure at baseline and one month following use of Headspace Care's on- demand mental health platform. Baseline anxiety and depression levels were also collected.

CONCLUSIONS:

Findings showed that any care modality on the Headspace Care platform was associated with an increase in "Healthy Days."

KEY RESULTS

Members, on average, reported "frequent distress" at baseline with more unhealthy mental health days (mean = 16) than healthy mental health days (mean = 14).

3 day average increase in healthy mental health days. After one month of using Headspace Care, members experienced statistically significant improvements in the average number of healthy mental health days.

Pharmaceutical Client Claims Analysis

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BACKGROUND:

In 2019, a large pharmaceutical company (Company X) chose to partner with Headspace Care to proactively address employee needs and reduce barriers to care. After three years of partnership, Company X and Headspace sought to measure the impact of Headspace on Company X's healthcare claims spend. Headspace partnered with Accorded, a third party actuarial intelligence company, to conduct detailed claims & savings analysis on Company X's U.S. medical claims data.

METHODOLOGY:

- To assess Headspace's impact on total medical spend, Accorded generated a person-level benchmark for each engaged Company X member from the Merative MarketScan commercial database. They then compared each Headspace member against their matched benchmark to calculate savings or overspend
- The analysis measured total spending by care engagement type vs. benchmark and total spending by top diagnosis chapters

DATA SOURCES:

- Full year 2022 medical claims data (with 2 months of claims runout) for employees enrolled in Headspace Care.
- Headspace Care utilization data, including coaching and clinical sessions, and outcomes assessments

CONCLUSIONS

While all member segments who engaged with Headspace Care showed savings, members who engaged meaningfully with Headspace Care performed the best. Employees who did not enroll in Headspace saw overspend vs. benchmark.

KEY RESULTS

$37 PMPM

Savings vs. benchmark for members who meaningfully engaged (9% savings).

$53 PMPM

Savings vs. benchmark for team-based care (15% savings).

$32 PMPM

Savings vs. benchmark for coaching-only member cohort (7% savings)

Lower Spend

For members with comorbid conditions, including Cancer Maternity, Musculoskeletal, Metabolic Health

Matched Cohort Claims Data Evaluation

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BACKGROUND:

To understand how healthcare costs may change after an individual utilizes virtual mental healthcare, Headspace conducted a matched cohort study. The study evaluated the impact of text-based mental health coaching, video telepsychotherapy, and video telepsychiatry on claims costs.

METHODOLOGY:

This study compares the difference between Headspace Care cohort's post-index costs to pre-index trends to estimate the impact of Headspace Care on claims cost.

DATA SOURCES:

- Claims data from IQVIA, a healthcare data solution. Claims data included hospital charge data, prescription data, and professional fee claims.
- Headspace Care utilization data, including coaching and clinical sessions, and outcomes assessments

CONCLUSIONS

The study found a 5% reduction in overall costs and a 17% reduction in outpatient costs. The data from this study gives us key insight on how Headspace Care can shift outpatient care to a high-quality, lower cost site of care.

As a majority of the members in this study joined Headspace Care in 2020, these results contribute to our understanding of the impact of digital mental health interventions on healthcare costs during the pandemic.

KEY RESULTS

Decrease in Costs

5%
Decrease in Total Costs

17%
Decrease in Outpatient Costs

Headspace Care Book of Business Claims Analysis

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BACKGROUND:

Headspace partnered with Komodo Health, a health data vendor that enables linking of Headspace member engagement data to healthcare claims data, to evaluate the impact of Headspace Care on healthcare claims spend.

METHODOLOGY:

- **Descriptive analyses:** Headspace's internal research team analyzed demographics + clinical characteristics of Headspace Care members.
- **Actuarial performance evaluation:** In partnership with 3rd party actuarial firm, Accorded, Headspace conducted a performance evaluation to compare overall costs of care to propensity-matched cost benchmark based on MarketScan commercial claims data
- **Pre/post analyses:** Headspace's internal research team conducted a pre/post analysis looking at members who signed up in 2021 with 2019-2020 as pre-period and 2021-2022 as post period.

DATA SOURCES:

- Headspace Care utilization data, including coaching and clinical sessions, and outcomes assessments
- Matched healthcare claims data from Komodo Health, including demographics, diagnoses, and costs.

CONCLUSIONS

The analyses demonstrated savings vs. benchmark based on age, gender, geography, core condition, and comorbidities. In particular, members with Gastrointestinal, Musculoskeletal, and Metabolic and Endocrine comorbidities saw savings vs. benchmark.

KEY RESULTS

Overall Savings

10%
Overall savings vs. benchmark

17-18%
Cost decrease post HS Care

Savings for Comorbidities

9-17%
Savings vs. benchmark for members with GI conditions

27%
Cost decrease for members with GI conditions & anxiety post HS Care

4-21%
Savings vs. benchmark for members with MSK conditions

7%
Cost decrease for members with MSK conditions & anxiety post HS Care

6-14%
Savings vs. benchmark for members with Metabolic conditions

28%
Cost decrease for members with metabolic conditions & anxiety post HS Care

Claims Analysis for Caregiver Organization

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BACKGROUND:

Headspace partnered with a company whose population primarily included caregivers to conduct a claims analysis with their 3rd party actuarial vendor. The claims event study sought to examine the changes in healthcare costs after using Headspace Care.

METHODOLOGY:

- Healthcare claims event study via OLS regression
- **Primary model:** Estimates changes in outcomes relative to month before joining Headspace Care.
- **Secondary model:** estimates changes in outcomes relative to what would have been predicted by the linear trend during the 6 months leading up to joining Headspace Care.
- Additional controls for demographics (5-year age bins x gender), chronic conditions and seasonal trends.

DATA SOURCES:

- Headspace Care utilization data, including coaching and clinical sessions, and outcomes assessments
- Matched healthcare claims data from client, including demographics, diagnoses, and costs.

CONCLUSIONS

Despite an increase in psychiatry and preventive visits, overall monthly spending decreased relative to pre-Headspace Care trend. Although our sample size was too small to detect statistical significance, the results of this analysis could signal a shift towards "appropriate" healthcare utilization.

KEY RESULTS

Total Spending Decreases

11.3%

Decrease in average monthly costs compared to pre-Headspace Care trends

Increases in Access to Care

192%

Increase in average monthly % of members with psychiatric and psychotherapy utilization compared to pre-Headspace Care trends

Increase in Preventive Care

45%

Increase in average monthly % of members with preventive visits compared to pre-Headspace Care trends