



ValidationInstitute

2023 Validation Report

Review for: Spring Health
Validation Achieved: Savings
Valid through: May 2024



Company Profile

Spring Health

Category:	Behavioral Health
Website:	https://www.springhealth.com/
Public or Private:	Private
Year Established:	2016
CEO:	April Koh
Company contact:	sales@springhealth.com

Description provided by the company:

Spring Health is a comprehensive mental health solution for employers and health plans. Unlike any other solution, we use Precision Mental Healthcare to seamlessly pinpoint and deliver exactly the right fit for each person - whether that's digital support, meditation exercises, coaching, therapy, medication, and beyond.



Claim Assertion of Validation

Spring Health demonstrates a positive return of investment for healthcare buyers. People who use Spring Health services have lower medical costs and lower employee turnover than similar people who have the same mental illness diagnosis and who do not use Spring Health services. Participants who have cancer, diabetes, hypertension, or chronic obstructive pulmonary disease show greater savings than participants who do not have these illnesses, and greater than the participant group average savings per member month. Spring Health program participants also reduced the number of days that illness affected their productivity.

Method / Calculation / Examples

Spring Health program participants were matched to similar non-participants on their

- mental health diagnosis,
- month of diagnosis,
- medical risk score,
- age,
- sex.

Spring Health participants (N=3640) and matched non-participants (N=7076) had to have at least six months of health insurance enrollment before their diagnosis month. Mental health diagnoses were grouped into four types: mood, anxiety, substance use disorder, and other. (SUD and other made up less than six percent of both groups.)

A person was counted as a Spring Health participant if they enrolled and had at least one psychotherapy or medication management session during the six-month period. The analysis focused on people who had six months of participation.

Using medical claims data, the Per Member Per Month (PMPM) medical costs were calculated for the six-month period before (and including the month of diagnosis) and six-month period after the mental health diagnosis. The amount that the PMPM changed for the Spring Health participants was compared to the change for the matched comparison group (Difference in Differences). The difference between the two was the gross savings.

Method / Calculation / Examples

The Spring Health and matched groups were sorted into groups of the following conditions:

- Cancer
- Diabetes
- Hypertension (high blood pressure)

If a person had one of these diagnoses in the pre- or the post- six-month period, they were assigned to the group. The PMPM total medical costs were calculated for each group, and the change from pre- to post-periods were compared to one another.

Medical costs were segmented into mental and physical health. The percentage change in physical health for the matched group was compared to the change for the Spring Health group. (Mental health costs were not compared since Spring Health participants' costs are in program fees, not in claims handled by the health plan.)

To measure employee retention, the analysis used the employer's census one year from the start of the Spring Health program. The turnover rate was the number of employees who were absent from the 12-month census for more than 30 days as a ratio to the total number of people. Turnover for Spring Health participants (n=2,592) who were employees (excluding spouses) were compared to a matched group.

Method / Calculation / Examples

To calculate savings from employee retention, two assumptions were made:

- The average annual salary of employees was \$54,339, which is the 2021 median earnings for full-time employees in the United States (Full-Time, Year-Round Workers & Median Earnings by Sex & Occupation, 2021); and
- The cost of turnover was 15% of annual salary (Mahan, 2020).

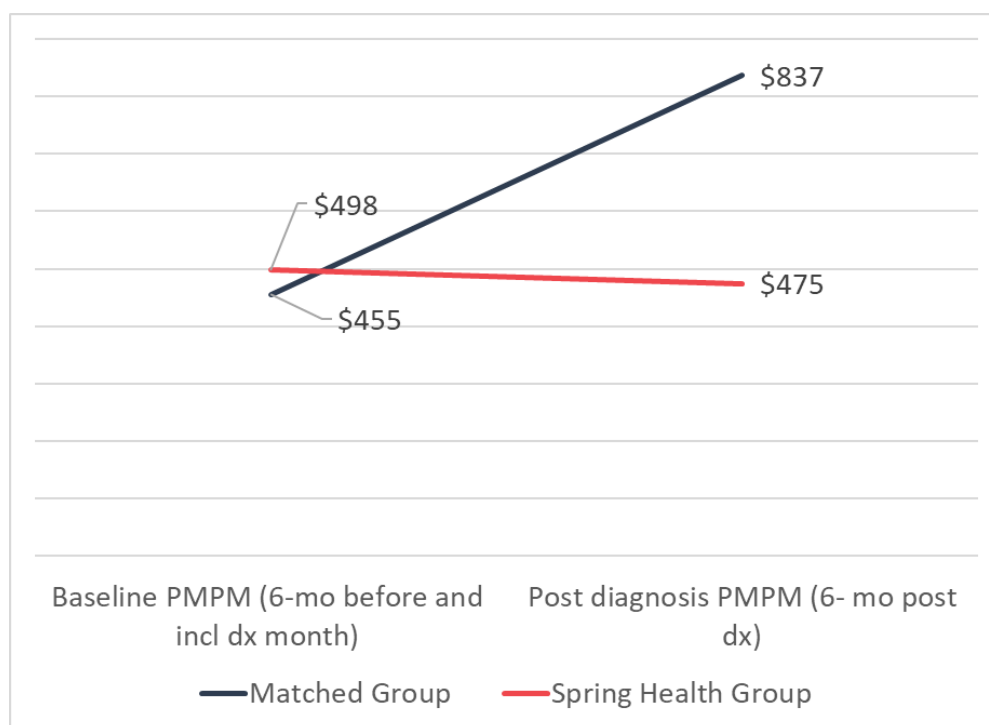
Using these assumptions, the analysis calculated how much higher costs would have been if Spring Health participants' turnover had been as high as the comparison group.

Productivity improvement was calculated by taking the self-reported number of days of work missed (in the prior week) before and after the Spring Health program began. Three thousand six hundred fifty-seven participants responded to the Sheehan Disability Scale, a copyrighted validated survey tool. The question was, "On how many days in the last week did your symptoms cause you to miss school or work or leave you unable to carry out your normal daily responsibilities?" To estimate savings, the Spring Health group's improvement was compared to a group of adults with major depression or dysthymia's change in days missed from work. (Lerner & al, 2004) The Lerner study group did not have a treatment program, though some members may have had treatment.

The Return On Investment was calculated by taking the gross savings for the health plan, from improved retention, and from fewer days missed from work as a ratio to the program costs.

Findings & Validation

Graph 1 shows the pre- and post-diagnosis per member per month gross health plan costs for the Spring Health participants and the matched non-participants. Spring Health participants' PMPM went down \$23, while the matched group's went up \$382. In total, the comparison group's PMPM went up by \$405 more than the Spring Health group. Total savings in the first six months of engagement were \$2430, implying a range of \$2430 to \$4860 savings in the first year. Spring Health provided a return of investment of \$2.15 for every \$1.00 invested in the program. Program costs were inclusive of all fees, including therapy services and platform fees over the time period of the study.



Graph 1: Comparison of Spring Health PMPM change to Matched Group PMPM change



Findings & Validation

The health cost savings calculation is shown below.

PMPM Estimated Savings	X	# of Member Months	=	Gross Savings (6 months)
\$405		17,813		\$7,207,687
<u>Savings</u>		<u>\$7,207,687</u>		ROI Multiple
Program Costs	=	\$3,359,699	=	2.15x

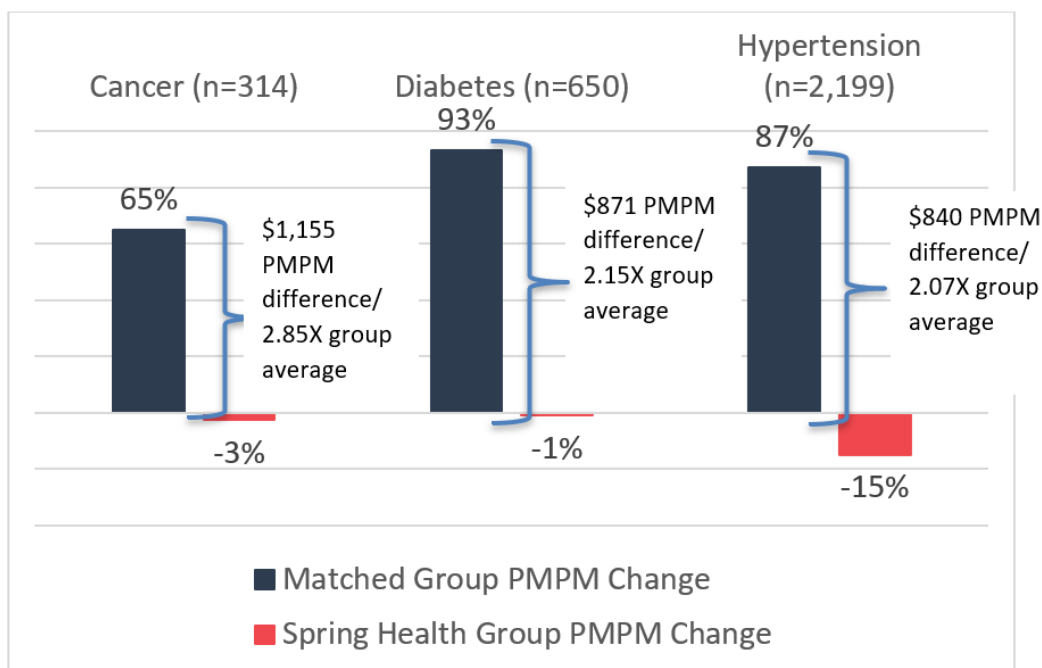
Figure 1: Health Plan Cost Savings Calculation

Spring Health participants who had one of the chronic conditions had lower PMPM costs than similar non-participants with the same conditions. A total of 314 Spring Health and matched non-participants had cancer; of those, Spring Health participants' PMPM costs went down by three percent while similar non-participants' went up 65%. The PMPM change for Spring Health participants with cancer was 2.85 times as much as it was for all Spring Health participants. See Graph 2 for the total number of members and summary of PMPM changes for each chronic condition.





Findings & Validation

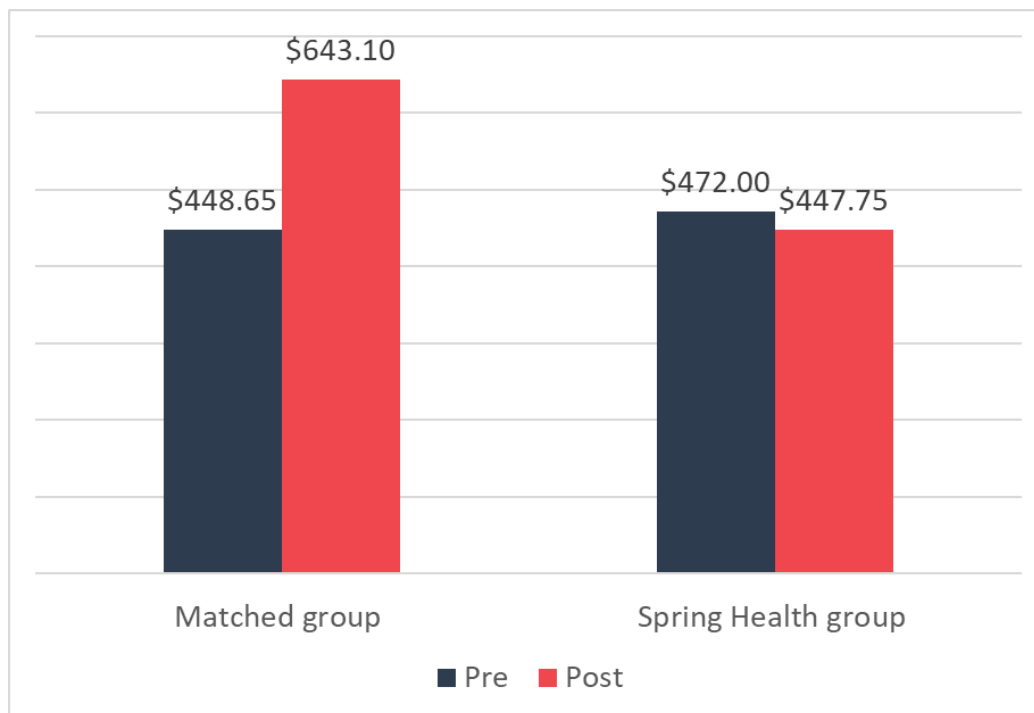


Graph 2: Change in Total Medical PMPM for Chronic Conditions

Spring Health participants' PMPM for physical health slightly decreased from the six months before they had a mental health diagnosis to the six months following. The matched group, by contrast, had their costs for physical health increase by 43%.



Findings & Validation



Graph 3: PMPM Spending on Physical Health Spring Health Participants and Matched Group

Spring Health participants' annual turnover rate was 10.6%, 3% lower than the rate for similar non-participants. If the 2,592 Spring Health participants had turned over at the same rate as the matched non-participants, the employer could have had higher retention costs by \$633,810. (Note: this analysis included only employees who participated in Spring Health and who were included in the matching process used for the health plan cost analysis.) Table 1 shows the turnover rates and estimated retention savings.

Findings & Validation

	Spring Health Participants	Matched Group
Turnover rate (12 month)	10.6%	13.6%
Turnover costs ^	\$2,239,462	\$2,873,272

Gross retention savings	\$633,810
Retention savings per participant	\$245

Assumptions

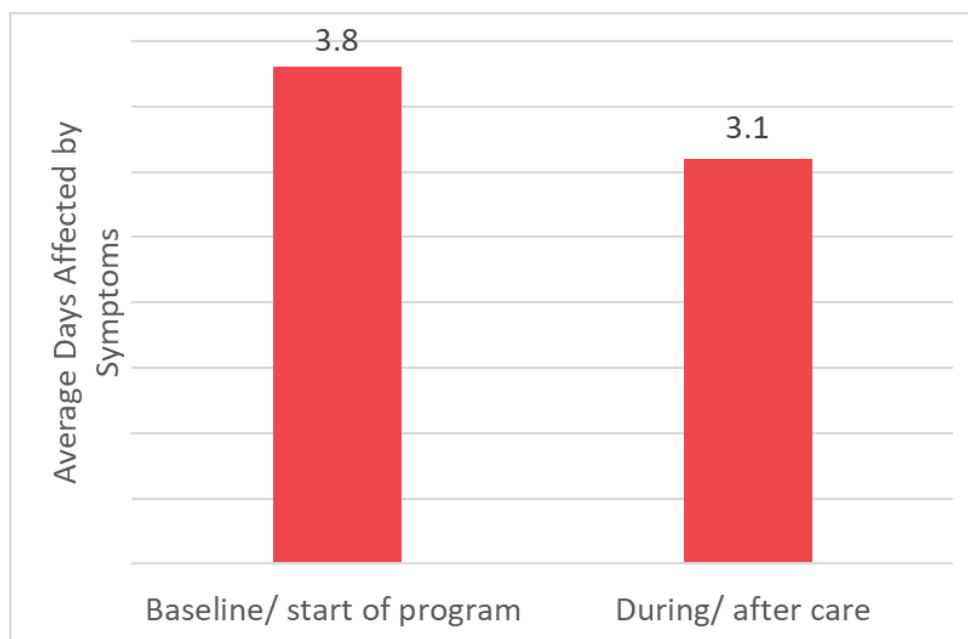
Spring Health Participant/ employee count	2,592
Median salary (US Census Bureau 2021)	\$54,339
% of salary for turnover costs (Mahan, 2020)	15%

Table 1: Turnover and Retention Costs Comparison



Findings & Validation

On average, participants gained 0.7 days of productivity from their first (baseline) assessment to their last. Before the program began, participants reported that on 3.8 of the past seven days symptoms caused them to miss school or work. This decreased to an average of 3.1 days during and after care. A group of adults with major depression or dysthymia was shown to reduce their time away from work (with or without treatment) by 0.25 days per week (Lerner & al, 2004). Spring Health participants' improvement at 0.7 days per week is 0.45 days better than the Lerner study group. See Table 2 for summary of the productivity improvement calculation.



Graph 4: Average Days reported in response to "On how many days in the last week did your symptoms cause you to miss school or work or leave you unable to carry out your normal daily responsibilities?"





Findings & Validation

1	Spring Health participants reduced their time away from work on average	0.7	days per week
2	They might have naturally reduced their time away (Lerner et al, 2004)	0.25	days per week
3	So, Spring Health participants improved their time away more than expected (Line 1 - Line 2)	0.45	days per week
4	This improvement would be expected to last	24	weeks
5	Other data		
	a) Spring Health employee participants	2,592	
	b) Annual salary assumption (US Census Bureau, 2021)	\$54,339	
6	Total value of work days gained (Line 3 X Line 4 X Line 5a X Line 5b)		\$5,850,555

Table 2: Productivity Gain Value Calculation





Findings & Validation

ROI Summary

Type	Savings	\$s	ROI
Health Plan	Total Saved by Reducing Healthcare Costs (Spring Health users have lower PMPM medical costs than similar non-users)	\$7,207,687	2.15x
Workplace	Total Saved by Increasing Productivity & Time at Work (Employees who use Spring Health for care have lower absenteeism, resulting in savings)	\$5,850,555	1.74x
	Total Saved by Reducing Employee Turnover (Employees who use Spring Health for care are more likely to be retained, leading to cost savings)	\$633,810	0.2x
(Health Plan ROI + Workplace ROI)		-	4.08x
Note. ROI multiples are based on total program costs of \$3,359,699			





Limitations

In a comparison of two matched groups, a factor that was not taken into consideration or cannot be measured may explain part of the difference between the groups' performance.





Works Cited

(2021). Full-Time, Year-Round Workers & Median Earnings by Sex & Occupation. United States Census Bureau. Retrieved from <https://www.census.gov/data/tables/time-series/demo/industry-occupation/median-earnings.html>

Lerner, D., & al, e. (2004). Unemployment, Job Retention, and Productivity Loss Among Employees With Depression . Psychiatric Services , 1371 - 1378.

Mahan, T. F. (2020). 2020 Retention Report: Trends, Reasons & Wake . Franklin, TN: Work Institute.



Validation and Credibility Guarantee

Spring Health's service achieved validation for **Savings**. Validation Institute is willing to provide up to a \$25,000 guarantee as part of their Credibility Guarantee Program. To learn more, visit

<https://validationinstitute.com/credibility-guarantee/>

Savings

Can reduce health care spending per case/participant or for the plan/purchaser overall.

Outcomes

Product/solution has measurably improved an outcome (risk, hba1c, events, employee retention, etc.) of importance.

Metrics

Credible sources and valid assumptions create a reasonable estimate of a program's impact.

Contractual Integrity

Vendor is willing to put a part of their fees "at risk" as a guarantee.



Validation Expiration: May 2024

CERTIFICATE OF VALIDATION

Applicant:

Spring Health

New York City, NY 10001, US

Product:

Spring Health services

Claim:

People who use Spring Health services have lower medical costs and lower employee turnover than similar people who have the same mental illness diagnosis and who do not use Spring Health services.

Validation Achieved:

Validated for Savings

Award Date:

August 2023

Linda Riddell
Chief Data Scientist
Validation Institute

Benny DiCecca
Chief Executive Officer
Validation Institute



About Validation Institute

Validation Institute is a professional community that advocates for organizations and approaches that deliver better health value - stronger health outcomes at lower cost. We connect, train, and certify health care purchasers, and we validate and connect providers delivering superior results. Founded in 2014, the mission of the organization has consistently been to help provide transparency to buyers of health care.

Validation Review Process

Validation Institute has a team of epidemiologists and statisticians who review each program. The team focuses on three components:

- Evidence from published literature that a similar intervention had similar results.
- The reliability and credibility of the data sources.
- The rigor of the approach to calculating results.

To achieve validation, the program has to satisfy each of these components. VI's team then summarizes the review into a report which is publicly available. Details of VI's review are available with the program's permission.