

## Workplace Wellness: New Study Finds No Changes in Health Care Costs

By [Damon Jones](#), [David Molitor](#), and [Julian Reif](#)

Does your workplace provide incentives to attend the gym? Offer support to quit smoking? Mandate completing a health assessment? It seems that everywhere you turn, businesses are investing resources into trying to improve the health of their workers.

Some of the largest drivers of high healthcare spending in the US are related to chronic diseases such as cardiovascular disease, smoking-related health issues, diabetes, high blood pressure, and obesity. US workers spend nearly one-third of their time in the workplaces. With a captive audience and large enough incentives, the hope is that businesses can persuade workers to improve their health, and, as an additional benefit, lower health care costs for all parties involved. Many employers seemingly agree with this logic: the workplace wellness industry has more than quadrupled since 2011, drawing in [\\$8 billion](#) in annual revenue and covering almost one in three in American workers.

Unfortunately, our rigorous study of a comprehensive workplace wellness program concludes that it didn't change employees' behavior or health care costs in the first year. Employees who took part didn't become healthier or more productive, and were not more likely to go to the gym or run in a local race. Total health care costs didn't drop, either.

The lack of effects may come as a surprise. A 2010 [review](#) of major studies on wellness programs found expanding such programs could in short order benefit budgets, productivity, and health. A more recent [review](#) concluded that the average program had a positive return on investment, but [other studies](#) showed mixed results. A major issue with many of the prior studies is what's known as selection bias. Are gym rats, like your office-mates who already run marathons or lead healthy lifestyles, the ones opting into these types of programs? If so, are the programs really improving people's health and reducing costs, or are they just attracting healthier (or wealthier, younger, etc.) people? There are ways to adjust for these confounders, but how can you adjust for intrinsic motivation or grit?

To overcome these issues, we ran a large-scale [randomized controlled trial \(RCT\)](#) to identify if the program had any impact on health and well-being, productivity, and health care spending. By [randomly assigning](#) a large group of employees to either be offered a workplace wellness program or not, we ensure that the two groups are similar at the start. After a period of time, we can be sure that any differences in health and cost are the true effect of the program and not due to other characteristics like motivation, which are often difficult to measure.

We designed a workplace wellness program called iThrive at the University of Illinois at Urbana-Champaign and randomly assigned employees to either a control group or a treatment group that was invited to take part in iThrive. Those in the treatment group were eligible to receive a biometric health screening and complete an online health risk assessment. They were then invited to participate in an array of wellness activities such as recreational exercise classes, a tobacco cessation hotline, and an online, self-paced wellness challenge. We offered monetary

incentives to encourage participation, and randomly varied the amount in order to evaluate the importance of the incentive.

Our program was popular: 56 percent of the treatment group completed both the health screening and the health risk assessment, and 31 percent additionally completed at least one wellness activity. We found that offering a \$100 incentive rather than no incentive significantly increased screening rates, but further increasing the incentive to \$200 had little effect.

One year later, when we compared the control group to the iThrive group, we found that the program didn't lead to healthier employees or reduce health care costs. The program's failure to improve health outcomes or reduce costs was likely because employees who were interested in participating in the workplace wellness program were already quite healthy. A year before the program began, people who ultimately chose to participate in iThrive were already more likely to visit recreational facilities on campus or to participate in a community running event. On average, they already had incurred \$1,373 less in medical expenses over the previous year compared to employees not interested in the program. Participants were also less likely to have extremely high medical expenses and were higher-earners, on average.

Workplace wellness programs such as iThrive, therefore, might not actually encourage participants to *change* their behavior, at least not in the short term. Instead, programs like these may simply attract employees who are already healthy and have lower health care costs. This also suggests that non-RCT studies of workplace wellness programs likely suffer from selection bias. In other words, results from non-RCT studies may be due to differences in who participates, not differences caused by participating in the program.

We emphasize that at this point we've only observed one-year impacts from this workplace wellness program. In the next phase of our study, we will collect biometric outcomes and follow up with participants to track potential changes in health behaviors and costs for up to 4 years following the intervention. That investigation may uncover longer-run impacts that might not have registered in the first year of the study.

Nonetheless, our research suggests that there is reason to be cautious about employers providing significant incentives for participation in workplace wellness programs. Since we know that healthier, wealthier employees are more likely to participate in wellness programs, these groups of employees may benefit disproportionately from participation incentives. Lower-income, less healthy employees—who may face legitimate barriers to participation in wellness activities—may see their health care premiums rise, even though as a group they might benefit most from reduced health care costs.

Our results are also important in light of recent litigation over workplace wellness programs. The Equal Employment Opportunity Commission (EEOC), a federal agency that enforces civil rights laws against workplace discrimination, used to explicitly permit employers to incentivize participation in workplace wellness programs [by up to 30%](#) of the total cost of an employee's health insurance coverage (typically thousands of dollars per year). The American Association of

Retired Persons (AARP) argued that participation in workplace wellness programs is not truly voluntary if employees are offered substantial monetary rewards conditional on participation. A District Court ruled in AARP's favor, and the EEOC [removed the rule](#) in December, neither permitting nor prohibiting employer-provided incentives and leaving their future [uncertain](#).

Given the large amount of investment in workplace wellness programs, it's worth establishing a rigorous understanding of the real impacts of these programs. Our study finds that the return on investment is likely low in the short run; future results from our study will shed light on whether benefits will emerge in the long run.

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