



ValidationInstitute

2023 Validation Report

Review for: Hello Heart
Validation Achieved: Savings
Valid through: October 2024



Company Profile



Hello Heart

Category:	Digital Therapeutics
Website:	https://www.helloheart.com/
Public or Private:	Private
Year Established:	2013
CEO:	Maayan Gonnen-Cohen
Company contact:	contact@helloheart.com

Description Provided by the Company:

Hello Heart is the only digital therapeutics company to focus exclusively on heart disease, the leading cause of death for U.S. adults. Through a connected device and mobile app that uses AI, behavioral science, and personalized digital coaching to drive lifestyle changes, **Hello Heart** empowers people to embrace healthier behavior, which can reduce the risks of high blood pressure and heart disease. It also helps users catch blood pressure readings that are extremely high and encourages them to talk to their doctor to identify potential risk in time. Validated in peer-reviewed studies and trusted by leading Fortune 500 companies, **Hello Heart** is easy to use and works alongside an employer's benefits ecosystem. Founded in 2013, **Hello Heart** is a member of the American Heart Association's Innovators' Network and is part of the CVS Health Point Solutions Management program.





Claim Assertion for Validation

Hello Heart users have lower medical costs for cardiovascular disease (CVD) than matched controls (non-users) who are not enrolled in the Hello Heart hypertension management program. The cost difference between Hello Heart users and matched controls is driven by decreased spending on surgery, emergency, and diagnostic services in the Hello Heart user group.





Method / Calculation / Examples

Hello Heart users who had more than three months of medical claims data available for their pre-enrollment period were matched to non-users on

- Baseline total health care costs
- Baseline cardiovascular disease (CVD) costs
- Gender
- Age
- Number of months in baseline period

The groups were 203 for Hello Heart and 200 for non-users, after removing members whose costs changed by more than \$60,000 from the baseline to the post-period. Because the matched non-users were not enrolled in Hello Heart, baseline blood pressure and change in blood pressure over time were unknown and could not be used as additional matching criteria.

The analysis focused on how much each group's annualized CVD costs changed from baseline to the post-period per participant; the calculation was also done per participant per month without annualizing the costs.

In addition, each person's use of inpatient hospital care was assessed in each time period. The number of people who had a hospital admission as well as the number of people whose days in the hospital went down from the pre- to the post-period were counted. The percentage of hospital patients whose days went down was then calculated.





Findings & Validation

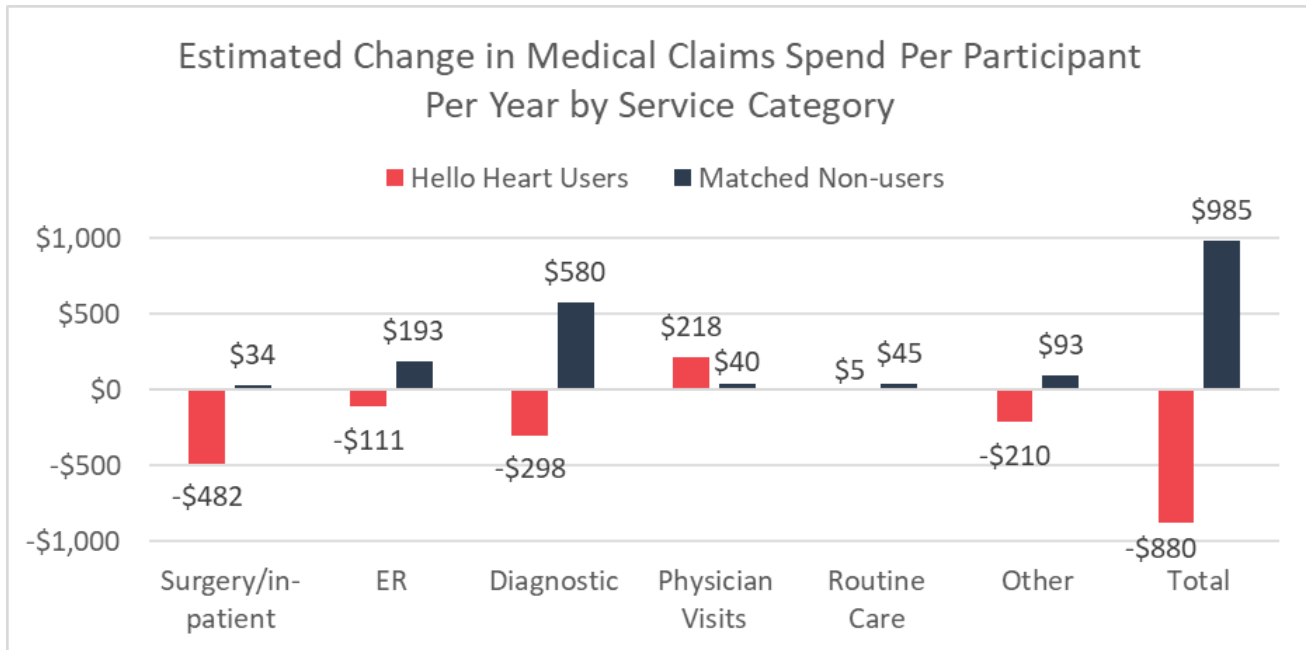
Graph 1 shows the change in CVD spending per participant from baseline to the post-period. (Note: figures for per participant per month are not shown, as the results and their significance was similar to the per participant). The majority of the difference between Hello Heart and the matched non-users came from lower use of surgery and inpatient care, as well as diagnostic services. In total, Hello Heart users' CVD costs went down \$880, while matched non-users had costs go up by \$985. This \$1865 cost savings represents a 19% reduction in total medical spending per Hello Heart user per year. Given the average start time in the program was August 2018 for Hello Heart users, this savings amounts to \$2,382 after adjusting for inflation*[1]. Hello Heart users' costs for physician visits went up more than they did for matched non-users; this was expected, as the program encourages use of preventive care.

*Inflation adjustment based on percent change from August 2018 to June 2023 specific to medical care price increases over that time period.





Findings & Validation



Graph 1

Table 1 shows the number of people in each group who had at least one day in a hospital in the baseline period, the number of people whose days in hospital care went down, and the percentage whose days went down. Hello Heart users who had a hospital stay during the baseline period were 26% more likely to have fewer days in the hospital in the post-period than matched non-users.

	Hello Heart	Matched Non-users	Difference
Number of members with > 1 day hospitalized in baseline	19	36	17
Number of members with fewer hospitalization days post	14	17	3
Percentage decreased	74%	47%	-26%

Table 1: Inpatient Hospital Days





Limitations

Enrollment in Hello Heart is voluntary, and participants may differ from non-participants on factors that were not (or cannot be) measured. Consistent with a larger Hello Heart user study [2], the users in this study with stage 2 hypertension at enrollment (Systolic Blood Pressure > 140mmHg) who reduced their blood pressure showed an average reduction of 17 mmHg. Furthermore, 75% of these stage 2 users, 64% of stage 1 users (Systolic BP > 130mmHg), and 58% of users with elevated blood pressure (Systolic BP > 120mmHg) had reduced by at least 1 mmHg one year following enrollment. These changes are similar, though not identical to the larger study [2], possibly due to the smaller sample size and variable duration of follow up measurements during the claims period. Blood pressure changes or other unknown variables may explain part of the contrast in cost savings between users and non-users.





References

[1] Rakshit S, Wager E, Hughes-Cromwick P, Cox C, Amin K. How does medical inflation compare to inflation in the rest of the economy? Peterson-KFF Health System Tracker. July 31, 2023. Accessed October 23, 2023.

https://link.edgepilot.com/s/3fe6898c/q3luJ79gMEqBBUZI4AY_gA?

[u=https://www.healthsystemtracker.org/brief/how-does-medical-inflation-compare-to-inflation-in-the-rest-of-the-economy/.](https://www.healthsystemtracker.org/brief/how-does-medical-inflation-compare-to-inflation-in-the-rest-of-the-economy/)

[2] Gazit T, Gutman M, Beatty AL. Assessment of Hypertension Control Among Adults Participating in a Mobile Technology Blood Pressure Self-management Program. JAMA Netw Open. 2021 Oct 1;4(10):e2127008. doi: 10.1001/jamanetworkopen.2021.27008. PMID: 34652447.





Validation and Credibility Guarantee

Hello Heart program 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: October 2024

CERTIFICATE OF VALIDATION

Applicant:	Hello Heart 545 Middlefield Rd, #260, Menlo Park, California 94025, US
Product:	Hello Heart program
Claim:	Cardiovascular disease medical costs went down significantly more for Hello Heart participants than for matched non-participants.
Validation Achieved:	Validated for Savings
Validation Award Date:	October 2021

Linda K. Riddell, MS
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.

