THE EFFECTIVENESS OF WORKSITE HEALTH RISK APPRAISALS AND BIOMETRIC SCREENINGS AS A COST CONTROLLING STRATEGY FOR EMPLOYERS

THE PROBLEM

Although rising health care costs occur for various reasons, perhaps the most serious is that of chronic disease. A look at the number of deaths per year attributed to preventable chronic disease is alarming. A recent *New England Journal of Medicine* article notes the estimated amount of deaths per year at 465,000 from smoking, 395,000 from high blood pressure, 216,000 from obesity, 191,000 from inactivity, 190,000 from high blood sugar, and 113,000 from high cholesterol.[1] Putting a dollar-value on chronic diseases is complicated, but several studies have sought to quantify the impact. Data from the Centers for Medicare and Medicaid indicated that of the $2 trillion spent on health care in 2005, 75% of those costs were attributed to chronic diseases.[2]

The impact of chronic disease carries over to the workplace. This impact is compounded by rising health care costs, creating a dilemma for employers who offer benefits. According to the United States Department of Health and Human Services, health insurance premiums have consistently grown faster than inflation and workers earnings in recent years. Between 1998 and 2008, the cumulative growth in health insurance premiums was 119% compared with cumulative inflation growth of 29% and cumulative wage growth of 34%.[3]

The combination of rising health care costs and chronic disease incidence in the workplace has caused health care premiums for employer-sponsored family coverage to increase by 87% since 2000.[4] From a cost perspective, one study indicates that health care coverage for employees with a chronic condition averages around $6,000 per year—or five times higher than the cost of those without a chronic condition.[5] The cost associated with chronic conditions combined with an increasing rate of growth of health care costs creates a burden for employers. A feasible and ethical solution must be implemented to contain these costs at a manageable level, as opposed to "quick-fix" remedies that employers turn to as short-term solutions.

THE BASIC SOLUTION

Employers must implement strategic measures to mitigate rising costs through primary prevention. In other words, employers must be proactive in reducing the onset of new cases of chronic disease. Studies consistently reinforce the connection between primary prevention and a reduced risk of chronic diseases such as diabetes, obesity, and coronary heart disease. The Centers for Disease Control and Prevention estimate that eliminating the three risk factors—poor diet, inactivity, and smoking—can prevent 80% of heart disease and stroke, 80% of type 2 diabetes, and 40% of cancer.[6]

[1] Christopher J.L. Murray, M.D., D.Phil., and Julio Frenk, M.D., Ph.D., M.P.H. Ranking 37th – Measuring the Performance of the US Health Care System. *New England Journal of Medicine*. 14 Jan 2010. 362:98-99.

[2] Centers for Medicare and Medicaid Studies. *Historical Overview of National Health Expenditures*. Available at: http://www.cms.hhs.gov/nationalhealthexpenddata/02_nationalhealthaccountshistorical.asp#Topofpage

[3] Kaiser Family Foundation. *Trends in Health Care Costs and Spending*. March 2009. Available at: http://www.kff.org/-insurance/upload/7692.pdf.

[4] Kaiser Family Foundation and Health Research & Educational Trust. *2006 Employer Health Benefits Survey*. Available at: http://www.kff.org/insurance/7527/.

[5] Partnership for Solutions. *Chronic Conditions: Making the Case for Ongoing Care*. September 2004 update. Available at: http://www.rwjf.org/files/research/chronicbook2002.pdf.

[6] Mensah G. Global and Domestic Health Priorities: Spotlight on Chronic Disease. National Business Group on Health Webinar. May 23, 2006. Available at:http://www.businessgroup-health.org/opportunities/webinar052306-chronicdiseases.pdf.

Using cost-shifting or dropping coverage is not an effective or sustainable solution to combat rising health care expenditures. In the workplace, methods focusing on primary prevention include on-site workout facilities, wellness seminars, or health coaching. These may or may not be the result of an incentive, such as a premium discount. The net effects of implementing wellness at the workplace have the potential to decrease absenteeism and presenteeism, and control rising health care costs.

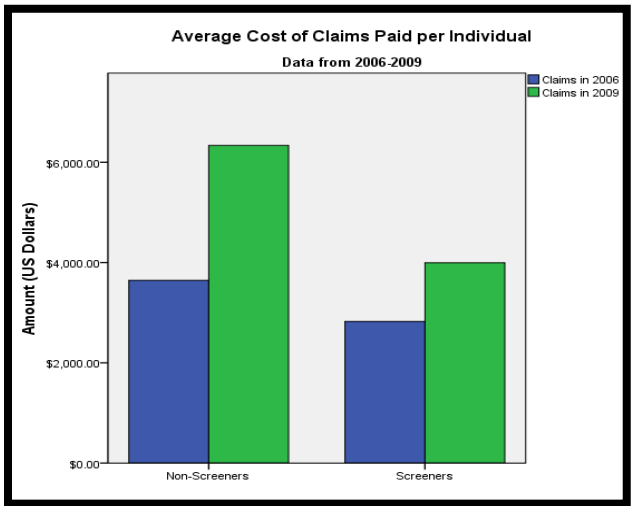
According to the Kaiser Family Foundation *2009 Employer Health Benefits Survey*, 55% of large firms (200 or more workers) providing benefits offer health risk appraisals (HRAs) to their employees and only 14% of small firms (3-199 workers) providing benefits offer this as an option to their employees.[7] The *2009 Employer Health Benefits Survey* concluded that among firms offering health benefits, 63% of employers think offering wellness programs is effective in improving the health of the firm's employees. Among those firms offering health coverage, 51% of employers think offering wellness programs is effective in reducing their firm's health care costs.[8]

THE CHC WELLNESS SOLUTION

In this retrospective case-series study of four cohorts, worksite screening participation was compared with health insurance claims paid. Screening was voluntary and took place on an annual basis at each company. The four cohorts: A, B, C, and D had health insurance claims paid from the years 2006 through 2009, and screened in years 2007 through 2009. Insurance data from 2006 served as the baseline with 2009 data as comparison. Those who screened at least two years are classified as 'screeners' while those who screened once or never are classified as 'non-screeners.' After combining data from the four cohorts, aggregate trends were analyzed from the baseline to the follow-up.

THE CHC WELLNESS RESULTS

Of the aggregate data, the number of individuals in each cohort ranged from 114 to 467. The inclusion group was comprised of 505 non-screeners and 210 screeners. Study duration covered four years with screenings performed annually in 2007, 2008, and 2009. In terms of cost-control, the screening group is associated with a greater level of cost-maintenance over time. Importantly, 2006 average claim costs per person for both non-screeners and screeners was fairly similar at $3,642 and $2,824, respectively. However, the 2009 values do not follow the same trend. In 2009, the average cost of claims per person in the non-screening group rose to $6,336 whereas the screening group stayed closer to the baseline average at $3,995 per person. These changes represent an increase in cost of average claims per person of $2,693 for non-screeners, and $1,171 for screeners. This translates to a 73.9% increase for non-screeners and a 41.5% increase for screeners. This is shown in the following bar chart.



CONCLUSION

This study reinforces the use of screenings as an effective cost controlling strategy for employers. Furthermore, employers who maintain a proactive interest in the well-being of their employees can expect even greater results over time.

[7, 8] Kaiser Family Foundation and Health Research & Educational Trust. Employer Health Benefits 2009 Annual Survey. Available at: http://www.ehbs.kff.org.