RESEARCH BRIEF NO. 28 | JULY 2018

Wellness Programs and Incentives: A Review of the Evidence

Employee wellness programs vary greatly in terms of the health concerns they address and the services they provide. This diversity of approaches is best viewed as a spectrum: on one end are low-touch programs focused primarily on assessment of health problems and limited educational resources; on the other end are high-touch, comprehensive programs that provide more intensive, individualized services to help employees make healthy lifestyle changes. Across this spectrum, programs also vary in the strength of incentives they provide employees to participate in wellness activities.

Health Risk Assessments and Biometric Screenings: These are the primary assessment tools used in wellness programs to identify health risks and connect employees to resources. Health risk assessments are self-reported questionnaires that collect data on a wide range of health issues, including lifestyle habits, medical history, substance use and mental health.[1] Biometric screenings are clinical exams that collect baseline measurements, such as body mass index, blood pressure and cholesterol. They may also include screenings for certain diseases. Both have become a common part of employee health benefits. Among large firms (200 or more employees) with wellness programs, 64 percent now use either health risk assessments or biometric screenings.[2]

SUMMARY

Increasingly, large employers offer workplace wellness programs in order to reduce health risks and the burden of costly health conditions among their workforce. However, controversy exists over the effectiveness of these programs at improving health and generating health care savings. There is also heated debate about whether employers should be allowed to encourage employee participation in these programs through large financial incentives. This brief reviews the evidence on the effects of wellness programs on health outcomes and spending. It also discusses key issues that matter when considering how these programs could affect consumers.

Lifestyle Management Programs: These include any wellness program activities targeted at reducing health risks through lifestyle changes. These programs address issues like physical activity, nutrition, weight loss and tobacco cessation. They range from low-touch self- education programs to high-touch individualized health coaching or classes. Today, these are the most common wellness offerings among employers. Eighty-five percent of large firms offer some type of lifestyle management program among their health benefits.[3] A minority of employers have begun to link data from wearable health monitoring devices (e.g., smart watches) to these programs.[4]

Wellness Incentives: Employers use a range of financial incentives to encourage participation in wellness program offerings. They are divided into two major categories: participation-based incentives that are awarded for completing wellness program activities and outcomes-based incentives that are awarded for meeting health goals, like maintaining a certain body mass index or reducing weight by a certain amount. Multiple federal laws set different requirements for programs with incentives, depending on whether incentives are participation-based or outcome-based, and depending on what activity the incentives are tied to. Legal questions remain about whether some incentives permitted under

federal regulation run afoul of nondiscrimination laws (see box on page 5).

In total, 46 percent of large firms' wellness programs use participation-based incentives for completion of at least one wellness activity.[5] Only 5 percent have rolled out outcomes-based incentives.[6]

These incentives can be structured as rewards or penalties. Most large employers that have incentives use cash, gift cards or merchandise. About 34 percent link incentives to health insurance benefits, either in the form of a premium surcharge or discount, or adjustment to employee cost-sharing.[7]

Do Wellness Programs Improve Health Behaviors and Outcomes?

There is limited rigorous research examining wellness programs' health effects due to poor study designs. A systematic review of 33 studies found pervasive methodological problems, including selection bias, small sample sizes, poor generalizability and short study durations.[8] This has made it challenging or impossible to answer important questions like: whether health improvements observed among participants in these programs are independently affected by motivational differences compared to nonparticipants; whether programs are equally effective in workplaces of different sizes or demographics; and whether these programs drive long-term improvements in health behaviors and outcomes.

Looking across the more rigorous studies, the evidence that wellness programs produce meaningful improvements in health behaviors and outcomes is mixed. In many cases, health gains are modest in magnitude and not sustained long-term.[9,10,11] For example:

- **Tobacco Cessation:** Research consistently shows a link between tobacco cessation program participation and increased tobacco cessation rates or reduced tobacco use.[12,13] However, the magnitude of improvements is often modest, and evidence is less consistent regarding whether effects are sustained beyond a year.[14,15]
- **Weight Loss:** Evidence is mixed on the efficacy of weight loss wellness program initiatives.[16,17] Among studies that have observed improvements in weight or BMI among program participants, the improvements are often modest from a clinical perspective.[18] RAND's Workplace Wellness Study—considered one of the largest and most comprehensive evaluations of wellness programs—found that participation in programs focused on nutrition, weight loss or exercise translated to additional weight loss of around one pound over three years, compared to nonparticipants. This additional weight loss was not sustained after four years.[19]
- **Cholesterol and Blood Pressure Levels:** Evidence does not indicate that participation in wellness programs significantly improves cholesterol or blood pressure levels.[20,21,22]

The potential for wellness programs to drive health improvements also depends on the quality of services the programs provide, and whether workplace policies, culture and leadership support employees' use of services. We would expect programs that invest in comprehensive and evidence-based resources, such as the Centers for Disease Control and Prevention's guidelines for tobacco cessation counseling programs, to have a more a meaningful impact than more limited programs.

Potential Negative Outcomes from Wellness Programs

Recently, more attention has been paid to potential negative health consequences of certain wellness programs. For example, eating disorder patient advocates have raised concerns that weight-focused programs may promote dangerous eating behaviors.[23] Some wellness vendors' biometric screenings have been criticized for not following the U.S. Preventive Services Task Force screening recommendations, resulting in over screening and overtreatment of otherwise healthy employees.[24] Some have also raised concerns that punitive financial incentives and pressure to adhere to wellness requirements could fuel stress and fear of discrimination among employees.[25] This bears its own negative mental and physical health impacts.

Academic research has yet to fully examine these potential unintended effects. It is a critical area for future research in order to grasp the scope of these programs' effects, both positive and negative.

Do Wellness Programs Produce Healthcare Savings?

A growing body of research indicates that wellness programs do not produce meaningful healthcare savings as a result of employee health gains.

RAND's review of seven years of data from a large employer's wellness program found that participating in health screenings and lifestyle management programs aimed at smoking cessation or disease prevention did not significantly reduce healthcare costs, or total healthcare utilization. Participation also did not affect rates of hospitalization, wellness sensitive hospitalizations (hospitalizations potentially prevented via wellness targeted interventions) or emergency care.[26] Another recent analysis of a hospital system's wellness program found that it reduced spending on wellness sensitive hospitalizations, such as hospitalizations related to diabetes complications, but these savings were completely offset by increased spending on outpatient services and prescription drugs.[27]

Disease management programs targeted exclusively at individuals with chronic conditions can generate more meaningful savings. Notably, these services are provided to a much narrower portion of the employee population (see box on right).[28]

Proponents of wellness programs have argued that low employee participation levels have stifled these programs' ability to produce savings. However, RAND's review estimated that even if all employees participate in lifestyle management programs, the cost of operating them would still exceed the savings gleaned from prevented health problems.[29]

The scarcity of evidence that wide-scale wellness programs save money does not mean they don't have other potential benefits for employees or employers. But it does raise serious concern about the use of large punitive incentives that effectively compel participation in these programs. Researchers have expressed concern that employers with large insurance-based incentives may simply be saving money by shifting higher health insurance costs to employees who do not meet wellness incentive requirements.[30]

Disease Management Savings far Outpaces Lifestyle Management

The most common wellness program offering, lifestyle management programs, seek to lower health risks across a full employee population, including relatively healthy individuals. In contrast, disease management programs target only employees who suffer from chronic diseases and strive to help them better control their conditions. Currently 68 percent of large firms have some form of disease management program.[31]

A landmark RAND study examined seven years of data from a Fortune 100 employer's *lifestyle management* and *disease management* programs, making it one of the longest studies of a wellness program to date. It found that the employer's *disease management* program delivered 87 percent of its wellness program's healthcare cost savings, despite serving a minority of the program participants (13 percent). It reduced hospitalizations by nearly 30 percent among participants, and on average, generated $136 in savings per participant per month. While the lifestyle management program served more than 87 percent of program participants, it generated no significant healthcare savings.[32]

What Does the Evidence Say About Incentives?

Evidence suggests that financial incentives may boost participation in certain wellness activities and help motivate short-term health behavior changes. However, questions remain as to the relative long-term benefits of incentives and potential downside risks they pose to consumers.

- **Participation-Based Incentives:** RAND found that financial incentives boost participation in programs, and that incentives framed as penalties (vs. rewards) tend to generate the highest participation. However, it also found that neither rewards nor penalties consistently increase participation in all types of

wellness activities. For example, comprehensive programs that offer a broad scope of preventive, lifestyle management and disease management services are less influenced by incentives. Compared with limited programs, comprehensive programs have much higher participation without financial incentives. This indicates that designing a program with perceived value to employees may be equally important in attracting participation.[33]

- **Outcomes-Based Cash Incentives:** Research examining the effectiveness of cash financial incentives have mainly focused on tobacco cessation and weight loss. While some forms of cash incentives do appear to increase the likelihood of people achieving short-term health gains, people do not tend to maintain these improvements long term once incentives are removed.[34] A more recent study of a program that provided $800 in cash incentives for tobacco cessation saw more sustained effects after a year. However, even among individuals receiving incentives, tobacco quit rates fell below 10 percent at the one-year mark.[35]
- **Insurance-Based Outcomes Incentives:** There is scant evidence that adjusting premiums and cost-sharing based on meeting desired health outcomes promotes health improvements. A recent study found that an annual premium reduction of $550, spread out over 26 weeks, did not increase chances of employees achieving pre-set weight loss goals.[36] Broadly, behavioral economists have pointed out that health insurance-based incentives may be less effective motivators because they are delayed and bundled into a larger expense.[37]

  Such designs could even run counter to the aims of wellness programs if they add barriers to obtaining health coverage and timely care for people who choose not to or cannot fulfill wellness requirements. This is an area of concern that demands future research.

There are serious downsides and legal concerns regarding many forms of wellness incentives. Health-insurance based incentives can increase healthcare costs for groups that face the greatest challenges addressing health issues. This is true regardless of whether the incentive is framed as a reward or penalty, as people who do not obtain the incentive cannot access lower healthcare costs. As a result, this form of incentive could further entrench health disparities. Large incentives tied to completing medical inquiries also risk undercutting nondiscrimination protections that workers are guaranteed under multiple laws and could threaten the privacy of employees' sensitive medical information (see box on page 6).

While consumers should benefit from easy-to-use pathways to improve their health, they should not be burdened with compliance requirements that have little evidence of health benefit.

We should also consider the merits of incentives in relation to the evidence-base for the workplace wellness programs that they aim to promote. Are incentives even warranted for activities that have limited evidence of producing health savings?

Consumer Considerations and Concerns

From a consumer perspective, a number of elements in wellness programs raise concerns, particularly the use of certain forms of incentives. While consumers should benefit from easy-to-use pathways to improve their health, they should not be burdened with compliance requirements that have little evidence of health benefit. Efforts to support employee health also should ensure coverage and care is affordable and employees' privacy is secure.

Wellness programs can be made more (or less) consumer protective by considering these factors:

Affordability of Coverage: A primary concern is that health insurance-based incentives could make health coverage and care unaffordable for people who do not meet wellness program requirements. Based on the average cost of employer-sponsored coverage in 2017 ($6,690 for an individual), programs with non-tobacco related outcomes-based incentives could increase premiums for employees who do not meet requirements by as much $2,007. Tobacco-related programs could

increase employees' premiums by $3,345 if they fail to meet program requirements.[38] Most employers do not use incentives of this magnitude yet.[39] But in light of survey data showing employee struggles to afford healthcare costs, even smaller insurance-based incentives should raise red flags.[40] If the goal of wellness programs is to support employees in improving health, guaranteeing affordable coverage and care to all employees should be a high priority. There is no research showing that incentives tied to health insurance drive health improvements. But there is a large body of research showing that going without health coverage or facing high cost sharing leads to unmet or delayed care needs.

Discrimination and Privacy Concerns: Nondiscrimination laws like the Americans with Disabilities Act and the Genetic Information Nondiscrimination Act were born out of a history of workplace discrimination against people with disabilities and sensitive medical conditions. Wellness programs need to balance health promotion efforts with preserving these populations' right to not disclose sensitive health information. Employer efforts to compel completion of health screenings through large financial incentives cuts into those rights.

Employers should also consider whether the scope of data their programs collect and how that data is used serves the best interests of their employees. One study found nearly one in three people who chose not to participate in wellness programs cited concerns about the privacy of their health information.[41] These concerns are valid. Wellness vendors do not have to comply with privacy protections under the Health Insurance Portability and Accountability Act (HIPAA), unlike health plans and providers. This means they can share health information they collect with third party business partners, including claims data they have access to.[42] News reports have exposed the expansive scope of data that wellness vendors collect and the non-health related activities such data could be used for, from marketing to bank lending decisions.[43] Policymakers need to scrutinize how this data is being used and consider what additional privacy laws are needed to best protect consumer health information (see box on page 6).

Accessibility: A number of factors hinder employees' ability to participate in wellness programs, even when they want to engage. Poor accessibility of educational resources, work schedule conflicts or general time constraints are among common consumer-reported barriers to participating in these programs.[44,45] Child or elder care responsibilities and second jobs can cut into a person's time. Employers that want to maximize engagement in these programs should review how inclusive their program is. Could holding programing onsite and on paid time help expand a program's reach? Do the workplace culture and expectations of managers truly support employees that try to engage in programs on paid time? Employers should consider how to address these issues, particularly if they are considering employing incentives.

Wellness vendors do not have to comply with privacy protections under the Health Insurance Portability and Accountability Act (HIPAA), unlike health plans and providers.

Appropriate Role of Wellness Programs: The reality is that making long-term behavior change is challenging. Even when people want to quit smoking or lose weight, environmental, social and individual factors can make it harder to pursue those goals. Self-efficacy, chronic stress, poor access to healthcare and limited neighborhood resources can all interfere with people realizing good health.[46] Employers cannot expect wellness programs to completely overcome these issues. Furthermore, penalizing employees who don't meet health goals may further entrench health disparities and perpetuate stigmatization of people who face structural barriers to achieving good health.[47] In light of the mixed evidence described above, employers should set realistic expectations about the limited health factors wellness programs can address, and should consider what changes they are well positioned to make that could strengthen the health infrastructure available to their workers.

Wellness Incentives and Nondiscrimination Laws

Consumer, patient and disability advocates have voiced concerns that certain financial incentives in wellness programs undermine nondiscrimination laws and could be used in discriminatory ways. To understand these concerns, below is an overview of some of the main laws regulating the use of wellness incentives and the debates surrounding these standards.

Affordable Care Act: While the Affordable Care Act (ACA) banned medical underwriting across all forms of health insurance, it continued to allow employee wellness programs that tie incentives to healthcare costs. It even increased the maximum incentive allowed in programs that tie incentives to achieving better health outcomes.

The implementing regulations of this provision set some of the main federal standards governing wellness programs and incentives today. In general, programs that do not use incentives or only tie incentives to participation in wellness activities face very few requirements under the ACA. There is also no cap on the size of the incentive allowed in participation-based programs under the ACA, although other laws can limit incentives in these programs.

For programs that use outcomes-based incentives or that tie incentives to participation in activities dependent on health status (like a fitness program) there are more restrictions. The total value of incentives in these programs cannot exceed 30 percent of the total cost of coverage, including employer and employee share of premiums. This maximum incentive increases to 50 percent of the cost of coverage so long as any incentive amount exceeding the original 30 percent cap is tied to tobacco use. These programs must be reasonably designed to improve health and not be a subterfuge for discrimination, which is very broadly defined. They also must offer individuals a chance to earn incentives at least once per year and provide alternative ways to obtain incentives for certain populations.

A number of consumer and patient advocacy groups fought strongly against this provision of the ACA, out of fear that it would leave a backdoor way for employers to charge less healthy employees more for health insurance. Many groups remain concerned that the implementing regulations do not have sufficient teeth to ensure that programs with these incentives provide evidence-based health supports and do not simply shift costs to less healthy populations.

Americans with Disabilities Act (ADA) and Genetic Information Nondiscrimination Act (GINA): Together, the ADA and GINA prevent employers from making medical inquires of employees, or requesting genetic information, unless it is part of a voluntary wellness program. GINA defines genetic information as including medical information about employees' family members, including those collected from family members participating in wellness program inquiries.

Over the years, there has been immense debate about how these laws should constrain outcome-based wellness incentives and incentives tied to completing health risk assessments and biometric screenings. As of 2010, the Equal Employment Opportunity Commission (EEOC) guidance defined programs as voluntary only if they are not required and employees are not penalized for not participating. However, in 2015 the EEOC began to reverse its interpretation of voluntary programs, issuing revised regulations for the ADA and GINA. Under these new rules, employee wellness programs would be considered voluntary so long as the total value of incentives in the program was capped at 30 percent of the total cost of self-only coverage. In the case of GINA, wellness programs would be allowed to have an additional incentive for employees' spouses to participate, capped at 30 percent of the cost of self-only coverage.

Disability and patient groups strongly opposed this change in policy, citing concerns that health risk assessments and biometric screenings collect sensitive information that could be used in discriminatory manners by employers. In 2016, AARP challenged these rules in court, arguing that such interpretation of voluntary ran afoul of the actual language of the ADA. Last year, the D.C. District Court sided with AARP and required that the EEOC rewrite the rule. The court also vacated the rule effective at the start of 2019. This leaves some of the most common forms of wellness incentives in questionable legal territory.

Quality of Programs: Federal law sets few standards related to the quality of services wellness programs have to provide. Programs are not held to evidence standards with respect to the health behavior change interventions they promote. They also aren't required to comprehensively evaluate the effects of their programs. RAND found that the most common type of wellness program used by employers offered fairly limited services, with sparse resources to actually assist in making lifestyle changes or limited services to help manage chronic conditions.[48] Additionally, a minority of employers formally evaluate the health and savings impacts of their wellness programs.[49] This raises concerns that few employers are thoughtfully designing their wellness programs based on what works. The lack of rigorous evaluation or quality standards is particularly concerning given the potentially harmful health consequences of poorly designed programs.

So long as employers are permitted to use large incentives to push wellness program participation, policymakers should consider whether these programs should be held accountable for showing effectiveness.

Conclusion

Employer-offered wellness programs are extremely common, despite very limited evidence of effectiveness. Additionally, these programs have some concerning downsides, including potential employee privacy violations, discriminatory effects, affordability burdens and resources diverted from programming with greater evidence of a health benefit and/or wages.

Given the weak case for wellness programs, policymakers and employers need to carefully reevaluate the evidence for proposed wellness activities and the use of large incentives to push workers into participating into these programs. Not only do incentives appear unnecessary to effectively drive participation in programs, many incentives undermine nondiscrimination laws and could negatively impact affordability of coverage for workers. Disease management programs show more promise at reining in healthcare costs, targeting a much narrower portion of the workforce. But even these programs need to balance health promotion efforts with the need to safeguard employees' privacy and nondiscrimination rights.

Employers understandably have a vested interest in managing the health of their workforce. Their efforts should center on evidence-based interventions that strengthen the health infrastructure available to workers. Punitive approaches may only further entrench disparities.

Notes

1. Pollitz, Karen, and Matthew Rae, *Changing Rules for Workplace Wellness Programs: Implications for Sensitive Health Conditions*, Kaiser Family Foundation, Washington, D.C. (April 2017).
2. Pollitz, Karen, and Matthew Rae, *Workplace Wellness Programs Characteristics and Requirements*, Kaiser Family Foundation, Washington, D.C. (May 2016).
3. Kaiser Family Foundation, *2017 Employer Health Benefits Survey*, Washington, D.C. (September 2017).
4. Kaiser Family Foundation (September 2017).
5. Pollitz and Rae (April 2017).
6. Ibid.
7. Ibid.
8. Ossila, Karen Chan, et al., "Systematic Review of the Impact of Worksite Wellness Programs," *American Journal of Managed Care*, Vol. 18, No. 2 (February 2012).
9. Ibid.
10. California Health Benefits Review Program, *Analysis of Senate Bill 189: Health Care Coverage: Wellness Programs*, Oakland, CA (April 2013).
11. Mattke, Soeren, et al., *Workplace Wellness Programs Study: Final Report*, RAND Corporation, Santa Monica, CA (2013).
12. Ossila, et al. (February 2012).
13. California Health Benefits Review Program (April 2013).
14. Ossila, et al. (February 2012).
15. Mattke, et al. (2013).
16. Ossila, et al. (February 2012).
17. Mattke, et al. (2013).
18. Ossila, et al. (February 2012).
19. Mattke, et al. (2013).
20. Ossila, et al. (February 2012).
21. Mattke, et al. (2013).
22. California Health Benefits Review Program (April 2013).
23. BingeBehavior.com, EEOC Propose Rules, Official Comment Letter from the ED Community. *http://bingebehavior.com/eeoc-proposed-rules-official-comment-letter-from-the-ed-community* (accessed on Feb. 10, 2018).

24. Lewis, Al, and Vik Khanna, "The Cure for the Common Corporate Wellness Program," *Harvard Business Review* (Jan. 30, 2014).
25. Seppala, Emma, "Good Bosses Create More Wellness than Wellness Plans Do," *Harvard Business Review*, (April 8, 2016).
26. Mattke, Soeren, et al., *Workplace Wellness Programs: Services Offered, Participation and Incentives*, RAND Corporation, Santa Monica, CA (2014).
27. Gowrisankan, Gautam, et al., "A Hospital System's Wellness Program Linked to Health Plan Enrollment Cut Hospitalizations But Not Overall Costs," *Health Affairs*, Vol. 32, No. 3 (March 2013).
28. Caloyeras, John, et al., "Managing Manifest Disease, But Not Health Risks, Saved PepsiCo Money Over Seven Years," *Health Affairs*, Vol. 33, No. 1 (January 2014).
29. Mattke, et al. (2014).
30. Horwitz, Jill, Brenda Kelly and John DiNardo, "Wellness Incentives in the Workplace: Costs Savings Through Cost Shifting to Unhealthy Workers," *Health Affairs*, Vol. 32, No. 3 (March 2013).
31. Kaiser Family Foundation (2017).
32. Mattke, Soren, et al., *Do Workplace Wellness Programs Save Employers Money?*, RAND Corporation, Santa Monica, CA (2014).
33. Mattke, et al. (2014).
34. Cahill, K., J. Hartmann-Boyce, and R. Perera, "Incentives for Smoking Cessation (Review)," *Chochrane Database for Systematic Reviews*, Vol. 5 (2015).
35. Halpern, Scott, et al., "Randomized Trial of Four Financial-Incentive Programs for Smoking Cessation," *New England Journal of Medicine*, Vol. 372 (May 28, 2015).
36. Patel, Mitesh S. et al. "Premium-Based Financial IncentivesDid Not Promote Workplace Weight Loss in A 2013-15 Study," *Health Affairs*, Vol. 35, No. 1 (January 2016).
37. Volpp, et al., "Redesigning Employee Health Incentives-Lessons from Behavioral Economics," *New England Journal of Medicine*, Vol. 365 (August 2011).
38. Kaiser Family Foundation (2017).
39. Kaiser Family Foundation (2017).
40. Collins, Sara, et al., *Americans Confidence in Their Ability to Pay for Health Care is Falling*, The Commonwealth Fund, Washington, D.C. (May 2018).
41. Fronstin, Paul, *Findings from the 2013 EBRI/Greenwald & Associates Consumer Engagement in Health Care Survey*, Employee Benefit Research Institute, Washington, D.C. (December 2013).
42. Pollitz and Rae (2017).
43. Hancock, Jay, "Workplace Wellness Programs Put Employee Privacy at Risk," CNN (Oct. 2, 2015).
44. Fronstin (December 2013).
45. Mattke et al. (2014).
46. McGovern Laura, George Miller, and Paul Hughes-Cromwick, "Health Policy Brief: The Relative Contribution of Multiple Determinants to Health Outcomes," *Health Affairs*, Washington, D.C. (Aug. 21, 2014).
47. Mattke, et al. (2014).
48. Ibid.
49. Kaiser Family Foundation (2017).

Independent Consultant Lydia Mitts prepared this report. Thanks to colleagues Lynn Quincy and Tad Lee for their review and editing.

ALTARUM
HEALTHCARE VALUE HUB

ABOUT THIS SERIES

The Healthcare Value Hub takes a careful look at the evidence and consults with experts in order to clarify for advocates, media and policymakers the important cost drivers and the promising policy solutions. Hub Research Briefs, Easy Explainers, infographics and other products are available at our website.

Contact the Hub: 2000 M Street, NW, Suite 400, Washington, DC 20036
(202) 828-5100 | www.HealthcareValueHub.org | @HealthValueHub

Support provided by the Robert Wood Johnson Foundation