

The background of the entire image is a teal-tinted photograph of two hikers standing on a mountain peak. They are seen from behind, with their arms raised in a gesture of triumph or joy. The hiker on the right is wearing a large backpack. The overall scene is bright and clear, suggesting a successful ascent.

Virginia *Pulse*  
**INSTITUTE**

**2019 HEALTHCARE INDUSTRY - BUSINESS CASE FOR WELLBEING**

# Executive Summary

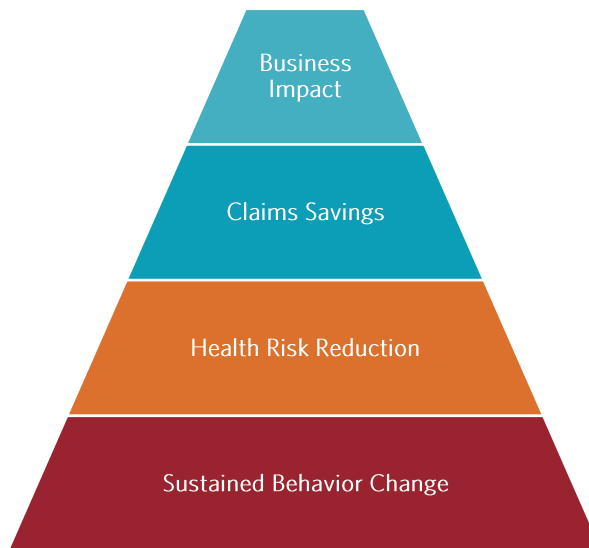
## 4:1 EXPECTED ROI FROM HEALTHCARE INDUSTRY'S INVESTMENT IN VIRGIN PULSE

Virgin Pulse Institute evaluated the potential of a Healthcare Industry wellbeing program by examining available activity, participation, outcomes, and combining it with HR/Talent data and costs verified from an average workforce size of 10,000 eligible employees.

The analysis is built on the VOI model developed from the HERO framework and leverages VP Book of Business results, case studies, and assumptions where needed.

Using a mixed methods approach to analyze our average Healthcare Industry Client's three year investments (costs detailed on slide 11), the VP Institute determined the impact of the program on productivity relative to its investments (Return on Investment, or ROI) to be 4, well over breakeven.

### VOI Framework



| Metric Evaluated                 | Client Inputs / Actual Values   | Average Savings per FTE  | Average Savings per year/ROI |
|----------------------------------|---|--------------------------|------------------------------|
| Unscheduled Absences             | Avg salary \$82,000   | \$197                    | \$683K/0.42                  |
| Turnover                         | Member/nonmember diff 54%   | \$1,248                  | \$1080.9K/0.67               |
| Worker's compensation            | Avg per person \$603.20   | \$271                    | \$940.5K/0.58                |
| Medical & prescription claims    | Avg per person \$6,800  | \$1,190                  | \$4123.5K/2.54               |
| Overall Health Risk Improvements | 43% of members who started in the moderate risk the first year moved to low risk        | Linked to outcomes above |                              |
| Increased activity, sleep etc.   | Members who started with less than recommended daily avg steps increased steps by 3,500 | Linked to outcomes above |                              |

# Absence Time

## HEALTHCARE INDUSTRY MEMBERS WILL WORK 1,381+ DAYS MORE THAN NON-MEMBERS

### Results

- Case studies found that members take 15-30% less sick time per year than non-members.
- Applying an avg 15% savings assumption results in an estimated 1,381+ days of productivity per year due to improved wellbeing.

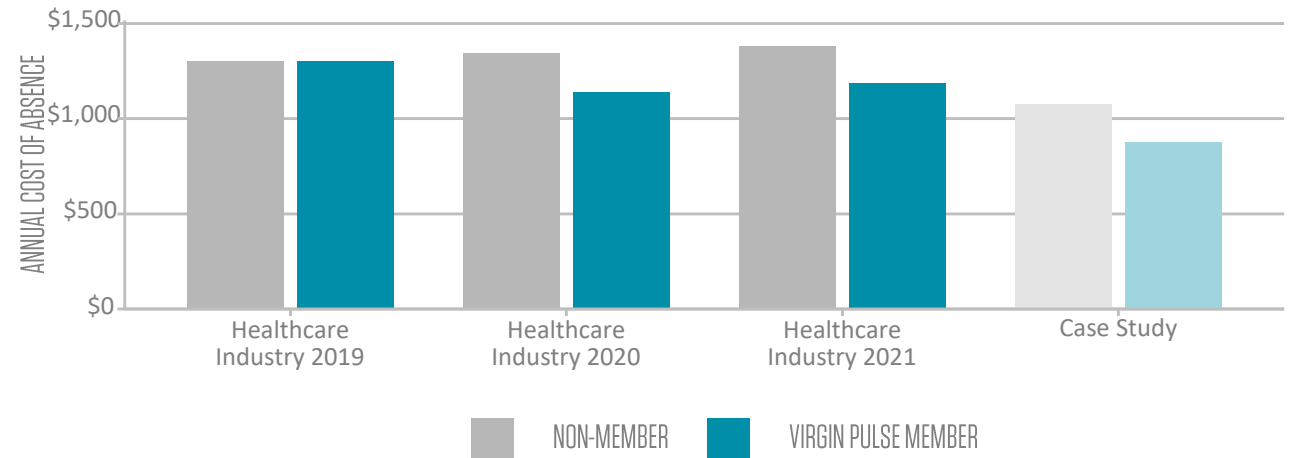
### Methodology

- Assumptions based on multiple client analyses.
- From national industry benchmarks, the average sick or unscheduled time is 33 hours/year/employee.
- Savings is calculated using the average hourly salary and the percent lowered by VP for engaged members.

### Relationship to wellbeing

- Productivity is lost when employees take unexpected time off of work. The CDC reports \$225.8 billion in productivity losses annually due to absenteeism in the USA Centers for Disease Control, 2015)
- By encouraging healthy habits like exercising and sleeping more, VP members reduce absence, thus boosting productivity.

### MEMBERS TAKE FEWER SICK DAYS



| Savings Category                     | 2019    | 2020                     | 2021                   |
|--------------------------------------|---------|--------------------------|------------------------|
| # Engaged                            | 3,465   | 3,465                    | 3,465                  |
| Employer Cost per Person             | \$1,301 | \$1,239                  | \$1,284                |
| % Lowered by Being on VP             | 0%      | 15%                      | 14%                    |
| Savings per Member                   | -       | \$201                    | \$193                  |
| <b>Total Absence Savings (range)</b> | -       | <b>\$661.6K-\$731.3K</b> | <b>\$636.1K-\$703K</b> |

Employer Cost Per Person = Avg Salary/2080 hrs per yr \* Avg Sick hours per FTE  
 Baseline Avg Sick Hours per FTE = 33 based on case studies.  
 Baseline Avg Salary = \$82,000. Assume 3% annual increase.

# Turnover

## MEMBERS WILL BE 54% MORE LIKELY TO STAY AT HEALTHCARE INDUSTRY, SAVING OVER \$927.8K PER YEAR IN TURNOVER COSTS DUE TO VP PROGRAM

### Results

- VP Book of Business turnover is 31% lower for members than non-members.
- We expect a drawdown on impact over time as more employees join and reap the benefits of the Virgin Pulse program.

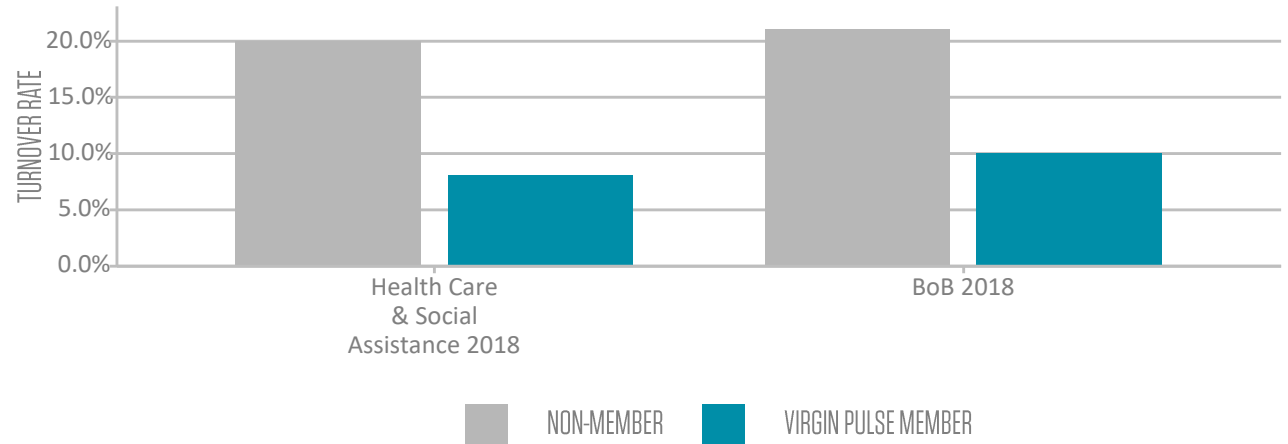
### Methodology

- Overall turnover is calculated from eligibility files.
- Employees removed from the eligibility file are assumed to have left the company.
- Percent lowered by VP represents the difference in non-member and member turnover rates.
- VP attributes 25% of turnover reduction of wellbeing.

### Relationship to wellbeing

- The cost of replacing an employee is estimated to be 30-150% of the employee's annual salary. (How Much Is Conflict Costing You?, John Ford and Associates)
- Increasing employee retention with Virgin Pulse can amount to significant savings.

### MEMBERS TURNOVER LESS THAN NON-MEMBERS



| Savings Category                      | 2019    | 2020                 | 2021                 |
|---------------------------------------|---------|----------------------|----------------------|
| # Engaged                             | 3,465   | 3,465                | 3,465                |
| Employer Cost per Person              | \$2,214 | \$1,596              | \$1,785              |
| % Lowered by Being on VP              | 0%      | 60%                  | 48%                  |
| Savings per Member                    | -       | \$1,368              | \$1,127              |
| % VP takes credit for                 | -       | 25%                  | 25%                  |
| <b>Total Turnover Savings (range)</b> | -       | <b>\$1.1M-\$1.2M</b> | <b>\$927.8K-\$1M</b> |

# Workers' Compensation

## HEALTHCARE INDUSTRY MEMBERS CAN SAVE \$1.8M+ IN WORKER'S COMP COSTS DURING THE PROGRAM

### Results

- Case study indicates 3-yr industry rates at work are 2x higher in non-members than members.
- Average workers compensation payments are 3x higher in non-members than members.

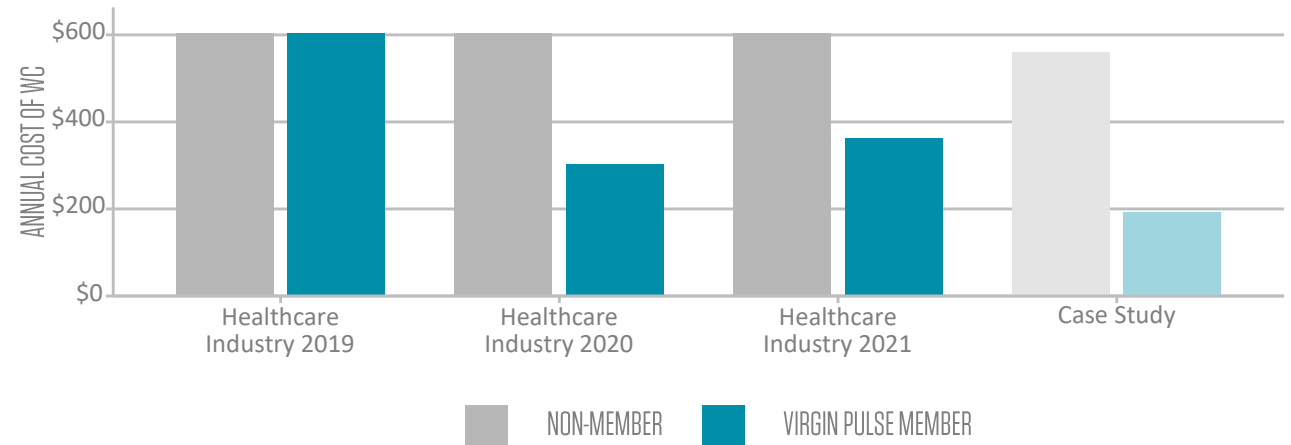
### Methodology

- Percent lowered by VP is calculated from case study results done with large transportation client, results similar to other studied clients.
- Study required full control year before starting VP and 2 years with VP.
- Members include anyone registering for VP before the first of that calendar year.

### Relationship to wellbeing

- Healthier employees are more focused and less prone to accidents.
- Employers report ~4 Million non-fatal workplace injuries annually and over 55,000 deaths due to workplace injuries. 'The health of workers is tied to the health and productivity of organizations.' (Centers for Disease Control, 2015)

### MEMBERS HAVE LOWER WC COSTS



| Savings Category                | 2019  | 2020                   | 2021                     |
|---------------------------------|-------|------------------------|--------------------------|
| # Engaged                       | 3,465 | 3,465                  | 3,465                    |
| Employer Cost per Person        | \$603 | \$452                  | \$483                    |
| % Lowered by Being on VP        | 0%    | 50%                    | 40%                      |
| Savings per Member              | -     | \$302                  | \$241                    |
| <b>Total WC Savings (range)</b> | -     | <b>\$992.8K-\$1.1M</b> | <b>\$794.2K-\$877.8K</b> |

Employer Cost Per Person = total paid/total eligibles

# Medical & RX Claims

## HEALTHCARE INDUSTRY MEMBERS WILL HAVE A 16% LOWER BENEFITS COST

### Results

- Across VP Book of Business (BoB), members reduce claims costs by 3-40%.
- Member costs are 16% less on average across all companies studied.
- For the Health Care & Social Assistance case study, member costs were 6% less than non-member costs.

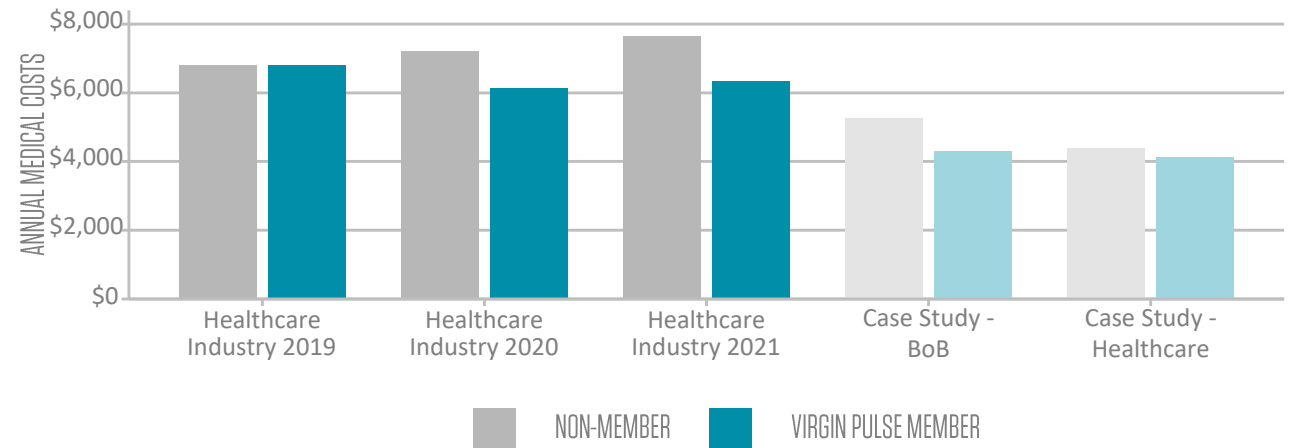
### Methodology

- Assumptions based on third-party and internal case studies, both requiring a full control year before starting VP and 2+ years with VP.
- Baseline determined using risk, cost, demographic, and propensity-matched cohorts, then calculated differences in differences over time between members and non-members.

### Relationship to wellbeing

- From 2016 to 2017, health care costs increased for 79% of organizations. (The Society for Human Resource Management, 2017)
- Healthy workers require less medical care, which translates to lower medical insurance costs. For example, employees with bad diets cost 40% more in health claims than those with healthy diets. (The University of Michigan, 2015)

### MEMBERS HAVE LOWER MEDICAL COSTS



| Savings Category                     | 2019    | 2020                 | 2021                 |
|--------------------------------------|---------|----------------------|----------------------|
| # Engaged                            | 3,465   | 3,465                | 3,465                |
| Employer Cost per Person             | \$6,800 | \$6,667              | \$6,991              |
| % Lowered by Being on VP             | 0%      | 15%                  | 17%                  |
| Savings per Member                   | -       | \$1,081              | \$1,299              |
| <b>Total Medical Savings (range)</b> | -       | <b>\$3.6M-\$3.9M</b> | <b>\$4.3M-\$4.7M</b> |

Total costs based on national averages and SHRM forecasted increase.

# Overall Health Risk

## OVERALL, VIRGIN PULSE MEMBERS BECOME HEALTHIER AFTER ENGAGING IN VIRGIN PULSE

### Results

- Across our Book of Business, 43% of members with moderate risk in 2017 moved to low risk.
- 77% of low risk members maintained this status.
- 29% of members starting with high risk moved to a lower risk category.

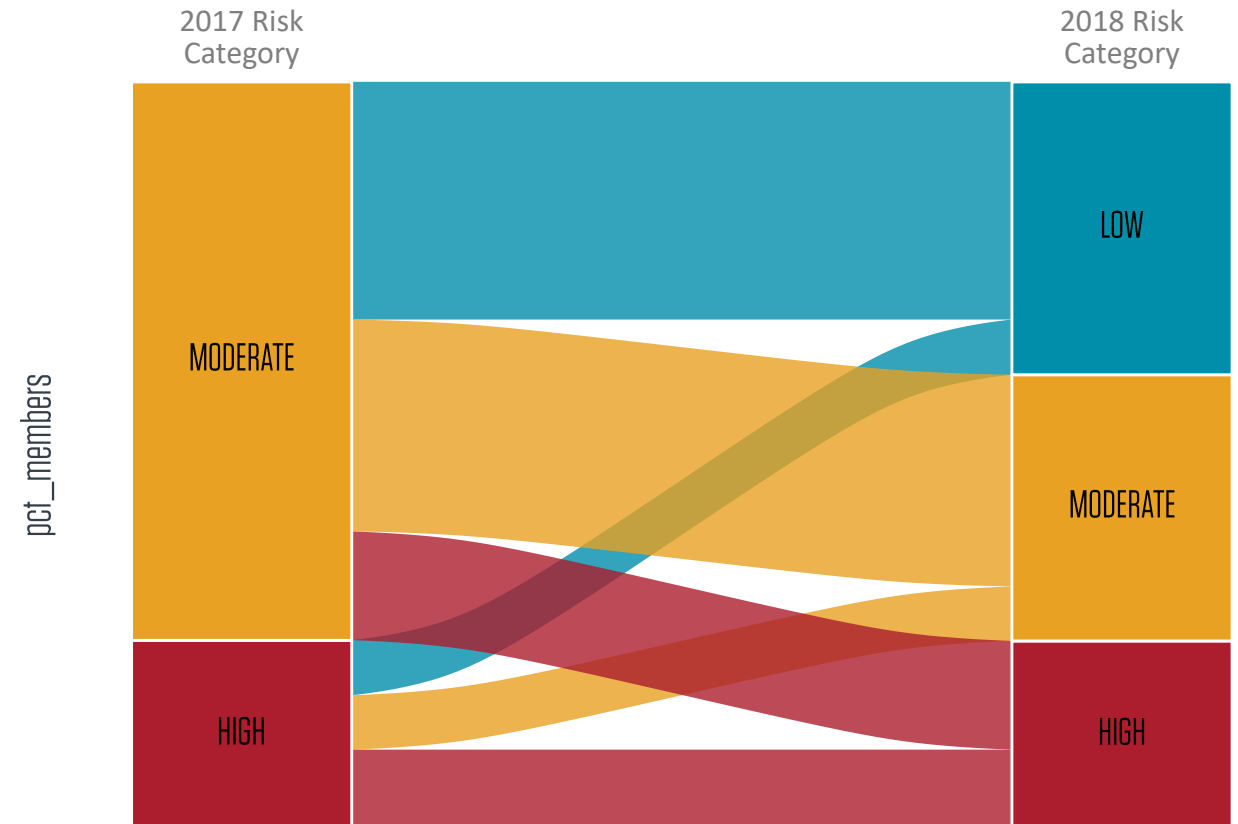
### Methodology

- Data from HRA completions.
- Risk indicators based on blood pressure, BMI, cholesterol, diabetic level, diet, activity, sleep, and stress.
- Risk categories: High = 5+ risks; Moderate = 3-4 risks; Low = 0-2 risks

### Relationship to wellbeing

- 'One out of every four dollars employers pay for health care is tied to unhealthy lifestyle choices or conditions like smoking, stress and obesity... Modifiable risks are conditions or behaviors that employees can improve or eliminate by making healthier choices.' (University of Michigan, 2015)

### MEMBERS HEALTH RISKS IMPROVE



BoB HRA Analysis 2017-2018. n = 261,755 members.  
Risk groupings based on combined activity levels & health risk indicators.

# Low Activity Employees

## VIRGIN PULSE MEMBERS STARTING AS "SEDENTARY" DOUBLED THEIR DAILY ACTIVITY LEVELS

### Results

- Health Care & Social Assistance low starters are beating the national average of 5,900 daily steps after 1 year of program use (Walking Behavior Lab at Pennington, LSU).
- After two years of program use, these low starters increased their average daily steps by 3,500!

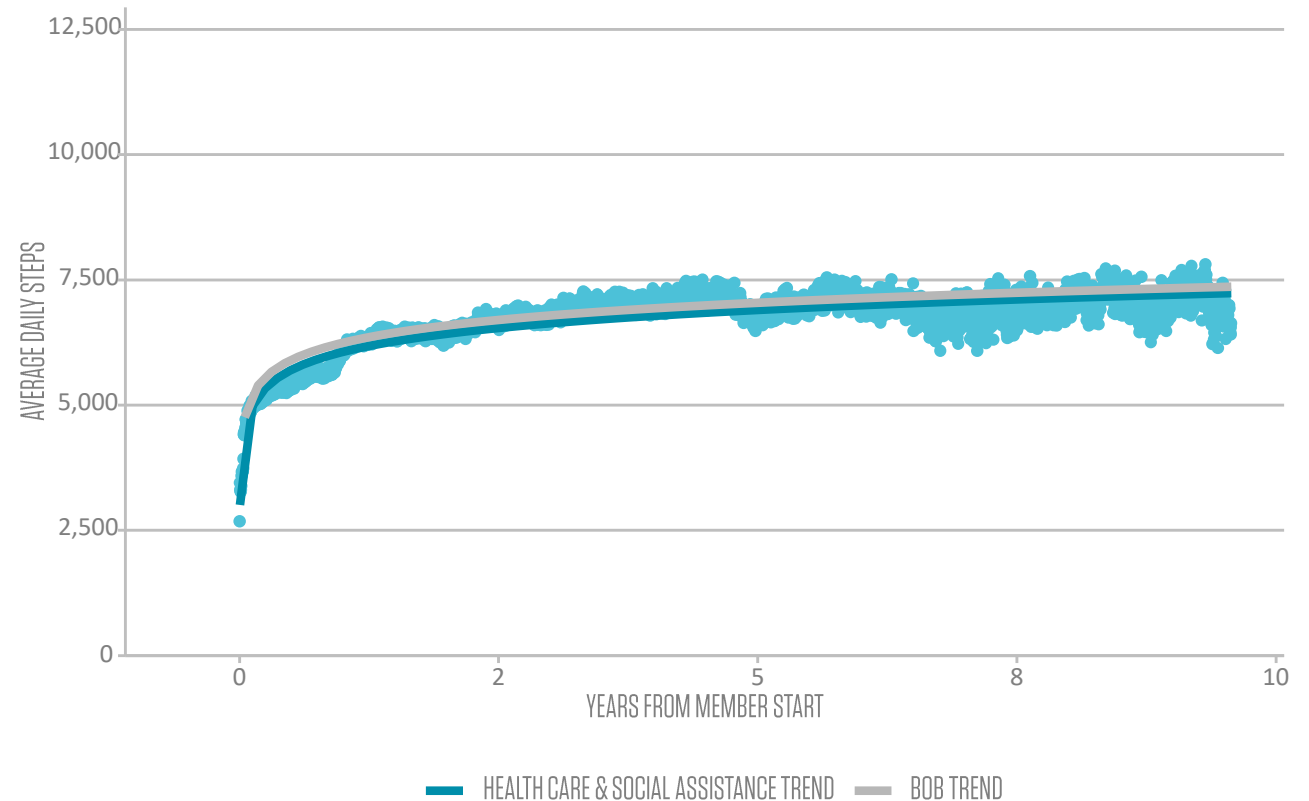
### Methodology

- Steps include validated sources only.
- Years are calculated from member's first step tracking.
- To be considered a 'low starter', members must average <5,000 steps per day in their first two weeks since registration.

### Relationship to wellbeing

- Getting people moving is one of the most important factors in raising workforce wellbeing.
- Regular physical activity can increase productivity and work performance by improving concentration and focus. (Harvard Business Review, 2014)

### AVERAGE STEPS INCREASE FOR INACTIVE MEMBERS



For Health Care & Social Assistance, N = 14,883,579 total data points and 53,858 members. Isolated to members averaging < 5,000 steps in their first 2 weeks.





**THANK YOU**  
QUESTIONS?



# Modeling Inputs And Assumptions

| Inputs                | 2019     | 2020     | 2021     | Notes  |
|-----------------------|----------|----------|----------|--|
| Enrollment rate       | 63%      | 63%      | 63%      | Industry average based on VP data  |
| Engagement rate       | 55%      | 55%      | 55%      | Industry average based on VP data  |
| Eligible employees    | 10,000   | 10,000   | 10,000   | Confirmed eligibles on the Medical Plan (10,000 total)   |
| Enrolled              | 6,300    | 6,300    | 6,300    | Based on eligible employees and enrollment rate  |
| Engaged               | 3,465    | 3,465    | 3,465    | Based on eligible employees and engagement rate  |
| Annual salary         | \$82,000 | \$84,460 | \$86,994 | Annual Salary, assumes 3% annual inflation/increase from Healthcare Industry   |
| Sick hours/FTE        | 33       | 33       | 33       | Average sick hours confirmed by Healthcare Industry  |
| Absence savings       | 0%       | 15%      | 14%      | Annual percentage savings in reduced sick time absence taken per member, assumption (lowest observed of VP BoB studies)          |
| Benefits cost/FTE     | \$6,800  | \$7,208  | \$7,640  | Average annual medical and prescription insurance costs per FTE, assumes 6% annual inflation/increase (from Healthcare Industry) |
| Benefits savings      | 0%       | 15%      | 17%      | Annual percentage savings in employer-paid insurance costs per member, assumption (average of VP ROI studies)                    |
| Workers' comp/FTE     | 603.2    | 603.2    | 603.2    | Annual Worker's Comp payout \$6,032,000 provided by Healthcare Industry divided by total eligible                                |
| Workers' comp savings | 0%       | 50%      | 40%      | Annual differential in employer-paid claims for Worker's Compensation  |
| Turnover cost/FTE     | \$2,214  | \$2,280  | \$2,349  | 30.0% of annual salary x turnover rate, from Healthcare Industry   |
| Turnover rate         | 9%       | 9%       | 9%       | Average annual turnover rate from Healthcare Industry  |
| Turnover savings      | 0%       | 60%      | 48%      | Annual difference in turnover between members and non-members, based on VP BoB data  |

# Annual Impact Summary

ESTIMATED ELIGIBILITY & ENROLLMENT

+

CASE STUDY & BOOK OF BUSINESS ESTIMATES

| Category                    | 2020          | 2021          |
|-----------------------------|---------------|---------------|
| Total Annual Rewards Payout | \$0.8M        | \$0.8M        |
| Software Cost               | \$0.5M        | \$0.5M        |
| Device Cost                 | \$0.3M        | \$0.3M        |
| Other                       | \$0M          | \$0M          |
| <b>Total Investments</b>    | <b>\$1.6M</b> | <b>\$1.6M</b> |

| Savings Category          | 2020               | 2021                 |
|---------------------------|--------------------|----------------------|
| Absence reduction         | \$661.6K-\$731.3K  | \$636.1K-\$703K      |
| Retention Impact          | \$1.1M-\$1.2M      | \$927.8K-\$1M        |
| Workers' comp. prevention | \$992.8K-\$1.1M    | \$794.2K-\$877.8K    |
| Medical costs savings     | \$3.6M-\$3.9M      | \$4.3M-\$4.7M        |
| <b>Total Savings</b>      | <b>\$6.3M-\$7M</b> | <b>\$6.6M-\$7.3M</b> |

|     |     |     |
|-----|-----|-----|
| ROI | 4.1 | 4.3 |
|-----|-----|-----|

# References And Definitions

- <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/2017%20Employee%20Benefits%20Report.pdf>
- <https://www.forbes.com/sites/rickungar/2012/04/30/obesity-now-costs-americans-more-in-healthcare-costs-than-smoking/#6ba4d4d53d79>
- <https://www.cdc.gov/niosh/twh/topreasons/infographic.html>
- <https://www.cdcfoundation.org/pr/2015/worker-illness-and-injury-costs-us-employers-225-billion-annually>
- [\*How Much Is Conflict Costing You?\*, John Ford and Associates](#)
- <http://ns.umich.edu/new/releases/23360-unhealthy-choices-cost-company-health-care-plans-billions-of-dollars>
- <https://hbr.org/2014/10/regular-exercise-is-part-of-your-job>
- [Human Capital Management Institute Study 2017](#)
- [https://www.bls.gov/news.release/archives/ecec\\_03192019.pdf](https://www.bls.gov/news.release/archives/ecec_03192019.pdf) (workers comp)
- [https://www.bls.gov/cps/cpsaat47.htm#cps\\_eeann\\_abs\\_ft\\_occu\\_ind.f.1](https://www.bls.gov/cps/cpsaat47.htm#cps_eeann_abs_ft_occu_ind.f.1) (absence)
- <https://business.linkedin.com/talent-solutions/blog/trends-and-research/2018/the-3-industries-with-the-highest-turnover-rates> (turnover rate)
- [https://www.mfrall.com/attachments/0003/6478/Manufacturing\\_Trends\\_Report\\_2017.pdf](https://www.mfrall.com/attachments/0003/6478/Manufacturing_Trends_Report_2017.pdf) (turnover rate)
- <https://www.bls.gov/news.release/pdf/jolts.pdf> (turnover cost)

# MEASURE IMPACT WITH THE VOI MODEL

Virgin Pulse's Measurement Framework clarifies success at both the individual & organizational levels, in over a dozen key metric areas, & accommodates varied business needs: measuring more, comprehensively

