

**CASE STUDY - MULTINATIONAL EMPLOYER**

# How one large multinational employer addressed their most expensive chronic condition



## Background

A multinational employer based in the U.S. reviewed their employees' healthcare claims and observed sustained increases in spending related to hypertension. Their benefits team sought to reverse these trends and reduce healthcare costs for their most expensive chronic condition.

The employer's growth in costs is not surprising. The number of people worldwide with hypertension has doubled to 1.28 billion over the last 30 years,<sup>1</sup> and hypertension now affects 47% of U.S. adults.<sup>2</sup>

This increased rate of high blood pressure equates to a high financial cost. A recent analysis by Validation Institute found that the average total medical spending for each individual with hypertension is \$9,842.<sup>3</sup>

## Solution

To address their most expensive chronic condition, the employer selected Hello Heart. Hello Heart is the only digital therapeutics company to focus exclusively on heart health. Built by a team of clinicians, data scientists, and consumer software experts, Hello Heart's coaching app provides wellness tips that have been clinically shown in a peer-reviewed study published in a top-tier medical journal to lower blood pressure.<sup>4</sup> Each participant receives a wireless blood pressure monitor and real-time, personalized digital coaching. Hello Heart's artificial intelligence and algorithms drive an individualized, unique experience for each person based on gender, comorbidities, age, geography, and user persona.

For their program with Hello Heart, the employer identified a target population of approximately 20,000 at-risk employees with blood pressure readings above 120/80 and/or a prescription for blood pressure medication.

## Key First Year Results Based on Hello Heart Data

**66%**

average engagement rate throughout the program<sup>5</sup>

**83%**

of participants starting in stage 2 hypertension reduced their heart risk using the app<sup>5,6,7,8</sup>

**21 mmHg**

drop in systolic blood pressure for participants starting in stage 2 hypertension using the app<sup>5,6,7</sup>

**244**

members had an elevated blood pressure reading in the hypertensive crisis range and returned to a lower level using the app<sup>5</sup>

## Approach

The enrollment process was simple and effective, including in-person enrollment events that detailed how eligible employees could access the monitor and app, as well as other communications throughout the year. 42% of the employer's targeted population enrolled during the first year.<sup>5</sup>

Hello Heart's personalized and digital approach to coaching kept users engaged long term. 64% of the employer's members engaged with the app's daily insights and educational emails.<sup>5</sup> Additionally, the employer's benefits team and Hello Heart collaborated to develop an incentive, providing wellness points to employees who actively engaged with the app. The points could be used to offset future health insurance premiums.

These efforts drove a high engagement rate, with an average of 66% of enrollees engaging with the app (e.g., tracking their blood pressure, weight, and/or steps; reading insights) each quarter.<sup>5</sup>

## Results

Using the personalized coaching app's wellness tips focused on exercise, nutrition, and other lifestyle factors, 83% of participants starting in stage 2 hypertension reduced their blood pressure and lowered their heart risk after one year.<sup>5,6,7</sup> On average, they dropped their systolic blood pressure by 21 mmHg.<sup>5,6</sup> Additionally, 244 members had a blood pressure reading of 180/120 or greater (hypertensive crisis level) but then their blood pressure fell to a lower range.<sup>5</sup>



**Risk Reduction:** One study found that even a 10 mmHg reduction in systolic blood pressure reduced the risk of major cardiovascular disease events by **20%**, coronary heart disease by **17%**, stroke by **27%**, heart failure by **28%**, and all-cause mortality by **13%**.<sup>9</sup>

These clinical outcomes enabled the employer to potentially avoid significant medical costs by reducing spending on expensive surgeries and invasive procedures related to high blood pressure. Validation Institute recently found that the Hello Heart program delivered a \$1,865 per participant reduction in year 1 total medical claims.<sup>10</sup>



**ValidationInstitute**

**\$1,865**  
reduction

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costs per participant<sup>10</sup>

<sup>1</sup>NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. *Lancet*. 2021;398(10304):957-980. [https://doi.org/10.1016/S0140-6736\(21\)01330-1](https://doi.org/10.1016/S0140-6736(21)01330-1). Accessed June 8, 2022.

<sup>2</sup>Facts About Hypertension. CDC Web site. <https://www.cdc.gov/bloodpressure/facts.htm>. Published September 27, 2021. Accessed June 8, 2022.

<sup>3</sup>Figure calculated as part of Validation Institute's analysis of Hello Heart cost savings. Source: Validation Institute. 2021 Validation Report (Valid Through October 2022). [https://validationinstitute.com/wp-content/uploads/2021/10/Hello\\_Heart-Savings-2021-Final.pdf](https://validationinstitute.com/wp-content/uploads/2021/10/Hello_Heart-Savings-2021-Final.pdf). Published October 2021. Accessed June 8, 2022. (This analysis was commissioned by Hello Heart, which provided a summary report of self-funded employer client medical claims data for 203 Hello Heart users and 200 non-users from 2017-2020. Findings have not been subjected to peer review.)

<sup>4</sup>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;4(10):e2127008. <https://doi.org/10.1001/jamanetworkopen.2021.27008>. Accessed June 8, 2022. (Some study authors are employed by Hello Heart. Because of the observational nature of the study, causal conclusions cannot be made. See additional important study limitations in the publication.)

<sup>5</sup>Based on data on file at Hello Heart. Results may vary from employer to employer.

<sup>6</sup>Based on a comparison of users' average blood pressure level in their first week in the program compared to their most recent week. There were 431 participants with baseline blood pressure over 140/90 who had been enrolled in the program for one year and recorded blood pressure readings between weeks 48 and 55 of their time in the program.

<sup>7</sup>Stage 2 hypertension is defined as blood pressure equal to or above 140/90.

<sup>8</sup>Reduced heart risk is defined as a reduction in blood pressure.

<sup>9</sup>Ettehad D, Emdin CA, Kiran A, Anderson SG, Callender T, Emberson J, et al. Blood pressure lowering for prevention of cardiovascular disease and death: a systematic review and meta-analysis. *Lancet*. 2016;387(10022):957-967. [https://doi.org/10.1016/S0140-6736\(15\)01225-8](https://doi.org/10.1016/S0140-6736(15)01225-8). Accessed June 8, 2022.

<sup>10</sup>Validation Institute. 2021 Validation Report (Valid Through October 2022). [https://validationinstitute.com/wp-content/uploads/2021/10/Hello\\_Heart-Savings-2021-Final.pdf](https://validationinstitute.com/wp-content/uploads/2021/10/Hello_Heart-Savings-2021-Final.pdf). Published October 2021. Accessed June 8, 2022. (This analysis was commissioned by Hello Heart, which provided a summary report of self-funded employer client medical claims data for 203 Hello Heart users and 200 non-users from 2017-2020. Findings have not been subjected to peer review.)