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## *policy brief*

Stanford Institute for Economic Policy Research

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## Are Wellness Programs Any Good?<sup>1</sup>

By *Damon Jones*

If you or someone you know are one of the many Americans looking to re-enter the labor force, do not be surprised if during a job interview a potential employer includes a question about whether or not you smoke. Many companies are now penalizing employees for costly behaviors such as smoking: PepsiCo charges an annual smoker surcharge on health insurance premiums of \$600 (Petrecca 2009). Employers are also encouraging other types of health-related behavior. At firms such as Safeway, the amount that employees pay for their health insurance depends on how well they do on health exams. Those who are able to lose weight, lower their blood pressure, or reduce their cholesterol level will be rewarded with discounts on their health care premiums (Doyle 2010). These types of incentives are examples of

wellness programs: workplace-based efforts that enhance awareness, change behavior, and create environments that support “good” health practices (Aldana 2001).

Such programs are becoming commonplace as employers struggle to keep up with exploding health care costs. Indeed, wellness programs are set to become even more prominent in 2014, when the recently signed health reform law will increase the maximum amount that employers can offer to encourage participation. These programs have the potential to curtail rising health costs, but whether or not this is true remains an open empirical question. Furthermore, any such benefits of improving health outcomes may be offset if wellness programs cause excess sorting of healthy employees

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<sup>1</sup> I'd like to thank Maria Fitzpatrick and Gopi Shah Goda for helpful comments. The author alone is responsible for any errors or omissions.

### About The Author

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interests include public finance, household finance and behavioral economics. His recent papers cover topics such as the Earned Income Tax Credit, Income Tax Overwithholding and 401(k) savings behavior. He received his B.A. in Public Policy from Stanford University in 2003 and a Ph.D. in Economics from the University of California, Berkeley in 2009. Starting in July of 2010, he will join the faculty at the University of Chicago, Harris School of Public Policy.

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and sick employees into different insurance plans. This policy brief discusses some of the key insights that economic theory can provide regarding the impacts of wellness programs. We will then outline a number of research questions that must be addressed in order to adequately evaluate the merits of forthcoming wellness-related policies.

## Background on Wellness Programs

Wellness programs emerged during the 1970s amid an environment of rising health care costs and new evidence suggesting that lifestyle decisions may be related to long-term health outcomes and disease incidence. Employers, who are responsible for financing a majority of the health care for the working-age population, sought out new means of cost containment. The resulting shift toward greater cost sharing on the part of employees included the introduction of wellness programs, whose aim was to reduce employee health risk and the associated health care costs. The prevalence of such programs increased throughout the 1980s, gaining endorsement among medical practitioners and the government (Conrad 1987). By 1990, the federal government's Healthy People 2000 initiative set a target of 85 percent participation in at least one type of health promotion (or wellness) activity for companies with 50 or more employees. The follow-up initiative, Healthy People 2010, set a more ambitious goal of 75 percent participation in

comprehensive health promotion (i.e., multifaceted, integrated wellness programs) among these same employers.

Wellness programs come in various shapes and sizes. Figure 1 shows the share of firms offering different options: wellness newsletters, smoking cessation programs, fitness facilities and gym memberships, weight-loss programs, and screening or health-risk assessments. Other options not shown on the graph include personal health coaching and Web-based wellness resources. Wellness programs may be initiated and run by the employer or may be features of individual health plans. As will be made clear below, this is an important distinction.

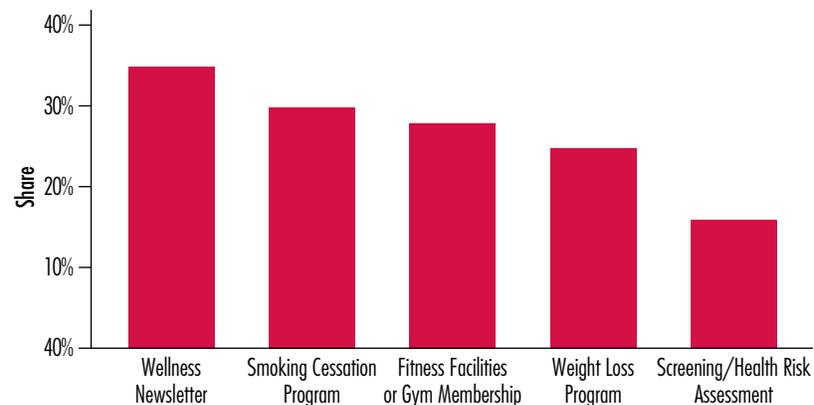
## Current Trends

Wellness programs have experienced a recent surge in prevalence. An estimated 58 percent of employers offering

health benefits provided some type of wellness program in 2009, up from just 27 percent in 2006. These overall percentages mask a wide range of wellness program availability across firms of different sizes. For firms with more than 200 employees, the share providing at least one type of wellness program grew from 62 percent in 2006 to 93 percent in 2009. Among firms with fewer than 200 employees this share increased from 26 percent to 53 percent over the same period. In addition, wellness programs among small firms (83 percent) are much more likely to be driven by health plans than they are among large firms (63 percent).<sup>2</sup>

Increasingly, employers are providing incentives for participation in wellness programs. The most popular (offered at 27 percent of large firms and 9 percent of small firms) are rewards such as a gift

**Figure 1**  
**Share of Firms Offering A Particular Wellness Program**



Source: Kaiser Foundation Annual Survey of Employer Benefits, 2009

<sup>2</sup> Data are from the Kaiser Foundation Annual Survey of Employer Benefits, 2009

card, travel, merchandise, or cash. In fewer cases, firms tie participation directly to health insurance premiums. Employees who participate in wellness programs pay smaller premiums in 8 percent of large firms and 4 percent of small firms.<sup>3</sup> In a number of cases the default has been shifted to participation in wellness programs, and penalties are levied on employees who fail to do so. Nearly half of the employers in a recent survey plan to impose penalties such as higher premiums on employees who are, for example, smokers and do not seek smoking cessation services (Hewitt 2010).

### The Effect of Wellness Programs on Health Outcomes and Health Care Costs

When surveyed, 63 percent of firms believe that wellness programs are effective in improving the health of employees, while 51 percent think that these programs are also effective in reducing the firm's health care costs.<sup>4</sup> But are these beliefs confirmed by empirical research?

When it comes to the link between wellness programs and health outcomes, research is generally favorable but not yet definitive. More than 100 studies have evaluated wellness programs and the overwhelming majority document a correlation between participation and improved health outcomes (Pelletier 1996, 1999, 2001, 2005). However,

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many of these studies lack the proper design to make the leap from identifying a correlation to asserting a cause and effect relationship between wellness programs and health risks. The major issue is one of *sample selection*: Those who participate in wellness programs may also be more likely to have relatively good health. Therefore, comparing them with non-participants may skew results. There are, however, some exceptional controlled randomized trials that credibly point to a positive effect on health outcomes. For example, a few studies demonstrate that health screening in conjunction with follow-up counseling can be effective in treating smoking habits and dangerously high cholesterol.

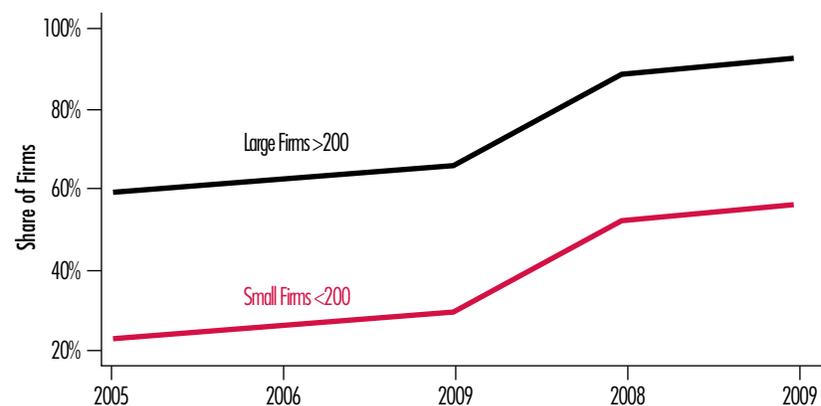
Even if we interpret the existing evidence as proof that wellness programs improve health outcomes, the question remains as to whether these

programs pay for themselves by reducing health care costs. Here the evidence on wellness programs is even more tentative. Existing studies suggest that wellness programs are successful at reducing absenteeism and lowering health costs. However, these studies are not carried out carefully enough to draw solid conclusions on cost-effectiveness, again because of the same problems of sample selection described above (Aldana 2001).

### Wellness Programs and Adverse Selection

The selection of healthy people into wellness programs does not only make it difficult to measure their effectiveness; it may also have implications for the overall efficiency of health insurance provision. In health insurance markets, sick consumers will sort into generous health plans, while healthy consumers will choose more

**Figure 2**  
Share of Firms Offering at Least One Type of Wellness Program



Source: Kaiser Foundation Annual Survey of Employee Benefits, 2005-2009; MetLife Study of Employee Benefits and Trends, 2006-2009

moderate ones. In most product markets, consumer choice fuels competition among firms, leading us toward an optimal allocation of goods. However, health insurance is unique in that the cost of providing it and therefore its price depend on the characteristics of those who purchase it. As the relatively healthy consumers leave a generous plan, the average price charged for the generous plan will have to increase to cover costs, which will in turn induce further migration. In this case, consumer choice has the side effect of forcing some consumers to choose insurance that is less generous than they would otherwise prefer. This mismatch in plan choice is referred to as adverse selection and can be socially costly (Cutler and Zeckhauser 2000).

When wellness programs are associated with some plans and not others offered by an employer, they may contribute to adverse selection. To reduce costs, health insurance providers may alter the features of their plan to make them more attractive to healthy consumers and unattractive to sick consumers. This is referred to as plan manipulation. Such distortions can be socially costly if they result in a further mismatch of consumers and insurance plans. Wellness programs may be one means of attracting healthy consumers into a plan. This is especially the case when participation in the wellness program affords one a lower premium. In this sense, wellness programs may be viewed as a

form of plan manipulation when they vary by health insurance plan. Understanding how much these plans exacerbate adverse selection in health insurance markets is important for evaluating wellness-related policy.

### Wellness Programs and Fairness

Alternatively, when wellness programs are company-wide and not specific to any particular insurance plan within a firm, they may undesirably affect equity between healthy and sick employees. In effect, wellness programs may serve to shift the costs of health care provision from the healthy to the sick, especially when participation in these programs leads to reduction in premiums and deductibles or failure to participate results in penalties and surcharges. Some may argue that this process increases fairness by forcing those who impose the most cost to incur the highest burden. However, society may prefer to alleviate the costs to the sick, who are typically in less of a position to shoulder their burden. For this reason, numerous advocacy groups such as AARP or the American Diabetes Association are leery of laws that aim to increase wellness incentives (Vesely 2010).

The idea that wellness programs shift costs to the sick hinges on the assumption that healthy employees are much more likely to participate in wellness programs and therefore receive the associated incentives. The evidence on this is mixed.

While some studies suggest that participants in wellness programs tend to be the healthier employees (Conrad 1987), other studies demonstrate the opposite when it comes to programs that deal with weight control, smoking, and blood pressure (Lewis, Huebner, and Yarborough 1996).

### Wellness Programs and the Labor Market

Even with inconclusive evidence on the health care cost savings of wellness programs, employers may yet offer these programs as a means of recruitment and retention. Wellness programs may provide a low-cost means of competing with other firms in the area of employee benefits. A recent study indicates that employees who participate in wellness programs are more likely to state that they are very loyal to their employer (MetLife 2009). This is not to suggest that wellness programs increase loyalty, but it may indicate that wellness programs are one of many factors taken into consideration as workers choose a firm. Some employers believe so. When surveyed, 15 percent of firms state that the primary reason for offering wellness programs is to improve employee morale and productivity (Kaiser 2009). Thus, when evaluating the cost-effectiveness of wellness programs from a firm's perspective, the effect on recruitment, retention, and productivity of employees must be considered in addition to health and health care costs effects.

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## Policy Implications & Conclusion

The recently passed Patient Protection and Affordability Care Act has explicit provisions to increase the presence of wellness programs. Currently, companies are able to offer no more than a 20 percent discount on premiums to employees in return for participation in a wellness program. Starting in 2014, the new law will allow employers to offer at least 30 percent in discounts and possibly incentives as large as 50 percent of the cost of premiums. Given the cost of an average plan, these incentives could be as much as \$2,412 for single coverage and \$6,688 for family coverage.

From a policy perspective, the evaluation of this increase in allowed incentives must weigh the benefits of reduced health care costs against the possible increase in adverse selection and redistribution of costs from the healthy to the sick. The current research evidence is not capable of providing definitive answers as to the balance of these costs and benefits. As such, a number of research priorities emerge for policymakers anticipating the 2014 change in rules. First, more carefully designed evaluations of the health effects of wellness program participation are in order. Establishing precise estimates of the potential cost savings is key.

Furthermore, for policy evaluation, the overall lifetime savings in health care costs is the relevant measure. While companies may experience savings over the working life of

an employee, society's cost of health care includes any costs that are simply delayed until retirement. Longer-term horizons should therefore also be a goal of future studies. Finally, research should seek to acquire a better grasp of the selection of employees into wellness programs. Empirical analysis of this type will go a long way toward understanding the role that adverse selection and cost shifting may play once the 2014 changes take effect.

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