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Effectiveness of Health and Wellness Programs

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Effectiveness of Health and Wellness Programs

A look at the effectiveness and goals of health and wellness programs offered by insurers and employers in the U.S.

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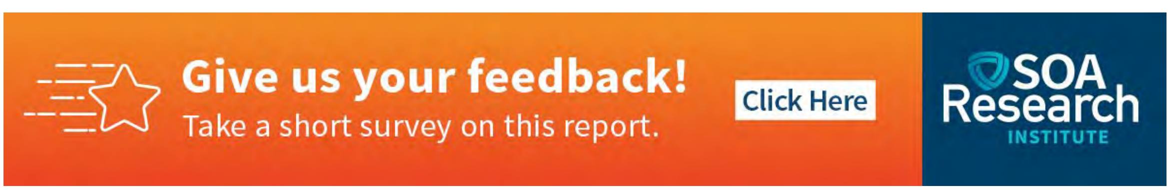

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Executive Summary

Chronic conditions like heart disease, diabetes, and obesity are becoming more prevalent in the U.S. despite public health efforts to reduce these conditions. More than half of American adults have at least one chronic disease and the cost of treating these diseases make up a significant portion of the annual $4.1 trillion spent on health care in the U.S. Given the significant cost of treating these diseases, insurers and employers have looked to health and wellness programs to help reduce the prevalence of chronic conditions in their covered populations.

The focus on health and wellness programs is two-fold. These programs are a way to attract and retain employees and policyholders (which improves retention and persistency), while at the same time addressing significant drivers of health care, mortality, and productivity costs.

However, there is limited published data and industry survey results demonstrating the outcomes of health and wellness programs for insurers and employers. Health and wellness programs are designed to improve health outcomes and increase productivity by helping participants modify lifestyle risk factors that are associated with chronic conditions. However, in order for these to reduce cost, they must be effective at changing behavior and the behavior change must result in measurable cost savings that can be attributed to the program. It is difficult to prove this connection given the long time horizon for cost savings to develop (i.e., the benefit of changes in lifestyle risk factors may not be realized for many years after the intervention), the turnover in the population (whether employees or policyholders), and difficulty in collecting necessary data.

Research does show that changes in behavior, and their impact on health status, can improve health outcomes and reduce cost, but there is limited evidence to show that health and wellness programs are successful at changing behavior. The more targeted the intervention is, the more likely it is to impact behavior. This can be seen through the engagement rates and participation rates of a program. Key drivers of participation rates include:

- whether a program is new or well-established,
- how much the program is promoted to policyholders or employees,
- how easy or difficult the program activities are to complete,
- how easy or difficult the program technology is to use,
- an individual's interest and availability to participate,
- the level and types of rewards or incentives, and
- an individual's perception of the program value (i.e., is the reward/outcome worth their effort).

Although insurers and employers have not demonstrated cost savings, they do review other measures to determine the success of their programs. These measures include:

- participation rate (% of individuals joining the wellness program when offered),
- engagement rate (% of individuals using the wellness program once enrolled),
- participant satisfaction,

- quantifiable behavior changes (such as increased activity levels recorded by a device),
- incentives/rewards paid out,
- number of health risk assessments completed, and
- retention (of customers or employees).

An expert panel discussion that was held by the SOA Research Institute expanded on these ideas by discussing how keys to wellness programs may work best today and in the future. Key observations were that the best chances for success are where insurance companies have strong ties to their customers, and where wellness is more embedded in the overall company strategy instead of a simpler product offering. Wellness program may have different opportunities around the world and can be more beneficial where there is an ability to more directly link public healthcare delivery to individual data and note when health interventions are taking place and where wellness partners (such as fitness centers or grocery store chains) are more concentrated and less fragmented. Additionally, optimism for the future lies in leveraging off working with the increasing amount of data available through smartphones and technology.

Looking forward, insurers and employers currently offering these programs plan to continue. Some employers also plan to expand their offerings to include financial wellness and expand their mental health programs. Both insurers and employers want to continue to improve the technology they use in their health and wellness programs. For insurers and employers reluctant to offer these programs, more concrete evidence of cost savings may be needed. Additional research is needed to determine if health and wellness programs produce cost savings in the long run.

Section 1: Background and Methodology

In this section, we provide background information regarding the purpose of health and wellness programs. We also discuss the approach taken to achieve our research goal which was to understand the effectiveness of health and wellness programs offered by insurance companies and corporations in the U.S.

1.1 BACKGROUND

The prevalence of chronic conditions has increased significantly over the past few decades in many parts of the world, including the United States. According to the Centers for Disease Control (CDC), 60% of adults in the U.S. have a chronic disease and 40% have two or more chronic diseases. The CDC defines chronic conditions as those that last for one year or more and either require ongoing medical attention, limit activities of daily living, or both. Some of the top chronic diseases in the U.S. include heart disease, diabetes, and obesity and many chronic diseases exist concurrently. For example, obesity is a risk factor for both diabetes and heart disease, and diabetes is a risk factor for heart disease. During the period 2017-2018, the rates of obesity in the United States quadrupled for males from 10.7% to 43.5% since the early 1960s. Over the same time period, obesity rates nearly tripled for females, growing from 15.8% to 42.1%.[1] Similarly, researchers project that between 2015 and 2030, rates of type 1 and 2 diabetes will increase by 54% to more than 54.9 million Americans, and that total annual medical and societal costs related to diabetes will increase by 53% to more than $622 billion.[2] The costs of treating chronic diseases make up a significant portion of the $4.1 trillion spent annually on national health care. The annual cost from obesity, heart disease and diabetes in terms of medical costs and lost productivity amount to $863 billion dollars per year in the U.S., or about $2,583 per person per year. The CDC notes that many chronic conditions are caused by the following lifestyle risk factors: tobacco use or secondhand smoke exposure, poor nutrition, physical inactivity, and excessive alcohol use.[3]

Due to the rising prevalence and associated costs related to chronic conditions, insurance companies began to offer health and wellness programs as part of their offerings to policyholders. While these programs were first introduced by health insurers, they are increasingly being offered by life insurers as well. These programs target the lifestyle risk factors that are known to impact chronic illness. Health and wellness programs are designed to promote healthier lifestyles, prevent chronic diseases, reduce morbidity and mortality, and ultimately reduce insurance costs.

Employers also offer health and wellness programs as part of their employee benefits packages to accomplish similar goals of improving employee performance, and lowering costs associated with medical expenses, absenteeism and presenteeism (being present at work but not fully productive). The Affordable Care Act (ACA) encouraged firms to adopt wellness programs by increasing the allowable participation incentives from 20% up to 30% of the total cost of health insurance coverage, and up to 50% for smoking cessation programs.[4]

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[1] Prevalence of Overweight, Obesity, and Severe Obesity Among Adults Aged 20 and Over: United States, 1960–1962 Through 2017–2018. Centers for Disease Control. December 2020. https://www.cdc.gov/nchs/data/hestat/obesity-adult-17-18/obesity-adult.htm. Accessed August 30, 2023.

[2] Rowley WR, Bezold C, Arikan Y, Byrne E, Krohe S. Diabetes 2030: Insights from Yesterday, Today, and Future Trends. Popul Health Manag. 2017 Feb;20(1):6-12. doi: 10.1089/pop.2015.0181. Epub 2016 Apr 28. PMID: 27124621; PMCID: PMC5278808.

[3] About Chronic Diseases. Centers for Disease Control. https://www.cdc.gov/chronicdisease/about/index.htm. Accessed December 1, 2023.

[4] Klinger, Lisa. "How Wellness Program Incentives Affect Affordability and MV" February 2018. https://news.leavitt.com/employee-benefits-compliance/wellness-programs/wellness-program-incentives-affect-affordabilityand-mv/#:~:text=The%20ACA%20increased%20the%20maximum%20HIPAA%20incentive%20for,to%2050%25%20for%20tobacco%20cessation%20or%20reduction%20programs. Accessed October 4, 2023.

The 2023 Employer Health Benefits Survey conducted by the Kaiser Family Foundation found that most firms offer health and wellness programs. The report was based on data collected from 2,133 interviews with non-federal public and private firms ranging from small firms (3-199 workers) to large firms (200 or more workers). Of the firms that offer health benefits, 62% of small firms and 80% of large firms offer at least one of these three programs:

- Smoking cessation (offered by 42% of small firms and 69% of large firms)
- Weight loss programs (offered by 39% of small firms and 61% of large firms)
- Other lifestyle or behavioral coaching programs (offered by 46% of small firms and 80% of large firms)

The programs may be administered by the firm, an insurer, or by another third party.[5]

Together, corporations have spent $61.2 billion on wellness programs, and these expenditures are expected to exceed $94 billion by 2026.[6] However, while such wellness programs are designed to encourage preventative care and discourage unhealthy behaviors like inactivity, overconsumption of processed foods, or smoking, there has been limited evidence to date regarding their effectiveness.

1.2 METHODOLOGY

In order to assess the effectiveness of health and wellness programs in the U.S., we first conducted a literature review. We reviewed a number of published studies to see what effect health and wellness programs can have on insurer and employer claim costs. We selected peer-reviewed journal articles wherever possible, but also included relevant industry articles and studies. We found limited evidence regarding the effectiveness of health and wellness programs (discussed further in section 2). Given the limited evidence, we focused on key drivers of effective health and wellness programs, as well as areas for future research.

We also collected input from the Project Oversight Group (POG) regarding their experience with health and wellness programs offered by insurers and employers. Working with the POG, we identified experts in wellness and developed a questionnaire to obtain input from this group of experts. The resulting group of experts included individuals at a number of insurance companies, wellness program providers, and corporations with employee wellness programs across the U.S. The questions included inquiries regarding the incentives offered to policyholders/employees, the metrics used to assess the effectiveness of the programs, the number and percentage of participants, and their disposition toward either expanding or contracting their wellness programs in the future. We ultimately collected feedback from 10 respondents. Although the sample size reflects a relatively small portion of the market, the findings illustrate key themes and considerations (discussed further in section 4).

In addition, the Society of Actuaries Research Institute gathered together a panel of industry experts for an interactive discussion on February 8, 2024. The panel discussed a wide variety of topics surrounding wellness programs in order to summarized potential drivers of wellness program results.

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[5] 2023 Employer Health Benefits Survey. Kaiser Family Foundation. October 18, 2023. https://www.kff.org/report-section/ehbs-2023-section-12-health-screening-and-health-promotion-and-wellness-programs-and-disease-management/. Accessed December 1, 2023.
[6] Miller, Stephen. "Study Stokes Fresh Scrutiny of Wellness Programs' Value?" June 2021. https://www.shrm.org/resourcesandtools/hr-topics/benefits/pages/study-stokes-fresh-scrutiny-of-wellness-programs-value.aspx Accessed March 2, 2023.

Section 2: Literature Review on the Efficacy of Wellness Programs

Our review of available literature indicates that there are limited published results on the efficacy of health and wellness programs to reduce insurer or employer costs. In a systematic review published in 2019 in the *American Journal of Preventive Medicine*, researchers found 25 articles published before 2019, which included an economic evaluation of a worksite wellness program in the U.S. that lasted for at least four weeks and targeted at least one of the following behaviors: physical activity, healthy diet, tobacco use, and harmful alcohol consumption. Only two of the studies, however, were found to have high methodologic quality and low risk for selection bias.[7] So, while articles do exist on the topic, it is difficult to draw conclusions given the inherent concerns regarding quality and bias. We note that while there it is clear evidence that healthy lifestyles generally lead to improved health outcomes, it is unclear how effective health and wellness programs are at modifying behavior and, if so, to what extent that translates to reduced costs.

In order to demonstrate the effectiveness of health and wellness programs, there must be evidence that they impact behavior and that the behavior change ultimately reduces insurer or employer costs. Therefore, we explored the following key questions:

- Do changes in behavior related to lifestyle risk factors result in improved health outcomes?
- Does health status (the combination of behavior and other factors) contribute to cost?
- Do health and wellness programs effectively change behavior?
- Is there evidence of reduced costs and improved outcomes from employer health and wellness programs?
- Is there evidence of reduced costs and improved outcomes from life insurer health and wellness programs?

2.1 IMPACT OF BEHAVIOR AND HEALTH STATUS ON HEALTH OUTCOMES AND COST

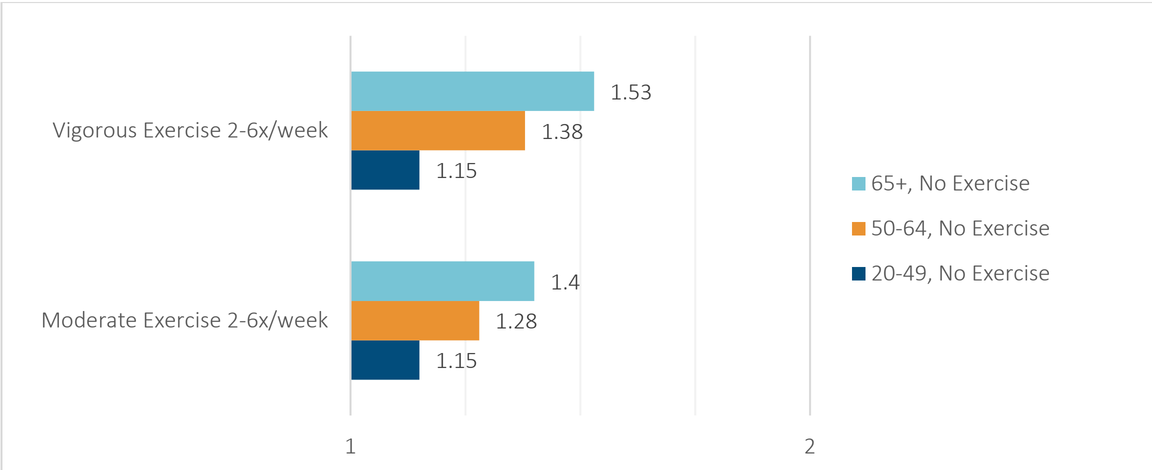
We first considered whether the lifestyle changes promoted by health and wellness programs, such as increased activity levels, would be expected to have a definitive impact on health outcomes. In one study, RGA analyzed health survey data from the CDC. They found that all-cause mortality decreased for all age groups for those who took between 5,200+ steps per day relative to those who took fewer than 5,200 steps per day. Moreover, for all age categories, all-cause mortality hazard ratios increased significantly for those who did not exercise relative to those who engaged in either moderate or vigorous exercise 2-6 times per week. These hazard ratios are essentially a multiple for the chance of dying in a particular year so, for example, those aged 65+ years old who do not exercise are more than 1.5 times as likely to die in a given year than those aged 65+ who exercise vigorously 2-6x per week. This effect was strongest for those aged 65+, with weaker effects for those aged 50-64, and the weakest effects for those aged 20-49 (see figure 1 below).[8] Increased activity levels did have a favorable impact on mortality.

[7] Baid, Drishit, et al. Return on Investment of Workplace Wellness Programs for Chronic Disease Prevention: A Systematic Review. *American Journal of Preventive Medicine*. May 2021.

[8] RGA. The Case for Wellness Programs in Life and Health Insurance June 22, 2022. https://www.rgare.com/knowledge-center/media/articles/the-case-for-wellness-programs-in-life-and-health-insurance. Accessed August 29, 2023

Figure 1

ALL-CAUSE MORTALITY HAZARD RATIOS (MEDIAN VALUE)– NO EXERCISE VS 2-6 TIMES PER WEEK, EXCLUDING THOSE UNABLE TO EXERCISE BY AGE BAND



Source: RGA. "The Case for Wellness Programs in Life and Health Insurance" June 22, 2022. https://www.rgare.com/knowledge-center/media/articles/the-case-for-wellness-programs-in-life-and-health-insurance. Accessed August 29, 2023.

We also wanted to understand if health status had an impact on costs (and, therefore, if improving health status could reduce costs). In a study published in the *Journal of Occupational and Environmental Medicine* in 2006, Yen and colleagues examined the excess costs of time away from work, medical claims, pharmacy claims, and total costs associated with health-related risks. They studied a Midwest utility company where employees were given a cash payment for completing a health risk appraisal (HRA). This provided health status information for participating employees. The study included a total of 4,266 employees (2,082 completed the HRA). Individuals who completed the HRA were assigned a risk status (low, medium, or high) and those who did not complete the HRA were considered nonparticipants. Although the risk status of the nonparticipants was unknown, the researchers conducting the study assumed that they were not 100% low risk and, therefore, excess costs would still be expected. The results showed that individuals who were medium risk, high risk, or nonparticipants were significantly more likely to be high cost (in the top 20th percentile of cost). The researchers controlled for gender, age, and employment status. Table 1 below shows the adjusted odds ratio of being high cost relative to low risk individuals. For example, as compared with low risk individuals, medium risk individuals were 2.22 times more likely to have high total costs.

Table 1

ADJUSTED ODDS RATIO OF BEING HIGH COST

Risk Level	Study Sample	Time Away	Medical Claims	Pharmacy Claims	Total Cost
Nonparticipants	2,184	1.67	1.40	1.63	1.99
Medium Risk	498	1.72	1.84	2.37	2.22
High Risk	244	2.22	3.01	4.12	3.97

Source: Yen, Louis, et al. 2006. Financial Costs Due to Excess Health Risks Among Active Employees of a Utility Company. *Journal of Occupational and Environmental Medicine*, 48(9):896-905. Doi: 10.1097/01.jom.0000235987.75368.d0, PMID: 16966956, https://pubmed.ncbi.nlm.nih.gov/16966956/.

The study also estimated the total costs and excess costs from health-related risk by cost measure. For the total employee group (not just those who participated in the HRA), they estimated that the excess cost from health-related risks increased costs by 39% for time away from work, 52% for medical claim costs, 9% for pharmacy claim costs, and 32% for total cost.[9] The study shows that health-related risk is a significant driver of increased cost, both from a productivity and claim cost perspective.

2.2 IMPACT OF HEALTH AND WELLNESS PROGRAMS ON BEHAVIOR

Next, we wanted to understand whether health and wellness programs could effectively change behavior. According to Goetzel, et al, in order to be successful, health and wellness programs need to take into account behavior change science, gamification, ease-of-use, loss aversion, and social norms in order to encourage healthy behaviors in policyholders. For example, by decreasing premiums for policyholders who walk a certain number of steps each day, companies can gamify healthy behavior (i.e., make it feel like playing a game).[10] In a report published by the RAND Corporation, they studied the impact of incentives for physical activity offered by the multi-national insurance group, Vitality. One incentive is Vitality Active Rewards with an Apple watch, which rewards individuals for reaching different thresholds of physical activity. It is a "loss-framed" incentive where the individual pays a different monthly repayment amount for their Apple watch depending on their level of physical activity. The study looked at experience in the United Kingdom, the United States, and South Africa and provided results separately for each country. There were over 8,000 individuals in the study from the U.S. who had the incentive. The researchers found that total activity days increased 30.6% or 4.7 days for individuals with the incentive. They also found that there was an increase of 52.4% or 1.2 days for advanced activity days, which shows that not only did overall activity levels increase, but even the intensity of activity increased. The study also found that obese individuals, an at-risk sub-population, had an increase in total activity days of 200% or 1.8 days. The researchers noted that the uptake rate of the incentive was generally lower among this sub-population.[11] This is one example where the "loss-framed" incentive successfully increased activity levels and intensity of activity.

2.3 EFFECTIVENESS OF EMPLOYER HEALTH AND WELLNESS PROGRAMS

We then looked for literature on the efficacy of workplace wellness programs in reducing costs, given that we were not able to find published results from health insurers. Health and wellness programs can impact costs through improved productivity for the company, as well as reduce insurance costs, particularly those costs associated with chronic illness. We identified a RAND study done in 2014 that evaluated a workplace wellness program's return on investment (ROI). The study looked at outcomes from wellness programs (disease management and lifestyle management) for over 600,000 employees across seven different employers. The researchers considered the total cost of the program (including vendor fees and screening costs) and estimated the medical cost savings. They did not include any costs associated with workplace productivity in the ROI. They found that there was a return of $1.50 for every dollar that the employer invested in the wellness programs, but the savings were primarily generated by the disease management component (with a $3.80 return) rather than the lifestyle management (with a $0.50 return). Where disease management programs focus on secondary prevention by improving disease control for those with chronic diseases (mainly diabetes, but also heart disease, chronic lung disorders, depression and cancer), lifestyle management programs focus on primary prevention by focusing on employees with risk factors for chronic disease. The researchers noted that 13% of employees participated in the disease management program, whereas 87% participated in the lifestyle management program. This indicates that the disease management programs are more targeted, which may contribute to their higher ROI. In addition, the savings from lifestyle management programs may

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[9] Yen, Louis, et al. 2006. Financial Costs Due to Excess Health Risks Among Active Employees of a Utility Company. *Journal of Occupational and Environmental Medicine*, 48(9):896-905. Doi: 10.1097/01.jom.0000235987.75368.d0, PMID: 16966956, https://pubmed.ncbi.nlm.nih.gov/16966956/.

[10] Goetzel RZ, Fabius R, Fabius D, Roemer EC, Thornton N, Kelly RK, Pelletier KR. The Stock Performance of C. Everett Koop Award Winners Compared With the Standard & Poor's 500 Index. J Occup Environ Med. 2016 Jan;58(1):9-15. doi: 10.1097/JOM.0000000000000632. Erratum in: J Occup Environ Med. 2016 Mar;58(3):e116. PMID: 26716843; PMCID: PMC4697959

[11] RAND. "Incentive and physical activity." 2018. https://www.rand.org/pubs/research_reports/RR2870.html. Accessed November 8, 2023

be more difficult to attribute to the program since the benefits are often longer term. The study also looked at the impact of the lifestyle management programs on absenteeism (though not included in their ROI analysis) and found a reduction of about one hour per employee per year; therefore, not a sizeable impact on productivity.[12]

A meta-analysis on the effectiveness of workplace wellness programs published in *Health Affairs* in 2010 estimated that every dollar spent on such programs was associated with a decrease of $3.27 in medical costs and about another $2.73 in absenteeism reduction.[13] Although these results are dated and shown in 2010 dollars, they demonstrate the potential for savings.

In a study published in 2014, using data from the University of Pittsburgh Medical Center (UPMC), researchers also found that wellness programs generated savings. UPMC is an integrated health care delivery and financing system that sponsors health insurance coverage for its employees, which includes a health risk appraisal and wellness programs. The UPMC study included 13,627 members with complete health risk appraisal (HRA) data and five continuous years of enrollment from 2007-2011.[14] These members were a subset of 30,899 employees with group health coverage. An additional 4,448 healthcare workers who were not employed by UPMC were also included in the study. The wellness program was a comprehensive wellness, prevention, and chronic disease management program that provided credits for health insurance deductibles for achieving goals. The study used a pre-post study design to compare outcomes for the intervention group and the propensity-matched comparison group. The measurement outcome used was the difference-in-differences method for medical, pharmacy, and total health care costs. They also studied changes in risk level (low, moderate, and high) over time. They found that higher risk levels led to higher excess costs related to productivity, disability, and health care costs. The health care cost savings by type of wellness program were $1,036/member for tobacco cessation, $2,745/member for weight loss/maintenance, $2,548/member for stress reduction, and $1,499/member for increased activity ($1,499/member). Again, although these dollars are dated, they also demonstrate potential savings for wellness programs.

However, not all studies showed savings from health and wellness programs. A study published in 2019 in the *Quarterly Journal of Economics* did not find an impact on total medical expenditures, health behaviors, employee productivity, or self-reported health status from an employer health and wellness program. The study looked at results from a large employer, about 5,000 employees, in Illinois. They did find an increase in health screening rates, but not in outcomes. In addition, the researchers found a selection bias in that those who participated in the health and wellness programs had lower medical costs and healthier behaviors than those who did not participate.[15]

In a systematic literature review and meta-analysis of employer health and wellness programs targeting key lifestyle risk factors in men, researchers found mixed results. They identified 11 randomized controlled trials that were conducted between January 2010 and August 2021 that met the research criteria. The results of the meta-analysis showed reductions in body weight (based on six studies) and body mass index (based on five studies) related to the health and wellness programs, but the results were not statistically significant. All studies showed increases in

[12] Mattke, Soeren, Liu, Harry H., Caloyeras, John P., Huang, Christina Y., Van Busum, Kristin R., Khodyakov, Dmitry, Shier, Victoria, Exum, Ellen, and Broderick, Megan, Do Workplace Wellness Programs Save Employers Money? Santa Monica, CA: RAND Corporation, 2014. https://www.rand.org/pubs/research_briefs/RB9744.html. Accessed August 29, 2023

[13] Baicker K., Cutler D., Song Z. (2010). Workplace wellness programs can generate savings. Health Aff, 29:304–311.

[14] Parkinson, et al. "UPMC MyHealth Managing the Health and Costs of U.S. Healthcare Workers." *American Journal of Preventive Medicine*. Volume 47, Issue 4, October 2014, Pages 403-410.

[15] https://academic.oup.com/qje/article/134/4/1747/5550759

healthy behaviors, however, the researchers noted that these behaviors were sometimes self-reported (which is harder to validate).[16]

The results of the employer health and wellness programs are mixed and highlight the difficulty of proving effectiveness of these programs.

2.4 EFFECTIVENESS OF LIFE INSURER HEALTH AND WELLNESS PROGRAMS

In addition to the programs offered by employers and health insurers, health and wellness programs are also utilized by life insurers to reduce claim costs. In a report published by Swiss Re, they stated that a life insurer who ran a health and wellness program on a fully underwritten term mortality product might see an aggregate mortality and lapse reduction of up to 3%-4% across their entire book of business. This reduction assumed an engagement rate of 40% in the health and wellness program. For an engagement rate of 25%, the expected reduction was up to 2.2% across the entire book of business. They also claimed that a program that had at least a 25% engagement rate could achieve a positive ROI and that programs with a 40% engagement might see an increase in profitability of up to 9%. Their analysis was based on their global experience for a fully underwritten 20-year term mortality product without preferred stratification. Swiss Re noted that benefits to the insurer were ongoing positive behavior changes from policyholders, positive initial selection, positive persistency, sales growth, and the opportunity to upsell and cross-sell. Their analysis showed that more than half of the reduction in aggregate mortality and lapse came from policyholder behavior change with the remainder of the reduction coming from positive selection and persistency. The costs to the insurer were the costs of the policyholder rewards, reduced premiums, initial setup costs, and ongoing administrative costs.[17] As noted earlier, the benefits from health and wellness programs may be long term. Therefore, while they may not have a significant impact on health insurers claim costs in the short run, they may have the potential to reduce life insurers claims costs that are longer term.

In light of the limited study data regarding the ability of wellness programs to reduce claims, we further researched this topic via a questionnaire sent to a panel of experts on the topic (see section 4) and an expert panel of industry experts provided their insights on ways they saw wellness programs being monitored for potential success.

[16] Bezzina, Aaron, et al. Workplace Health Promotion Programs Targeting Smoking, Nutrition, Physical Activity, and Obesity in Men: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Health Education & Behavior*. 2023. https://journals.sagepub.com/doi/10.1177/10901981231208396#pane-91a67f5d-48d7-493e-912e-2af5faaaceef0

[17] Swiss Re. Health and Wellness Engagement Impacts. September 2022. https://www.swissre.com/dam/jcr:8ab9148f-ba5e-437c-a802-acb8c92c5001/2022-10-sr-swissre-health-engagement-impact-paper.pdf

Section 3: Expert Panel Discussion

To provide insights on the background, current events, and potential future progress of wellness programs, the Society of Actuaries Research Institute gathered together a panel of industry experts for an interactive discussion on February 8, 2024. The panel discussed a wide variety of topics surrounding wellness programs, both in the U.S. and also with some reference to broader world markets. Some world markets can benefit by having closer integration with how individual healthcare is provided and data is able to be collected, which can lead to additional ways to monitor the success of programs. The overview of the panel discussion is summarized with the following observations.

3.1 POTENTIAL SUCCESS FACTORS

The panel discussed the possible factors that could lead to success in driving the performance of wellness programs. They noted that there is a growing paradigm shift with respect to wellness programs in order to drive future successes, especially as data becomes increasingly available. The group noted that the highest potential for successful performance of programs stem from where insurers have an ability to monitor and influence customer activity. Life insurers may have more limited opportunities compared to health insurance companies, as the typical relationship between a life company and a consumer is generally not as deep. Influencing life company customers requires getting their attention and that has historically been more challenging. Health insurance connections are generally more linked between company and insured, and there's a broader ability to put many pieces of the puzzle together in a program to build a coherent package that can be used to engage individuals. Still, in the health insurance world, the panel noted that having success can be a challenge and the largest successes are in places where insurance companies have strong relationships with healthcare providers and a common interest between the company and provider to emphasize overall wellness. In some world markets, the way public healthcare is delivered, and the way health insurance systems work can be more linked. In these world markets, companies can be more dominant market share leaders and make the right provider connections to have a broader ability for wellness programs to offer strong benefits. In these situations, insurers' programs have a strong opportunity to engage with insured members, change behaviors, and lead to more noticeable changes in morbidity and mortality. Wellness programs were also noted to have success where there are significant consumer connections and large amounts of data to help drive interactions. Some platforms make strong connections with grocery store chains, which have tens of millions of smartphone application users, and that volume helps connect, influence, and motivate better consumer decisions and outcomes.

The group noted that sometimes wellness programs that are used in life and health insurance contexts get somewhat mislabeled. Wellness programs often are thought of first as something that employers offer to their employees in order to drive workforce and health behaviors, but many of the insurance industry wellness programs are more than that. They are the integration of wellness along with product features and business strategies. Insurance companies have large amounts of capital at risk, so wellness concepts have an opportunity to drive a wide range of financial outcomes, rather than just being seen as a way to attract and retain employees or potentially save dollars on the next annual group health insurance renewal. The group noted, as well, that life insurance programs have some unique circumstances that can make the concept of wellness products and strategies more attractive. Life insurance is a stickier business than health insurance, as getting re-underwritten to move to a different carrier can take time and is often only successful if the customer qualifies. Health insurers face the potential risk that the wellness programs they implement may actually lead to benefits where they don't see the direct result as consumers move to a different health insurance company. This sometimes forces the benefits for health insurance companies to have a shorter time horizon to determine success. The difference in some life company approaches is that the wellness idea is built into the company strategy and products, and it becomes a very long-term play. The counter to this is that it's hard to look at a short-term time horizon in the life insurance context and know whether the program might be paying dividends. Companies need to consider wellness ideas more as a company strategy instead of looking for a quick payback. The group specifically noted, as well, that it might be challenging to identify specific drivers regarding why programs are having success. It is much more a blend or combinations of factors.

3.2 INSURANCE COMPANY STRATEGY

The group also dove deeper into how wellness programs might be evolving to be more engrained in company strategies. Some insurance companies in recent years have engrained wellness more deeply into their business model, and as part of the overall structure of their management, products, and innovations. It's being built more into how these companies price their products and what they consider part of risk management through prevention programs. These strategies sometimes come from a different angle as compared to other competitors and require a lot of discipline to hold and build on the strategy. These strategies, however, may not be so different from a property/casualty company doing similar risk prevention, education, and engagement with consumers. Parallels can exist between life company wellness strategies and the use of telematics in auto insurance, which create some common goals and connections between the insurer and the insured, though as noted the time horizon impact for health and wellness programs can be more long term. Telematics has been around auto insurance for more than a decade with a desire to engage with consumers on controlling risk and creating more alignment between insurers and customers. Through these methods, insurers can use technology with their customers to better monitor risk, encourage safe driving behaviors and improve upon the customer risk profile. Feedback through telematics can often be more immediate and provide helpful information towards improving driver behavior. Sometimes, risk attitudes and behaviors can be changed within very short periods of time.

The panel noted that the concept of building a wellness strategy into any company definitely starts at the top with the concepts being adopted and reinforced by senior management and the Board of Directors. Companies that follow this path will note that they are going to align around the ideas, building it into their products, prioritizing the health of their customers and focusing on prevention and risk management in their insurance practices. The companies decide, as part of their strategy, that they are going to reward customers for their behaviors and, in turn, have a goal of creating a healthier society. The panel noted that simply "bolting on" a wellness program to a company's products and focus does not lead to the same level of success. It works best if the concepts originate directly from the company's business model. These models may not work for every insurance company. They require a paradigm shift, in many cases, and often involve a large investment of time and change management.

The panel also noted that the company view is not the only part of the equation needed for success. The customer, as the end user of the wellness ideas, needs the right mindset as well. The analogy was drawn in a discussion surrounding the evolution of autonomous vehicles, where data might note that it can often be much safer to travel with full reliance on technology, but consumers simply aren't at the point yet where they feel comfortable without a human behind the steering wheel. Wellness programs require the users to be comfortable with the way the program works and is implemented. In many cases, fully integrated wellness solutions would be terrific, but some users are just not ready for them. So, companies may want to see where they can make some incremental change with their customers. Even if the wellness program led to small changes in eating behaviors – more greens and less saturated fats – then that might be a first step towards incremental improvement. Companies need to realize that they have to meet their customers where the customers feel comfortable. Wellness programs have a continuum of success and small changes in blood pressure levels, cholesterol levels, blood sugar levels, and other metrics might be first steps toward success.

Insurance companies have the ability to shift resources to focus on data and wellness, though the group noted that the level of capital needed to complete a strategy shift may not always be feasible to do for all companies. The implementation can be especially difficult in the U.S. where geographies are large and there are a very fragmented set of health-related businesses. There are so many different groceries store chains, fitness chains, and other such data sources that finding the right partnerships that overlap with an insurer's consumer base can be a challenge. In smaller world markets, there is often less fragmentation and a potential for less difficulty. What may be beneficial in coming decades is to track the mergers of data sources to see if it leads to more common data sets or consistent hubs of information that can lead to better implementation.

3.3 MARKET RESEARCH AND TOOLS

The panel was asked more about how information out in the marketplace, or studies being done across broader populations, could provide insights as to what wellness programs might develop. Key academic and public studies in recent years have started to offer some insights as to what companies could look at, though the panel noted not all studies have perfect data that would lead to a perfect ability to implement. The Global Burden of Disease studies from IHME[18] are one place where the panel noted information is coming together to help inform decisions, as well as similar data trends and studies originating from the UK Biobank[19]. These datasets often cover individuals longitudinally over long periods of time, and also have the potential to identify when changes in behaviors may have started or how they were influenced. This won't answer all the questions, but can help to give some insights and models into how population health is moving. Some world markets, such as the UK and Denmark, have been able to develop more comprehensive data for their populations that enable studying wellness concepts. Part of the drivers and benefits of these markets are that many social and health records and data points are tracked universally across the population in databases that talk more easily to each other. In other world markets, such as in the U.S., the link between individual health data and other societal information is not as well connected.

Some of the opportunities the panel saw when it came to data, however, are that smartphone data and technology are allowing more information to be gathered than ever before. Large technology companies that are deep into smartphone offerings have been collecting more information that might allow more productive partnerships with the insurance industry. The panel encouraged the life and health insurance industries to be leaders here as they have a lot of finances at stake, but also recognized that tech companies might want to be the leaders in these types of partnerships. Some U.S. population surveys exist, but the U.S. market might also have a longitudinal issue as the tracking of health trends by individuals and any potential interventions to change health outcomes have not been tracked for long enough as of yet to make a definitive immediate impact. In other world markets, insurers are taking broad steps to connect more with data that are associated with healthy activities and lifestyles, such as fitness centers, grocery store chains, and other individual information to build more helpful programs. An example of note in world markets is the Discovery / Vitality program in South Africa where individual insurance also offers wellness benefits such as fitness centers, food programs, and association with supermarkets.[20] The panel noted that the smartphone has strong potential to change the dynamic of wellness program in the future. Data privacy will be a question to contend with, but if between technology companies and insurers that power can be unlocked, then it presents some unique future opportunities. It provides the ability to create some strong incentives and interventions with insurance customers. Technology companies are getting more involved with the health insurance world, so the panel noted a risk that, while partnering is an option, some technology companies may desire to jump straight to the front of the line and become larger players in insurance.

3.4 RECENT OBSERVATIONS

The panel contemplated whether the pandemic era had a strong impact on any of the opportunities that lie within wellness programs. The group noted that the pandemic helped shift the emphasis to how important mental health awareness is, which has helped encourage programs to consider more than just physical risks and diseases. Other macro factors may play a role as well, especially with the more current focus on pharmaceuticals that address

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[18] https://www.healthdata.org/research-analysis/gbd
[19] https://www.ukbiobank.ac.uk/
[20] https://www.discovery.co.za/vitality/get-fit

diabetes and, in turn, dieting. Large businesses are already noting some of the nutrition shifts in large markets such as the U.S., with fast food restaurants and soft drink manufacturers already focusing on offering more healthy options to keep revenues strong and growing. The modern era of data has caused world markets to focus on what the potential for success is by increasing the focus on data, and the post-pandemic era may lead to data-based analysis and opportunities that weren't available just 5 or 10 years ago. Over more recent times, the increased use of smartphone technology, and data collected from daily activities have increased such as for online purchases trends and the ability of tracking location and movement. Changes from new data will come gradually, and the panel noted we shouldn't inadvertently rush to boil the ocean, but it will provide a strong opportunity to investigate new methods.

The panel was bullish on the actuarial profession playing a lead role in championing these various wellness programs and interactions with data and technology. They noted that the profession has a strong role to play in contemplating future wellness systems and company strategies, which can lead to tremendous potential for saving morbidity and mortality and leading to a healthier society. The panel observed that actuaries in insurance companies have benefited from seeing what's happening in society in terms of fighting and preventing disease such as cancer and other chronic diseases. The group noted there is a chance for actuaries to play a leading role with a strong ability to differentiate and be at the forefront of change.

Section 4: Review of Survey Responses

In addition to the expert panel discussion, we surveyed individuals from 10 different companies, including life insurers (4), health insurers (2), large employers (3) and wellness providers (1). Two of the life insurers do not currently offer wellness programs to their policyholders, but one does provide wellness programs to their employees. We developed a set of survey questions (see the appendix for the list of questions) and requested written responses from the participants. While our expert group was developed in order to capture a wide range of backgrounds and expertise, the overall response rate and ultimate sample size reflects a small portion of the health and wellness program market. Despite the small sample size, several key themes were identified and are summarized below. Where responses differed by type of company (life insurer, health insurer, employer), we note the differences; otherwise, common themes are reported. Responses for the wellness provider and responses from insurers about programs for their employees are grouped with the employer responses.

4.1 C. EVERETT KOOP NATIONAL HEALTH AWARD

In response to our survey of experts, we learned about the following study. While this study does not provide evidence of a connection between health and wellness programs and improved outcomes, it highlights the performance of companies that focus on employee well-being. The 14-year study shows outcomes for companies who won the C. Everett Koop National Health Award (26 companies), which is an award granted to companies who invest significantly in worker health, compared to the performance of the S&P 500. In order to receive the award, companies must show that their wellness programs produced health behavior change, health risk reduction, and cost savings. The cost savings cannot be generated by benefit plan design changes, rationing, outsourcing, or utilization review. The 26 companies who won the award were spread across various industries such as health care, industrial, financial services, information technology, and other business sectors. The study found the stocks for companies who won the award appreciated an average of 325% in contrast to the S&P 500, which only appreciated 105% over that same period.[21] The study also found that the award winners had higher dividends (2.31%) compared to the S&P 500 (1.95%) and had a lower price to earnings ratio (17.31) compared to the S&P 500 (18.27), therefore, the award winners did not appear to be overvalued. We note that there are many drivers of a company's earnings, which this study does not adjust for, therefore, we cannot conclude on the relationship between employer health and wellness programs and company earnings. The award does encourage employer health and wellness programs and may be a reason why we found more published results for employer programs than insurer programs.

4.2 GOALS OF THE WELLNESS PROGRAMS

Life insurers seek to promote longevity for their policyholders, both to help them lead more fulfilling lives and to save money for the company. Programs offered by life insurers tend to offer either incentives to pursue healthy activities, access to digital resources aimed at increasing health, or both. For example, one life insurance company offers a product whereby policyholders can opt into a program that attaches a rider to their policy. The rider allows them to earn points for wellness activities and attain status within the program that alters the price of their monthly premium, as well as earning other rewards and incentives. This program also provides education and incentives related to physical activity, annual biometric checks, preventative care, nutrition, sleep and mental health.

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[21] Goetzel RZ, Fabius R, Fabius D, Roemer EC, Thornton N, Kelly RK, Pelletier KR. The Stock Performance of C. Everett Koop Award Winners Compared With the Standard & Poor's 500 Index. J Occup Environ Med. 2016 Jan;58(1):9-15. doi: 10.1097/JOM.0000000000000632. Erratum in: J Occup Environ Med. 2016 Mar;58(3):e116. PMID: 26716843; PMCID: PMC4697959.

Similar to life insurers, health insurance companies seek to decrease morbidity among their clients and offer access to different resources based on the needs of their policyholders. Examples of programs include the following:

- Programs that aim to promote general health and offer a digital platform with interactive features that includes a health survey, coaching, educational content, and goal setting for better health,
- Programs that offer digital education targeting weight management, behavioral health and musculoskeletal health in order to combat chronic diseases, and
- Programs that give discounts focusing on healthy services and products, giving discounts for gym memberships, healthy meals, etc.

Employers that sponsor wellness programs appear to focus on the key areas of career, community, financial, physical and social/emotional wellbeing of their employees. Physical wellbeing refers to helping employees manage their health and improve their daily energy. Emotional wellbeing refers to understanding and managing emotions so employees can adapt to change and cope with adversity. Financial wellbeing involves achieving financial security and confidence in the pursuit of financial goals. Community wellbeing involves experiencing positive relationships, meaningful connections and a sense of community, culture and belonging. The overall goal for these programs is to develop career, prioritize family and pursue personal purpose.

4.3 WELLNESS PROGRAM PARTICIPATION

Survey responses for wellness program participation were mixed. Participation in the wellness programs ranged from only a small proportion of policyholders for newer, opt-in products up to 100% for products that had wellness programs built into them. Some respondents stated that participation was 100% for products that had wellness programs built-in, however, this percentage doesn't reflect who is actually using the wellness program (engagement). For more established opt-in wellness programs, participation rates of 20-65% participation were reported for insurer and employer programs. While the specific participation rates varied by company and program and were not always easy to track, the following key drivers of participation were identified across the respondents:

- Whether a program is new or well-established
- How much the program is promoted to policyholders or employees
- How easy or difficult the program activities are to complete
- How easy or difficult the program technology is to use
- An individual's interest and availability to participate
- The level and types of rewards or incentives
- An individual's perception of the program value (i.e., is the reward/outcome worth their effort)

These key drivers influence participation rates in wellness programs across insurer and employer offerings.

4.4 WELLNESS PROGRAMS SAVINGS AND OUTCOMES

Across both insurers and employers, none could provide recent quantifiable results showing cost savings from their wellness programs. One company was able to provide an analysis that showed savings, but the results were over five years old. One life insurer noted that they did not offer wellness programs at this time because they found it difficult to show savings.

In some cases, the companies did not attempt to quantify cost savings, and, in other cases, they did not yet have the data to do so as their current programs were new. While most expect that wellness programs will produce savings, they find it difficult to produce material and measurable evidence of savings. Some of the key difficulties of measuring savings include:

- Time horizon of benefit vs cost

- Policyholder/employee turnover
- Collection of data
- Confidentiality

However, insurers and employers still believe that wellness programs are a worthwhile investment. Life insurers expect to see eventual improvement in persistency, morbidity, and mortality experience. Health insurers expect improved healthcare outcomes resulting in reduced costs. Employers expect to have reduced healthcare costs by identifying and treating illnesses before they progress to more advanced stages. They also expect that healthier employees will be more productive, even if they don't have direct evidence of that outcome. Both insurers and employers reported that they strongly believe wellness programs help attract and retain customers and employees.

The costs of a wellness program include vendor fees, fees for the rewards and incentives, and internal administration costs. Employers also reported costs associated with integrating and submitting data to vendors. Of those surveyed, most insurers who included wellness programs in their fully insured products did not charge a separate premium amount for the wellness program.

Although insurers and employers have not been able to directly measure savings from their wellness programs, they do track a number of different measurement outcomes and use those as a proxy for the success of the programs. These measures include:

- Participation rate (% of individuals joining the wellness program when offered)
- Engagement rate (% of individuals using the wellness program once enrolled)
- Participant satisfaction
- Quantifiable behavior changes (such as increased activity levels recorded by a device)
- Incentives/rewards paid out
- Number of health risk assessments completed
- Retention (of customers or employees)

These measures can be tracked over time and compared to benchmark goals to provide feedback on the success of the wellness program.

4.5 THE FUTURE OF WELLNESS PROGRAMS

All the survey respondents expressed that they believe wellness programs support their attraction and retention efforts. Wellness programs create a perception among prospective hires and policyholders that the company cares about their well-being and has rich benefits. Furthermore, all the respondents plan to either maintain or expand their wellness programs. Insurers and employers are looking to find ways to reach more employees and policyholders to educate them about wellness programs and benefits. Many respondents stated that they plan to expand their wellness programs to include financial wellness and mental health (if not already offered). Respondents also stated that they are looking at additional digital solutions and improved technology to help strengthen their wellness programs.

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