EMORY | ROLLINS SCHOOL OF PUBLIC HEALTH

Comprehensive Worksite Health Promotion Programs

Submitted to the Bipartisan Policy Center by:

Ron Z. Goetzel, PhD
Research Professor and Director
Institute for Health and Productivity Studies, Emory University
Vice President
Consulting and Applied Research, Truven Health Analytics

Enid Chung Roemer, PhD
Assistant Research Professor
Institute for Health and Productivity Studies, Emory University

Karen Butcher Kent, MPH
Manager of Research Projects
Institute for Health and Productivity Studies, Emory University

Kristyn J. Smith, BA
Research Project Coordinator
Institute for Health and Productivity Studies, Emory University

Emory University Institute for Health and Productivity Studies
1341 22nd Street, NW
Washington, DC 20037

March 5, 2013

Acknowledgement of funding:
Funding for development of this report was provided through a contractual agreement between the Bipartisan Policy Center (BPC) and the Emory University Prevention Research Center; Contract Number: 12-HLCC-112. The views, opinions, and/or findings contained in this report are those of the authors and should not be construed as an official BPC position, policy, or decision unless so designated by other documentation. Additionally, the opinions expressed here do not necessarily represent the opinions of Emory University. Questions regarding this material may be directed to Ron Goetzel at ron.goetzel@emory.edu.

TABLE OF CONTENTS

BACKGROUND: THE ECONOMIC ARGUMENT FOR PREVENTION

The high and rapidly escalating cost of healthcare in the United States poses a serious threat to our nation's fiscal security and the economic competitiveness of businesses. In 2011, the United States spent $2.7 trillion (approximately 18 percent of our GDP) on healthcare.[1] This share of the GDP on healthcare services was almost double the average amount spent by OECD countries — 9.5 percent of GDP — and yet the United States has worse health outcomes than countries with much lower levels of spending.[2] Moreover, healthcare expenditure is still increasing, fueled in large part by the dramatic increase in chronic diseases, such as heart disease, diabetes, cancer, and depression.[3,4,5,6] Our current healthcare system is unsustainably expensive and is not focused on health – it is focused on the treatment of sickness.

The financial implications for businesses are dire. Employers cover the healthcare costs of more than 156 million non-elderly Americans (77.5 million workers, plus their dependents), and they currently spend nearly half of after-tax profits on healthcare benefits.[7,8,9] Higher medical utilization, coupled with rising medical costs, translate into higher insurance premiums. Moreover, with less than optimally healthy employees, businesses suffer large productivity losses due to excessive absences from work (absenteeism) and reduced performance while at work (presenteeism). Productivity losses related to personal and family health were estimated to have cost U.S. employers $227 billion in 2011.[10] These costs threaten the ability of American businesses to compete in a global marketplace.

---

[1] Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, National Healthcare Expenditures Data, January 2012.

[2] Organisation for Economic Co-operation and Development (OECD). OECD Health Data 2012. <http://www.oecd.org/els/healthpoliciesanddata/oecdhealthdata2012-frequentlyrequesteddata.htm>.

[3] Centers for Disease Control and Prevention (CDC). Chronic Disease Overview: Costs of Chronic Disease. <http://www.cdc.gov/nccdphp/overview.htm>.

[4] Partnership to Fight Chronic Disease (PFCD). About the Crisis. <http://www.fightchronicdisease.org/facing-issues/about-crisis>

[5] Thorpe, KE, Florence, CS, Howard, DH, Joski, P. The Impact of Obesity on Rising Medical Spending. Health Aff (Millwood). October 20, 2004:480-486.

[6] Thorpe, KE, Florence, CS, Joski, P. Which Medical Conditions Account for the Rise in Health Care Spending? Health Aff (Millwood). Web Exclusive. 2004: w4-437-445. <http://content.healthaffairs.org/cgi/reprint/hlthaff.w4.437v1.pdf.>

[7] While the total U.S. workforce is estimated at 155 million individuals, only approximately half of these individuals have employer-based health insurance in their own name.

[8] Fronstin P. Sources of health insurance and characteristics of the uninsured: analysis of the March 2011 Current Population Survey. Issue brief. No. 362. Washington, D.C.: Employee Benefits Research Institute, 2011. <http://www.ebri.org/pdf/briefspdf/EBRI_IB_09-2011_No362_Uninsured1.pdf>.

[9] Employee Benefit Research Institute. EBRI Databook on Employee Benefits, Chapter 34: Employer Spending on Health Insurance. 2011< http://www.ebri.org/pdf/publications/books/databook/DB.Chapter%2034.pdf>

[10] Integrated Benefits Institute. Poor Health Costs U.S. Economy $576 Billion According to the Integrated Benefits Institute. Published on September 12, 2012. <http://www.ibiweb.org/UserFiles/File/Poor%20Health%20Costs%20US%20Economy%20576%20Billion.pdf>

The high cost of healthcare also imposes an unsustainable burden on federal, state, and local governments, and is a major contributor to annual government deficits as well as the soaring national debt. Government is the largest purchaser of healthcare services, responsible for almost half of national healthcare expenditures.[11] As an employer of approximately 19 million Americans (4 million at the federal level), government agencies are subject to the same cost pressures as those imposed on the private sector: the direct cost of high insurance premiums for employees and their dependents, and the indirect cost of productivity losses.[12] Further, spending on healthcare programs, such as Medicare, Medicaid, and the Children's Health Insurance Program (CHIP), accounts for 21 percent of the federal budget and an even greater proportion of state budgets.[13] This fraction is expected to grow substantially in the years ahead as the baby boom generation becomes eligible for Medicare and as enrollment in Medicaid and CHIP increases.[14,15] Addressing out-of-control healthcare costs is a vital component of any long-term deficit reduction strategy, and in order to do so we need to improve the health of our population.

One of the biggest drivers of rising healthcare costs is the dramatic increase in chronic disease, with obesity being a key underlying cause.[16] Most of our healthcare spending—an estimated 75 percent—is directly related to the treatment of chronic diseases.[17] Chronic diseases are the leading cause of death and disability, and affect 133 million Americans, or 45 percent of the population.[18] Chronic diseases are most prevalent among the elderly, so the aging of the population is undoubtedly contributing to increased disease prevalence. However, these diseases are also on the rise among working age Americans. Because younger Americans are subject to many chronic illnesses usually associated with old age, the economic burden of chronic disease is increasing because of illness-related losses in productivity. Preventing or postponing the onset of chronic disease has become a crucial public health issue but also an economic issue affecting businesses. Improving population health holds the promise of compressing the period of

[11] Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, National Healthcare Expenditures Data, January 2012

[12] U.S. Census Bureau. Annual Survey of Public Employment and Payroll Summary Report: 2010. Released January 30, 2012. <http://www2.census.gov/govs/apes/g10aspep.pdf>.

[13] Congressional Budget Office. Preliminary Analysis of the President's Budget for 2012. March 18, 2011. <http://cbo.gov/doc.cfm?index=12103>.

[14] Executive Office of the President. Council of Economic Advisers. ―The Economic Case for Health Care Reform. June 2009. <http://www.whitehouse.gov/administration/eop/cea/TheEconomicCaseforHealthCareReform/.

[15] Healthways Center for Health Research. (2009). Potential Medicare savings through prevention & health risk reduction. Rula, E., Pope, J., & Hoffman, J.C <http://www.healthways.com/trillions/>

[16] Thorpe, KE and DH Howard. The Rise in Spending among Medicare Beneficiaries: The Role of Chronic Disease Prevalence and Changes in Treatment Intensity Health Aff (Millwood). 2006; 25(5): w378 – w388 .

[17] Centers for Disease Control and Prevention, Chronic Disease Overview. <http://www.cdc.gov/chronicdisease/overview/index.htm>

[18] *Ibid.*

disability prior to death, improving the quality of life for millions of Americans, *and* importantly saving money.[19]

Although chronic diseases are the most common and costly of all health problems, they are also the most preventable. The Centers for Disease Control and Prevention (CDC) has identified four modifiable behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—as primary causes of chronic disease in the United States. With this as background, it is imperative that Congress crafts a national strategy for healthcare cost containment that includes disease prevention and health promotion as central tenets. We have the opportunity today to transform the U.S. healthcare system from one focused on treating expensive chronic illness to one that actively promotes good health habits and prevents disease.

COMPREHENSIVE WORKPLACE HEALTH PROMOTION PROGRAMS

Comprehensive workplace health promotion (CWHP) programs offer a potentially powerful strategy to improve the lives of the 155 million American workers, and possibly their dependents.[20] The workplace is where most American adults spend the majority of their waking hours during a typical workweek. While job-related pressures can negatively influence health behaviors, the workplace also presents an underutilized setting for positive programs designed to lower health risks, and, in turn, have an impact on the prevalence, severity, and cost of chronic disease. Through workplace health promotion programs, employers have the unique opportunity to reach a large segment of the population who would not normally be exposed to, or engaged in, organized health improvement efforts. Along with this opportunity, employers also have strong *incentive* to offer health promotion programs, understanding that, if they can keep their employees healthy and fit, their workers will consume fewer healthcare resources, miss fewer workdays, and be more productive.

The health and economic impacts of workplace health promotion and disease prevention (also known as workplace wellness) programs implemented in the private sector, at private organizations, support a strong business case for increased investment in these programs. A meta-analysis of the literature on costs and savings associated with worksite health promotion programs reported that medical cost savings amounted to $3.27 for every $1.00 invested, over a three-year time horizon. This analysis also found a return of $2.70 in reduced absenteeism for each dollar spent.[21] The potential for savings has been borne out by the experiences of many

[19] Vita AJ, Terry RB, Hubert HB, Fries JF. Aging, health risks, and cumulative disability. New Engl J Med. 1998; 338(15): 1035–1041.
[20] Bureau of Labor Statistics. U.S. Department of Labor, Labor Force, Employment, and Earnings, 2010, February 17, 2012. <http://www.census.gov/prod/2011pubs/12statab/labor.pdf>
[21] Baicker, K., Cutler, D., Song, Z. Workplace Wellness Programs Can Generate Savings. Health Aff (Millwood). 2010. Feb; 29(2): 304-11.

large and small employers who have implemented these programs. For example, a recent evaluation of Johnson & Johnson's worksite health programs from 2002 to 2008 found that the company had experienced an average annual, inflation-adjusted, growth in total medical expenditures equal to 1.0 percent, approximately 3.7 percentage points lower than other similar large companies.[22]

Recent and ongoing research shows similar positive returns from programs implemented at non-federal worksites, including state, local government, or nonprofit organizations. For example, in 2009 the State of Nebraska responded to rising healthcare premiums by becoming one of the first state governments to offer an integrated health plan with lower premiums for employees and dependents participating in health promotion programs. In just two years, the Nebraska "wellnessoptions" initiative saved $4.2 million in medical and pharmacy claims, representing a return of $2.70 for every dollar invested.[23,24]

The general conclusion of evaluations conducted by leading economists and researchers is that comprehensive workplace programs *do* exert a positive influence on certain health behaviors (e.g., tobacco use and physical activity), biometric measures (e.g., high blood pressure), and financial outcomes important to employers (e.g., healthcare utilization and productivity).[25,26]

In recent years, the federal government has shown an interest in testing the value of health promotion and made promising advances in community-based and workplace-based programs. For example, over the last decade, the financial burden on Medicare resulting from the very high prevalence and cost of beneficiaries with chronic disease prompted the development of community-based health promotion and disease prevention programs. Such initiatives have been proven successful on a small scale, and the Centers for Medicare and Medicaid Services (CMS) is now evaluating a large-scale Senior Risk Reduction Demonstration project.[27] Preliminary results from the demonstration show that for one intervention vendor administering the program, Medicare beneficiaries who were randomly assigned to a group that received enhanced health

---

[22] Henke, R., Goetzel, R., McHugh, J., Issac, F. Recent experience in health promotion at Johnson & Johnson: Lower Health Spending , Strong Return on Investment. Health Aff (Millwood). 2011; 30 (3): 490-9.
[23] Wellness Council of America (WELCOA). 2012. First of its kind: The State of Nebraska's integrated health plan. <http://www.welcoa.org/freeresources/pdf/case_study_nebraska.pdf>.
[24] The Health Project (THP). C. Everett Koop National Health Awards: 2012 Koop Award Winners. http://www.thehealthproject.com/past_winners/index.html
[25] Soler RE, Leeks KD, Razi S, Hopkins DP, Griffith M, Aten A., et. al. A systematic review of selected interventions for worksite health promotion. The assessment of health risks with feedback. Am J Prev Med. 2010;38:S237–S262.
[26] Baicker, K., Cutler, D., Song, Z. Workplace Wellness Programs Can Generate Savings. Health Aff (Millwood). 2010. Feb; 29(2): 304-11.
[27] Center for Medicare and Medicaid Services (CMS). Fact Sheet—Senior Risk Reduction Demonstration. http://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/downloads/Senior_Risk_Reduction_Fact_Sheet.pdf

promotion services cost Medicare $958 less per person per year and were 14.2 percent less likely to be hospitalized compared to beneficiaries who did not receive those services.[28]

The federal government is also piloting workplace health promotion programs across several agencies. In 2010, the Office of Personnel Management (OPM) teamed with the Department of the Interior (DOI) and the General Services Administration (GSA) to launch *WellnessWorks*, a comprehensive health promotion program that includes health risk assessments, biometric screening, and health coaching. Similarly, Federal Occupational Health (FOH) has recently launched a program called *FedStrive* for Washington DC employees working in the Humphrey Building. Additionally, in recent years, the Department of Defense (DoD) has initiated a number of health promotion programs targeted at reducing health risks for a variety of costly and debilitating behavioral health conditions (e.g., depression and anxiety). These federal initiatives show great promise—many of them have, for instance, achieved good initial participation rates— but they need to be rigorously evaluated and expanded to optimize their impact.

The Affordable Care Act (ACA) contains several provisions that may broaden health promotion efforts such as those mentioned above. For example, Section 4108 of the ACA awards grants to states to carry out comprehensive, evidence-based, accessible programs to lower the health risks of Medicaid beneficiaries. These funds can be used for programs focused on tobacco cessation, weight management, lowering cholesterol, lowering blood pressure, and avoiding the onset of diabetes. Other sections of the ACA focus specifically on workplace health promotion. For example, Section 4402 requires the Secretary of Health and Human Services to evaluate the effectiveness of existing federal health and wellness initiatives and requires a report to Congress; Section 4303 requires the CDC to provide technical assistance in evaluating employer-based wellness programs, as well as to conduct a survey of existing programs; and Section 10408 authorizes a grant program for small businesses to establish workplace wellness programs. The effect of these initiatives is yet to be seen, and will depend on whether they are adequately funded and effectively implemented.

CHARACTERISTICS OF COMPREHENSIVE WORKPLACE HEALTH PROMOTION PROGRAMS

Workplace wellness programs can assume a variety of forms. There is no one-size-fits all approach— a successful program needs to be tailored to employee health needs and the organization's culture and environment. However, research has shown that a comprehensive approach to workplace wellness is more effective at yielding population health improvement and

[28] Impaq International. Evaluation of the Senior Risk Reduction Demonstration (SRRD) Under Medicare: First-Year Evaluation Report. February 2012.

cost savings compared to a program that simply involves administration of a health risk assessment (HRA).[29]

According to *Healthy People* 2010,[30] a comprehensive workplace health promotion program includes the following five elements:

1. Health education, focused on skill development and lifestyle behavior change along with information dissemination and awareness building, preferably tailored to employees' interests and needs;

2. Supportive social and physical environments, reflecting the organization's expectations regarding healthy behaviors, and implementing policies promoting healthy behaviors;

3. Integration of the worksite program into the organization's benefits and human resources infrastructure;

4. Linking related programs like employee assistance programs (EAPs) into worksite health promotion; and

5. Screening programs followed by counseling, linked to medical care to ensure follow-up.

Using the above framework, several studies have examined the key structural and process elements of effective worksite health promotion programs aligned with best practices. These benchmarking studies have concluded that effective programs have strong senior and middle management support, include employee input when developing goals and objectives, are grounded in behavior-change theory, are adequately resourced, have dedicated staff, include incentives for employees to participate, and are regularly evaluated using well-defined metrics of success.[31,32,33]

---

[29] Goetzel, RZ; Staley, P; Ogden, L; Stange, P; Fox, J; Spangler, J; Tabrizi, M; Beckowski, M; Kowlessar, N; Glasgow ,RE, Taylor, MV. A framework for patient-centered health risk assessments – providing health promotion and disease prevention services to Medicare beneficiaries. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2011. Available at: http://www.cdc.gov/policy/opth/hra/.

[30] Healthy People 2010: With Understanding and Improving Health and Objectives for Improving Health. Washington, DC: U.S. Dept. of Health and Human Services; 2000 <http://www.healthypeople.gov/2010/Document/HTML/Volume1/07Ed.htm#_Toc490550857>

[31] Goetzel, RZ, Shechter, D, Ozminkowski, RJ, Marmet, PF, Tabrizi, MJ, Roemer, EC. Promising practices in employer health and productivity management efforts: findings from a benchmarking study. J Occup Environ Med. Feb. 2007; 49(2): 111-30.

[32] Goetzel, RZ, Guindon, AM, Turshen, IJ, Ozminkowski, RJ. Health and productivity management: establishing key performance measures, benchmarks, and best practices. J Occup Environ Med. Jan. 2001; 43(1): 10-7.

[33] O'Donnell M, Bishop C, Kaplan K. Benchmarking Best Practices in Workplace Health Promotion. *The Art of Health Promotion Newsletter*. 1997;1:12.

In terms of content (i.e., specific interventions and target behaviors), comprehensive workplace wellness programs include policies, programs, benefits, and environmental supports that address chronic disease risk factors such as nutrition, physical activity, and smoking.[34] Well-designed programs also incorporate elements of *primary prevention* (helping employees stay healthy and reduce their risk of disease), *secondary prevention* (providing services aimed at early detection of disease), and *tertiary prevention* (interventions aimed at reducing the amount of disability caused by existing disease). Some examples of effective program offerings include: subsidized memberships to fitness centers or behavior modification programs such as Weight Watchers; healthy food options in cafeterias; incentives to walk or bike to work; on-site health services like blood pressure screenings and flu shots; and self-management coaching programs for diabetes control.

Several health and wellness organizations have constructed self-assessment tools that employers can use to determine whether their programs meet the standards of best practices. These tools include: the CDC Worksite Health ScoreCard,[35] the Health Enhancement Research Organization (HERO) Scorecard,[36] National Business Group on Health's (NBGH) Wellness Impact Scorecard,[37] and National Institute for Occupational Safety and Health (NIOSH) Essential Elements.[38]

While these tools provide an extensive listing of workplace health promotion strategies, it is important to note that best practices for large, medium, and small organizations will differ. Small organizations cannot (from a cost perspective) be expected to implement the same program elements as large businesses. Small employers often do not have the human resources, capital, or expertise to design and implement a best-practice health promotion program in-house, and typically rely on their health plans or other third-party vendors to administer the program. Furthermore, the definition of what is considered comprehensive for a small business is unknown. There is a need for more research establishing benchmarks for small employers in order to determine what programs are most feasible and effective for them. Additionally, future studies can examine how health benefit, community, and governmental resources can be better leveraged to provide small employers with the technical support, tools, and incentives to develop and offer health promotion programs to their employees.

Despite increasing numbers of workplace wellness programs, many are ineffective due to underinvestment. While recent surveys have shown that 63 percent of all companies offering

[34]Centers for Disease Control and Prevention. The CDC Worksite Health ScoreCard: An Assessment Tool for Employers to Prevent Heart Disease, Stroke, and Related Health Conditions. Atlanta: U.S. Department of Health and Human Services; 2012. < http://www.cdc.gov/dhdsp/pubs/worksite_scorecard.htm>
[35]< http://www.cdc.gov/dhdsp/pubs/worksite_scorecard.htm>
[36] <http://www.the-hero.org/scorecard_folder/scorecard.htm>
[37]< http://www.businessgrouphealth.org/scorecard_v4/index.cfm?event=logon.landing>
[38]< http://www.cdc.gov/niosh/docs/2010-140/>

healthcare benefits offer at least one wellness program, far fewer offer comprehensive programs.[39,40] In the most recent survey on this topic, Linnan et al. found that just 6.9 percent of U.S. employers offer comprehensive worksite health promotion programs as defined by *Healthy People* 2010.[30,41] Interestingly, *Healthy People* 2010 set a goal of 75 percent of all employers, regardless of size, having in place comprehensive workplace wellness programs with an average participation rate of 75 percent.[42]

BARRIERS TO ADOPTION OF WORKSITE PROGRAMS

There are several reasons why more employers do not offer comprehensive workplace health promotion programs. One is that many are not aware of the benefits such programs can offer. They may not have been exposed to the mounting research accumulated from program evaluation studies conducted at other employer sites demonstrating significant positive health and economic benefits. They may also be unconvinced that such programs are capable of both improving health and generating cost savings along with a positive ROI.

Additionally, while some may believe that health improvement and risk reduction programs exert a positive effect, they may not know how to design and implement successful programs, or determine which program elements are effective. Thus, they need guidance from trusted sources so that they can replicate interventions shown to be effective.

For some employers, the cost of implementing a comprehensive workplace health promotion program may be a barrier. Many small and medium-sized businesses, in particular, face this challenge, since they have few opportunities for economies of scale; for example, they may not be able to hire in-house staff or third-party vendors to implement a program. Because of such limitations, small employers offer fewer comprehensive workplace programs compared to larger businesses.[43,44] Cost is a general issue of concern for employers of all sizes because

[39] Kaiser Family Foundation and Health Research and Educational Trust, "Employer Health Benefits: Annual Survey 2012." <http://ehbs.kff.org/pdf/2011/8225.pdf>

[40] "Health Policy Brief: Workplace Wellness Programs," Health Aff (Millwood), Updated December 4, 2012.<http://healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_69.pdf.>

[41] Linnan L, Bowling M, Childress J, et al. Results of the 2004 national worksite health promotion survey. Am J Public Health. 2008;98(8):1503-1509.

[42] U.S. Office of Personnel Management. 2010. Federal Workplace Wellness Resources. <http://www.opm.gov/Employment_and_Benefits/WorkLife/HealthWellness/wellnessresources/worksitewellnessprogram.asp>

[43] Goetzel, R. Z., Kowlessar, N., Roemer, E. C., Pei, X., Tabrizi, M., Liss-Levinson, R., Samoly, D.,Waddell, J. (In press). Workplace Obesity Programs. Book chapter in The Oxford Handbook of the Social Science of Obesity. Cawley, J (ed.), Oxford University Press, Inc. 2011.

[44] Linnan L, Bowling M, Childress J, et al. Results of the 2004 national worksite health promotion survey. Am J Public Health. 2008;98(8):1503-1509.

implementing a workplace wellness program requires an upfront investment with returns accruing over a period of several years.

Finally, while many employers have the resources to implement workplace programs, they may lack motivation to do so because they do not feel that they will receive adequate credit or recognition for these efforts that fall outside of their usual business activities[45].

INCREASING EMPLOYER ENGAGEMENT

The federal government can play an important role in stimulating adoption of comprehensive workplace health promotion (CWHP) programs. This can be done with a two-pronged strategy. First, as the nation's largest employer, the federal government should *lead by example* by implementing CWHP programs more broadly across its own agencies and their worksites. Starting on a small scale by implementing and evaluating pilot programs, the federal government can then scale up successful programs while continuing to explore innovative approaches. As the employer of over four million Americans, federal workplaces touch many lives. The federal government spends more than $40 billion per year on healthcare for the federal workforce, so there is potential for great savings by improving employee health and reining in spending increases.[46]

Second, the federal government should encourage and accelerate the adoption of CWHP programs by highlighting the benefits of these initiatives to the business community, elevating best practices, and developing resources to stimulate implementation. These strategies will require upfront investment; however, our analysis shows that a modest federal investment, spread over ten years, will generate significant savings and achieve a positive return-on-investment (ROI).

[45] NIOSH [2012]. Research Compendium: The NIOSH Total Worker Health Program: Seminal Research Papers 2012. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2012-146, 2012 May; :1-214.

[46] Office of Management and Budget. *Historical Tables. Table 16.1—Total Outlays for Health Programs: 1962–2017.* <http://www.whitehouse.gov/omb/budget/Historicals>

POLICY RECOMMENDATIONS

As shown in our analyses, there are large potential gains, in terms of medical cost savings and productivity improvements, which would be realized by increasing the number of CWHP in place at American businesses. However, these gains cannot be achieved quickly without government investment. This is because very few organizations have the experience, resources and expertise – the "know how" – needed to design, implement, and evaluate effective programs on their own. The government is uniquely positioned to gather learning from best practices, disseminate that information to the business community, develop and make available tools and resources that employers can adopt, and measure the results of innovative programs. That is what government does best – act as a "clearinghouse" to harness the knowledge emanating from small initiatives into a comprehensive strategy that has broad appeal and is easy to implement. This avoids wasteful duplication of effort and will speed to market evidence-based practices that improve workers' health and save businesses money. This centralized approach is preferred to one that merely waits for the marketplace to solve this problem on its own.

Below we propose four key strategies that federal policymakers should pursue to support the wider adoption of comprehensive workplace health promotion programs (summarized in Figure 1). If adequately funded and effectively implemented, these policies can lead to a doubling of the proportion of non-federal employers offering comprehensive workplace health promotion programs (from approximately 7 percent to 14 percent) over the next 10 years, and—as our analysis demonstrates—garner significant returns on investment in terms of medical savings and productivity improvements.

Strategy #1: Actively Promote the Benefits of Comprehensive Workplace Health Promotion Programs

One barrier to the wider adoption of CWHP programs is that organizations are not aware of the potential benefits of such programs. Government can address this in three ways.

Provide more funding for research on and evaluation of health promotion programs. High-quality independent research is instrumental in overcoming the political disputes and private doubts about the value of CWHP programs that result in limited funding for wellness programs. The Patient Protection and Affordable Care Act (ACA) requires the Secretary of Health and Human Services to assess existing federal health and wellness initiatives and report conclusions to Congress. The law, however, does not specify a timeline or provide funding. We recommend that Congress authorize $100 million in funding for these activities over the next 10 years.

Some of these funds would be used to develop and evaluate innovative programs for federal employees, such as the ones currently being piloted at OPM and FOH. Additionally, more

research is needed to examine the effectiveness of programs within small business settings. As noted above, little is known about what constitutes best practices for small employers. There is also a need for more rigorous research to quantify the program elements that are most effective at improving health and saving money.

Very few organizations are able to independently conduct high-quality research that would inform best practices and allow for comparisons of alternative intervention programs. By increasing the evidence base in this relatively new field, the federal government can directly support the efforts of businesses, large and small, seeking guidance on the types of programs that produce meaningful results. The lessons learned from new applied research would also help to guide future government policy and reduce wasteful spending on ineffective efforts.

Improve communication and dissemination activities directed at educating employers about the benefits of workplace health promotion. There are many existing resources at the state and federal level as well as across public/private partnerships that need to be better leveraged, improved, and consolidated to communicate the value of CWHP to employers. Government should support the development of a general clearinghouse website with information on CWHP, including lay summaries of study results, and tools to help employers estimate the cost of implementing a program at their worksite. A well-designed clearinghouse has the capacity to overcome many of the challenges that have stymied the utility of existing resources, e.g., wordiness and poor organization. We recommend that Congress allocate $50 million for these activities.

Develop social marketing campaigns with business leaders acting as champions of CWHP. This could be modeled after the Partnership for Prevention's *Leading by Example* series of communications and discussions where business leaders educate their peers about the value of workplace health promotion programs. As part of this marketing campaign, government should develop persuasive messaging to motivate business leaders to play a significant role in influencing the health of their employees, and issue press releases on successful programs, so that business leaders can learn from one another and apply proven strategies to their own organizations. We recommend that Congress allocates $1 million a year towards such activities over the next ten years.

Strategy #2: Provide Resources to Support Broader Implementation of Comprehensive Workplace Health Promotion Programs

Another barrier employers face is not having available resources or knowing where to go when designing, implementing, or evaluating their wellness programs. While there are resources and tools already available in the marketplace, including those provided by the CDC on its website, navigating and sifting through all of them to determine what is or is not credible and useful can

be daunting and discouraging. The value of government sanctioned resources and tools is that they are viewed as reliable and grounded in science – and as such, credible and trustworthy.

CDC's role is to assemble and disseminate best practice information on community-based prevention programs, including worksite health promotion programs. The CDC plays a vital role of disseminating current, state-of-the-art information that can be applied in a real world setting. Without a central "clearing house" like the Community Guide for Preventive Services housed at the CDC, employers would be "reinventing wheels" and, worse yet, employing practices that are not effective. In short, federal investment in applied research, technical assistance, tools development, and effective dissemination of best practices will significantly propel the adoption of comprehensive worksite health promotion programs.

Develop/improve tools and resources to support the design, implementation, and evaluation of CWHP programs. Several tools and resources for workplace health promotion have already been developed with the support of government funding. These include the CDC Worksite Health ScoreCard.[47] CDC/National Business Group on Health's Employer Guide to Clinical Preventive Services,[48] and CDC's LEAN *Works!* Employer Toolkit.[49] Moving forward, more resources should be directed at validating and improving the current tools, consolidating and making available the materials in user-friendly formats, and keeping the information up-to-date. We recommend that Congress allocate $100 million over 10 years toward improving existing tools and resources, and developing tools that are more relevant to small businesses.

Create a comprehensive health promotion resource center. A government supported resource center would collect, develop, and disseminate objective, easy-to-use, and accessible workplace health promotion information and act as a clearinghouse for resources, tools, and expertise to support employer efforts. The information disseminated would be vetted by respected outside experts (similar to the work of the CDC Community Guide Task Force) to ensure accuracy and objectivity. Government should strive to reduce redundancies, identify gaps, and consolidate existing tools and resources into a centralized toolbox where employers can go to find user-friendly worksite health promotion tools and resources, as well as the most current evidence-based best practices in workplace health promotion program designs, implementation strategies, policies and program elements.

Provide technical assistance. ACA requires the CDC to survey worksite health policies and programs nationally and provide technical assistance related to employer-based wellness programs. However, no money was allocated for these activities. We recommend that federal lawmakers renew commitment to this strategy, and provide $100 million over 10 years in funding to support it. This may be done by adding a subcommittee to the U.S. Surgeon

[47] http://www.cdc.gov/dhdsp/pubs/worksite_scorecard.htm
[48] http://www.businessgrouphealth.org/pub/f2f59214-2354-d714-5198-3a8968092869
[49] http://www.cdc.gov/leanworks/

General's Prevention Council. The subcommittee would coordinate worksite health promotion program resources and technical assistance efforts. Alternately, a new position could be created at the CDC to coordinate CWHP resources and efforts. This CWHP Resource Coordinator could, for example, utilize CDC's LEAN *Works!* website as the foundation vehicle to provide this service, and work with the worksite health promotion subcommittee.

One example of a current effort that should be expanded is the CDC's National Healthy Worksite Program (NHWP), which is providing technical assistance to support workplace health promotion expansion by helping establish and evaluate comprehensive workplace wellness programs in up to 100 companies of all sizes.[50] The NHWP has been in place since 2011, with Viridian Health Management currently implementing the programs, evaluating best practices and results, and disseminating findings.[51]

Strategy #3: Reduce Cost for Businesses Interested in Implementing Programs

Government should fund and implement the workplace wellness provision of ACA that provides grants to small businesses to pay a portion of the cost of comprehensive workplace health promotion programs for small businesses (Sec 10408). $200 million was authorized in ACA, but these funds have not been appropriated. Instead, the administration allocated $10 million each year in FY 11 and 12 ($4 million requested for FY 13) from Prevention and Public Health Fund (PPHF) to support this effort.[52]

In addition to making these funds available, lawmakers should authorize an additional $200 million over the next ten years. This money would be used to support implementation of CWHP at both small and medium-sized organizations (those with fewer than 750 employees) and to establish demonstration projects to test innovative programs. Only $9 million, over two years, has been allocated from the PPHF to establish and evaluate comprehensive workplace health programs that improve the health of workers and their families in 70 to 100 small, medium, and large employers. Efforts like these (e.g., CDC's NHWP) are promising and funding should be extended past two years to allow for a more thorough and long-term evaluation of program impacts (e.g., examining the sustainability of programs that the CDC's NHWP helped to implement; determining which best/promising practices were most effective for which type of organization; understanding what types/level of support provided were most useful) and dissemination of findings. With lessons learned, improvements on strategies and resources can

[50] "About the National Healthy Worksite Program." Centers for Disease Control and Prevention (CDC).Last Updated January 9, 2013. < http://www.cdc.gov/nationalhealthyworksite/about/index.html>.
[51] Centers for Disease Control and Prevention (CDC). Press Release: Affordable Care Act helps improve the health of the American workforce, increase workplace health programs. September 30, 2011. <http://www.cdc.gov/media/releases/2011/p0930_improve_healthcare.html?s_cid=2011_p0930_improve_healthcare.html>
[52] Redhead, C., Colello, K., Heisler, E., Lister, S., Sarata, A. Discretionary Spending in the Patient Protection and Affordable Care Act. Congressional Research Service. 2012. <http://www.fas.org/sgp/crs/misc/R41390.pdf>.

be made available to continue to provide meaningful and effective support to businesses across the country, especially for smaller employers.

Establish CWHP Purchasing Consortia for Small Employers. Similar to health insurance exchanges, the goal of health promotion purchasing consortia would be to define common health and business objectives for employers in a given community, and negotiate lower rates with vendors and health plans providing workplace health promotion services. An example of such an initiative is the Employer's Coalition on Health in Northern Illinois (www.ecoh.com). These consortia would be particularly useful to small businesses, since they typically lack the resources or internal expertise to manage the complexities of designing, implementing and evaluating a comprehensive workplace program. We recommend that Congress allocates $10 million over ten years to support the development and maintenance of such consortia.

Strategy #4: Provide Incentives to Spur Implementation of High Quality and Innovative Programs

Honor and reward America's healthiest organizations. There are several high quality award programs in the arena of workplace health promotion. These include the C. Everett Koop National Health Awards,[53] National Business Group on Health (NBGH) Award,[54] and the Wellness Councils of America (WELCOA) National Awards.[55] These award programs recognize organizations and leaders who have implemented innovative and comprehensive workplace health promotion programs, and documented improved health and cost savings.

Government agencies at the national, state, and local levels should elevate and promote these awards. This would not require any new financial outlays, but could be tied to current dissemination and technical assistance efforts, boosting the recognition of organizations that have successfully implemented health promotion programs and assisting employers (include state and local government agencies) who are interested in pursuing existing awards.

Support establishment of health promotion program certification and accreditation programs.

In recent years, some established accreditation organizations, such as the National Committee for Quality Assurance (NCQA), the Utilization Review Accreditation Committee (URAC), and the Health Enhancement Research Organization (HERO), have introduced review processes focused on workplace health promotion vendors and health plans. Their goal is to objectively assess the quality of programs offered by these providers to employer customers. The intent of vendor accreditation programs is to improve the overall performance and quality of workplace by

[53] http://www.thehealthproject.com/
[54] http://www.businessgrouphealth.org/benchmarking/awards.cfm
[55] http://www.welcoa.org/wellworkplace/index.php?category=19

weeding out underperforming vendors. In reality, few employers have required accreditation of vendors when making decisions on contractors. Employers are generally focused on program quality, outcomes, and costs. There is value, we believe, in supporting certification and accreditation of vendors and tools sold by vendors. Further, having access to objective reviews of health promotion vendors and programs (through the clearinghouse website, for example) would help purchasers make informed decisions about the value of these programs. The federal government should strive to improve the profile of accreditation organizations and support the uptake of high-quality accredited programs without increasing bureaucratic regulation requiring employers to accredit or certify their programs. Requiring accreditation or certification on part of employers would reduce rather than increase adoption of worksite health promotion programs.

Developing certification programs (akin to Leadership in Energy and Environmental Design [LEED] certifications) would encourage even small employers to complete a self-scoring and comprehensive checklist of CWHP program elements, with opportunities to achieve gold, silver, and basic certification. A different set of program elements and criteria should be established for each business size, as what may be feasible and comprehensive for a large organization would not automatically apply to small- and medium-sized organizations. We recommend that Congress allocate $10 million over the next ten years to support the development of such self-scoring accreditation programs. The CDC Worksite Health ScoreCard or other similar valid instruments can be used to guide the establishment of criteria for effective and evidence-based programs that employers use to self-rate their programs.

Figure 1: Policy recommendations to broaden implementation of comprehensive workplace health promotion programs

BARRIERS	POLICY SOLUTIONS	COST (over 10 years)
1. Organizations not aware of potential benefits of CWHP	➢ ***Promote benefits of CWHP*** o More research and evaluation (since political disputes/private doubts about *value* result in shortage of funding for wellness programs) o Better dissemination of information (e.g., through government run/sponsored clearinghouse website) o Social marketing with business leaders acting as champions	➢ $100 million for Research and Evaluation; ➢ $50 million for dissemination ➢ $10 million for social marketing *(Government can leverage existing funds and resources)*
2. Organizations don't understand how to implement CWHP/what to do	➢ ***Provide resources*** o Develop tools and resources (e.g., CDC Worksite Health ScoreCard) o Create a comprehensive health promotion resource center (of both private and public resources) on a federal website (e.g., National Healthy Workplace Program, LEAN *Works!*) o Provide technical assistance	➢ $100 million for tools and resources ➢ *See above ($50 million total for dissemination)* ➢ $100 million for technical assistance
3. Cost of CWHP	➢ ***Reduce cost for businesses*** o Fund and implement workplace wellness provision of ACA that provides grants to small businesses (Sec 10408), extend to medium-sized companies o Establish purchasing consortium for small businesses (in the veins of health insurance exchanges) o Provide technical assistance	➢ $200 million already authorized in ACA, plus additional $200 million ➢ $10 million for purchasing consortium ➢ *See above ($50 million total for technical assistance)*
4. No credit/recognition for CWHP	➢ ***Provide incentives*** o Honor and reward healthiest organizations through development/promotion of awards, or assistance in applying for awards o Support the development of a private certification (like LEED certification) that encourages even small businesses to work towards a checklist of CWHP elements	➢ No new funding required for supporting awards ➢ $10 million for supporting certification
		TOTAL FEDERAL INVESTMENT ≈ $780 million

ROI ANALYSIS SUMMARY

The policy recommendations presented above outline a strategy that we believe will result in a doubling of the number of non-federal and federal (e.g., the Office of Personnel Management – OPM) employers offering comprehensive health promotion programs at their worksites. Our analysis shows that this increased implementation of programs will result in substantial savings in medical costs and productivity improvements—savings that far outweigh the cost of implementing the programs and the government investment necessary to spur wider adoption.

To demonstrate the savings and potential for achievement of a positive ROI for U.S. employers in private and public sectors, we used the Truven Health Analytics (www.truvenhealth.com) ROI Model. A detailed description of the model, including model inputs and assumptions, modeling methods, and results are provided in the attached document. For each modeling exercise, we first created a scenario that estimates cost savings derived from what we believe is the *current state* of health promotion program penetration among large employers (the federal government and others).[56] To create these current state scenario results, we estimated medical and productivity savings from effective programs that improve the risk profile of workers using evidence of program effects from studies published in the peer-reviewed literature.

We then assumed that, as a result of the policies recommended in this report, twice as many employers will adopt comprehensive, evidence-based worksite health promotion programs over the next 10 years, thus doubling the exposure of employees to these programs. The potential savings from doubling the number of employees exposed to effective programs are then modeled.

The analysis shows that doubling the proportion of employers offering CWHP programs would yield significant medical and productivity savings and a positive ROI. Specifically, the analysis shows that for large non-federal employers, both at baseline levels and when assuming a doubling of employees exposed to worksite programs, a positive ROI of $1.02 to $1.00 is achieved by medical savings alone. However, savings are optimized by the addition of productivity gains; when medical and productivity savings are combined, an ROI of $3.26 to $1.00 is achieved. Similar results are seen for the federal sector analysis of OPM workers, where a positive ROI of $1.13 to $1.00 is achieved through medical savings alone. For OPM, combined medical and productivity savings yield an ROI of $3.11 to $1.00. Figure 2 presents these summary results.

[56] Small businesses were excluded from our analysis because of insufficient data regarding the performance of worksite wellness programs at small employer sites. There are very few studies in the workplace health promotion literature that focus on small businesses, and none that provide reliable estimates of average program expenditures, participation rates, and risk reductions. Seeking insights from practitioners who work with small employers yielded unreliable and non-credible results.

Figure 2: Summary of Return on Investment (ROI) Estimates from Worksite Health Promotion Programs

	Non-federal large employers	Federal employer
Return on Investment (ROI), medical care	$1.02	$1.13
ROI, workplace productivity	$2.24	$1.98
ROI, medical care + workplace productivity	$3.26	$3.11

As the final step in our analysis, we compare the potential savings from doubling the number of CWHP programs to the government investment required to spur this increased implementation over the next 10 years. This analysis shows a significant net savings of $74.0 billion to the general economy and federal government resulting from an investment of $780 million over ten years. Figure 3 shows the dollar savings compared to investment costs for large non-federal and federal employers over 10 years.

Figure 3: Ten-Year Medical and Productivity Savings vs. Program Costs

	Non-federal large employers	Federal employer	TOTAL
Medical savings	$32.6 Billion	$1.0 Billion	$33.6 Billion
Productivity savings	$71.2 Billion	$1.8 Billion	$73.0 Billion
Program cost	$31.8 Billion	$0.9 Billion	$32.7 Billion
Net savings	$72.0 Billion	$2.0 Billion	$74.0 Billion
Government investment			$0.8 Billion

**All figures are based on current US dollars*

The medical savings reported above represent the total savings to society. In reality, however, these savings would be shared by employers and employees. To estimate the distribution of these savings, we examined data from the Truven Health Analytics MarketScan Database for 2011. These data indicate that the ratio of employer paid amounts for health care benefits divided by total covered charges (i.e., plan generosity) was approximately 84%. That is, for every $1.00 in medical claims costs, employers covered $0.84. Similarly, a recent Kaiser Permanente survey of employer health benefits shows that employers pay approximately 80% of health care benefits with the balance paid by workers.[57,58] Thus, the ROI estimates above would benefit both employers and employees at an approximately 80:20 ratio. For employees, this

[57] Kaiser Family Foundation and Health Research and Educational Trust, "Employer Health Benefits: Annual Survey 2012." <http://ehbs.kff.org/pdf/2011/8225.pdf>

[58] The 2012 Kaiser survey, referenced above, examines premium costs and estimates that employers on average pay 83% of premiums for single coverage.

would translate to lower health care premiums, lower absence rates, and higher productivity – all of which would increase take home pay and improve workers' quality of life.

The results of this analysis are conservative because the model does not factor medical inflation into the ROI calculations, which is unstable and therefore unpredictable. While the Centers for Medicare and Medicaid Services (CMS) has estimated 5.7% healthcare cost growth annually over the next decade based on recent expenditures, this projection includes not only an increase in medical prices, but also an increase in medical utilization. However, a key premise of this analysis, supported by strong evidence from peer-reviewed health promotion literature, is that comprehensive workplace health promotion programs have the capacity to reduce medical utilization. Therefore, it would be inappropriate to simply apply this inflation factor to output cost estimates. Furthermore, if medical inflation adjustments were factored in the modeling exercises without consideration to the other key cost variables in the model (e.g., program costs, wages, etc.), the results of the model would be distorted and the reported ROI figures would be artificially high and not creditable.

Secondary Gains from Workplace Health Promotion Programs

The analysis above projects cost savings and an ROI for individuals in the workforce. However, these individuals will become Medicare recipients when they turn 65 and the federal government will then assume the costs of health care for these Americans. If workers are exposed to effective worksite-based health improvement, and these programs reduce their health risks, the federal government will accrue additional savings.

As we know, Medicare is a large and ever growing entitlement program and much of its cost is attributable to the increase in preventable chronic diseases. For instance, data from 2002 indicate that half of all Medicare beneficiaries were treated for at least five chronic conditions and this population accounted for more than 75% of Medicare spending.[59] Workplace wellness programs have the capacity to improve the health of older Americans before they age into Medicare, saving the federal government money in the long term. An actuarial study recently estimated that by making modest changes to the health risk profile of entering Medicare beneficiaries, the federal government would realize significant savings. Specifically, by increasing the proportion of Medicare fee-for-service beneficiaries who are at low risk for disease (e.g., not obese or hypertensive) at age 65 from 54% of the population entering Medicare to 65% of the population,

[59] Thorpe, KE and Howard, DH. The rise in spending among Medicare beneficiaries: the role of chronic disease prevalence and changes in treatment intensity. Health Aff (Millwood) 2006;25:w378–88

Medicare would realize savings amounting to $30,499 in lifetime costs per beneficiary ($1.1 trillion in total savings, in 2008 dollars).[60]

In addition to Medicare, the savings of private workplace health promotion may be passed along to government through indirect tax benefits. First, by improving health, reducing medical spending, and slowing the attendant growth of health insurance premiums, CWHP programs can increase tax revenue for the federal government and decrease the proportion of worker compensation that is not taxed (i.e., health insurance payment). The exclusion of health insurance premiums from workers' taxable income reduces federal and state tax revenues by $260 billion per year and is the government's third largest expenditure on health care, after Medicare ($400 billion) and Medicaid ($300 billion).[61] Given the scale of this tax expenditure, there is significant potential for garnering tax savings by reducing health insurance premiums.

There are many other ways in which increasing the implementation of CWHP programs may yield secondary savings and impact the U.S. economy in a positive way. For instance, we expect that lowered health care costs resulting from improved employee health, and increased worker productivity created through reduced absenteeism and presenteeism, will improve the competitiveness of the U.S. economy by lowering operating costs and making available additional human capital for businesses for investment purposes.

CONCLUSIONS

Overall, our analyses indicate that implementing best practice worksite health promotion programs that appeal to workers and therefore produce high participation rates will yield a reduction in employee health risks, lower healthcare spending, and increase worker productivity leading to a positive ROI for non-federal and federal employers. In each ROI model scenario, the potential for medical cost and productivity savings increased when the proportion of employees exposed to worksite health promotion programs was doubled over a 10 year time horizon. Therefore, efforts to increase the number of non-federal and federal employers that offer best practice worksite health promotion programs to their employees is good policy likely to yield savings in the form of decreased medical expenditures and increased worker productivity for private businesses and U.S. government agencies.

[60] Healthways Center for Health Research. (2009). Potential Medicare savings through prevention & health risk reduction. Rula, E., Pope, J., & Hoffman, J.C <http://www.healthways.com/trillions/>

[61] Gruber, Jonathan."The Tax Exclusion for Employer-Sponsored Health Insurance." National Tax Journal, June 2011,64 (2, Part 2), 511-530. <http://ntj.tax.org/wwtax/ntjrec.nsf/009a9a91c225e83d852567ed006212d8/957e28330a12ba61852578ab004e2e49?OpenDocument>

These efforts should include a variety of initiatives, as outlined in this report, that address the barriers faced by employers to implementing comprehensive worksite health promotion programs.

We believe that all the investments opportunities listed above are equally important and should be performed in parallel. We would emphasize the need for more applied research, conducted in "real world" settings that would, for example, identify the key elements necessary to achieve the greatest health and cost impacts. The newly released CDC Worksite Health ScoreCard identifies 100 evidence-based interventions that employers should adopt in their workplace programs. The interventions vary in terms of their evidence base. However, there is no research currently underway that would quantify the relative impact of intervention combinations on health, cost, and productivity outcomes.

There is also great need to better disseminate available government-funded resources and tools that are not widely used by the business community. This is especially relevant to small employers who are not aware of or able to implement best practice programs. Finally, federally funded rigorous studies – ones that employ randomized controlled trial designs – should be initiated to investigate the combination of best practice health promotion program elements that yield the best value in terms of employee risk reductions, increased productivity, and decreased employer healthcare expenditures.

Finally, the federal government is uniquely positioned to leverage its infrastructure and communication networks to disseminate resources, tools, and best practice expertise to employers, particularly small businesses with limited resources. Increasing the number of U.S. worksites that offer comprehensive worksite health promotion programs has the potential to dramatically improve the economy and the health of Americans. Bottom line – federal investment in worksite health promotion offers good value for the money spent.

Case Study #1: Eastman Chemical

Program Description: Through the program **"***HealthE Connections",* Eastman Chemical supports a wide range of wellness opportunities for the company's employees with a strong emphasis on participation in health assessments, health coaching, and other health improvement programs. Eastman Chemical's program, in place since 1991, effectively engages almost all of its employees (including second and third shift workers) by offering programming at all times.

Results: Over the past five years, 90% of employees have completed health assessments and the company has experienced a steady drop in health risks including high cholesterol, hypertension, and blood glucose levels. In 2010, a quarter of the employees participated in onsite face-to-face health coaching. Eastman has seen a strong 3:1 return on investment from its educational and physical activity programming.

Case Study #2: L.L.Bean

Program Description: Since 1982, L.L.Bean has maintained a comprehensive health promotion program that today reaches more than 5,000 employees, family members, and retirees. The "Healthy Bean" program integrates many of the most effective strategies for improving employee health including well-articulated goals, excellent communications, wellness programming, free onsite fitness centers, and subsidies for off-site gym memberships, and management support. Additionally, L.L.Bean utilizes strong incentives for participation in a comprehensive Health Risk Appraisal and provides a healthy work environment with tobacco free campuses, subsidies for healthy food options, and both indoor and outdoor walking paths.

Results: Participation rates have averaged 85 percent over five years and smoking rates dropped from 24 percent in 1985 to 6 percent in 2011. L.L.Bean's medical trend for 2007-2010 averaged just 5.8 percent.

Case Study #3: Lincoln Industries

Program Description: This medium-sized company with about 1,000 employees, has operated its "*Wellness – go! Platinum"* program since 1977. During this time it has achieved very high participation rates in all its programs which include quarterly physicals to employees, a year-long physical activity challenge, health risk assessments, tobacco cessation programs, health education seminars, and wellness reimbursements. Senior management support has led to integration of wellness principles into the company's culture, policies, business strategy and belief statements and is reflected in leadership training, quarterly manager updates and is a component of wages based on performance against a wellness goal.

Results: Lincoln Industries has seen its tobacco use rates drop from 42% to 19% (from 2004 to 2007), has achieved dramatic reductions in blood pressure risks, and has experienced a 9.7% drop in healthcare costs from 2006 to 2007 along with significant decreases in lifestyle-associated claims (from 34% of total to 17%).