

# **CAN HEALTH PROMOTION PROGRAMS EFFECTIVELY REDUCE HEALTH CARE COSTS, INCREASE PRODUCTIVITY AND RETAIN QUALIFIED EMPLOYEES?**

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The changing nature of work organization includes modification in the type of work performed, increasing working hours, as well as increasing competition stemming from globalization. These factors combined with declining quality of life and health habits are among the main reasons that continue imposing a financial burden to many employers in the United States and they are reflected in increasing health care costs, employee absenteeism and costs of employee turnover. Many organizations have attempted to target the issue by providing health promotion programs directed at reducing health care costs to the employer while improving productivity. To what extent can these programs effectively assist the employer in achieving positive results in regards costs, productivity and employee retention?

“Now there are more overweight people in America than average-weight people. So overweight people are now average. Which means you’ve met your New Year’s resolution.” (Leno, 2008). There is a shocking reality out of this humor and is that one that quality of health is declining while medical costs continue to increase. Health problems derived from chronic – and indeed preventable – diseases are becoming an alarming reality in the United States. And most of the costs associated with handling health issues have been passed down to employers who contribute to a portion of their employees’ health insurance plans. The overall health of most employees continues to decline as a direct result from globalization, changes in work organization and increasing working hours among other factors.

Poor health habits not only represent a growing healthcare expenditure to the employer but they may also lead to lower employee productivity. In the advent of such employment issues, many organizations have been increasingly implementing health promotion programs that range from simple health assessment risk surveys to sophisticated wellness centers. Their focus is certainly on prevention. Several studies have in fact analyzed the impact of such initiatives on the employer’s bottom line and they came to similar conclusions: health promotion programs have a direct positive effect on improving the health of

employees while reducing health care costs and improving productivity. In addition to improved employer spending, wellness programs can help in retaining talented employees and boost morale in the workplace.

Skyrocketing healthcare costs combined with declining quality of health of the overall population has not only called the attention of employers but also many health organizations and the government itself. The Center of Disease Control and Prevention, The Agency for Healthcare Research and Quality, the National Business Group on Health, and the International Foundation of Employee Benefits Plans are just a few agencies that stress the importance of keeping people healthy.

Health improvement programs vary in type and purpose, but they are generally defined as a series of interventions applicable to the whole workforce or a specific group of employees, in particular those who show at risk health conditions, such as diabetes. They also differ in whether their approach is behavioral or clinical. Behavioral health promotion programs focus on reducing unhealthy lifestyle habits, such as tobacco use, unbalanced diets, and physical inactivity. Both behavioral and clinical programs can be divided into five distinctive categories: (1) wellness/prevention, (2) population health improvement, (3) population-based disease management, (4) high-risk management, and (5) case management. Their focus varies from

raising awareness about healthier lifestyle choices to providing complex medical services (Selecky, 2005). When first implemented, health promotion programs were offered mostly as a fringe benefit, independently from representing any health care savings to the employer. The more companies realized their potential, the more these programs got linked strategically to reducing costs while improving productivity and employee retention.

There are two main issues stemming from the implementation of health risk prevention programs, namely incentives to improve employee usage and return on investment to the employer. How effective are health promotion programs in reducing costs, improving productivity and retaining qualified staff? How do employers manage to motivate employees to use such programs and what consists of a sound investment? The following research will attempt to provide an analysis to such concerns.

### **Importance of These Issues**

The relevance of these issues lies in the fact that human resources practices must align with business ones. An employer may effectively utilize such programs as a way to foster healthy lifestyle habits among its employees and prevent foreseeable health care problems. “Chronic diseases such as heart disease, cancer and diabetes are the leading causes of disability and death in the United States. Despite being the most costly ones, they are also the most preventable” (The Burden of Chronic Diseases, 2004). Wellness programs may also be seen as value added benefits to retain talented employees. The key to being successful at achieving these outcomes is prevention but potential problems arise in regards to the use these programs get and their effectiveness in the long term. Health promotion programs are increasingly under pressure to show clear returns on investment. Employers work closely with health plans, consultants, and vendors to develop a strategic plan to target population health management. The cost of the program is expected to be tied into financial returns to the company (Heinen, 2006).

### **Potential Gains for Employers**

This paper attempts to identify the implications that health improvement programs have on potential gains for employers. After all, companies are in business to prosper and the implementation of such programs may positively impact the well being of its employees and lead to significant financial savings. Unhealthy behaviors such as lack of physical activity, smoking, excessive alcohol consumption, and poor nutritional diets, among others, can be modified through their intervention. The following variables will be used to assess the effectiveness of these programs:

- Reduction health care costs
- Increased productivity
- Employee retention

### **IMPACT OF HEALTH PROMOTION PROGRAMS**

The effectiveness of health promotion programs is challenging. A cost-effectiveness analysis may result in direct and indirect outcomes. Direct factors are related to cost savings and productivity data whereas indirect ones may be more difficult to observe but they are linked to employee retention and satisfaction (Finch, 2005). There are numerous well-grounded studies that associate the positive effects that these programs have on direct costs. However, the impact that health promotion programs have on indirect factors may be obscure, especially since quantifiable measures may be difficult to obtain (Sherman, 2002). Some studies show nonetheless that a vast majority of employers that offer wellness programs could not identify the return on investment per dollar spent (Many Health Employers Offer Wellness Programs, 2006). All in all, most research shows that healthier lifestyle habits assist in reducing healthcare costs, improving productivity while enhancing employee satisfaction and retention.

Measures applicable to determining the effectiveness of these programs differ from the perspective of various stakeholders. For the health care specialist, a decrease in health

behaviors may be a valid way of measuring it. Chief executive officers may be more interested in the outcomes of a cost-benefit analysis (Sherman, 2002). Moreover, the successful implementation of health promotion programs is directly related to the “Transtheoretical Model of Behavior Change”. Under such a model, behavior modification results in a higher commitment when change stems from individual choice. Change is seen as a process the individual goes through rather than an external outcome (Prochaska & DiClemente et. al, 1991). Health behavior modification, therefore, highly depends on how wellness programs are presented to employees and the progressive stage within the Transtheoretical Model each worker is undergoing. This model will be explored in further detail throughout the paper.

Total employee rewards are to be explored to identify the incentives that are most effective at attracting employees to utilize health promotion programs. Behavior modification will also include disincentives.

### **Reduction in Healthcare Costs**

A recent report published by the Department of Health and Human Services, Center for Disease Control and Prevention shows that chronic diseases such as heart disease, cancer and diabetes are the leading causes of disability and deaths in the United States and affect approximately 1.7 million Americans each year (2004). However, they are also the most preventable ones and targeting them at an early stage can considerably reduce healthcare business expenditure.

The healthcare system in the States has been designed to treat sick people. With eye opening healthcare costs increasing at a rate of 10% a year, health promotion programs are taking a different approach to finding a solution to this problem: prevention. The nature of these programs is to identify modifiable and non-modifiable risk factors and implement an intervention technique that would reduce the need to more sophisticated medical procedures if the problem goes untreated. Modifiable risk behaviors include unhealthy eating habits, smoking, and lack of physical activity whereas non-modifiable ones relate to age, genetics and

gender, among others (Preventing Chronic Disease, 2006).

Today’s business environment has highly influenced most employees’ health problems due to the effects of globalization, increased competition and changes in work organization. In fact, the increasing shift to the service industry has created more office-type jobs, forcing employees to devote long hours sitting down using computers to perform work. To make matters worse, Americans work on average one month and 3 months longer hours annually than their respectively counterparts in Germany and Japan (Magee, 2006). It is not surprising that increasing workloads and monotonous body movements combined with personal poor health habits continue to enhance health risks in the overall America’s workforce.

Tommy Thomson, former Secretary of Health and Human Services stated that 95% of the \$1.9 trillion spent in health care treat illness and only 5% of the expenditure is invested in prevention. The exuberant amount of money spent in healthcare, and its unpromising forecasting, is forcing employers’ profits to be shifted from reaction to prevention. Hence is the increasing popularity of health promotion programs, especially when 50 to 70% of all diseases relate to modifiable health risk behaviors (Health Improvement, 2004).

While several studies show the advantages of health promotion programs, there are also some reports that are cannot establish a positive relationship between these initiatives and savings in healthcare costs.

Overall, the literature used for the purpose of this paper shows a positive correlation between health promotion programs and reduction in medical costs. The intervention methods utilized varied depending on the need assessed and whether a behavioral approach was more appropriate to a clinical one and vice versa. Health promotion programs included but were not limited to:

- health risk assessments (HRAs)
- screenings for blood pressure and cholesterol
- smoke cessation

- weight loss management
- immunization/disease management
- stress management

These studies date back to the early 1990s and show that employers have been increasingly promoting the employee participation in such programs. Those initiatives aimed at reducing cardiovascular disease, diabetes, and smoking-related diseases are the most widely used due to their effectiveness at reducing healthcare costs (Finch, 2005).

**Smoking.** One study shows that employer-sponsored preventive programs resulted in an average 26% reduction in direct healthcare costs and 30% reduction in disability costs. Smoking cessation programs have in fact proven to be effective at reducing medical costs. Being the leading preventable cause of death in the United States, tobacco consumption costs companies \$3,856 per smoker per year in direct health expenditures and lost productivity. Successful smoking cessation programs, on the other hand, cost between \$1.20 and \$4.80 per employee annually (Finch, 2005).

Daimler-Chrysler successfully implemented a tobacco halt program and combined it with other education services based on risks and interests, such as weight control, cholesterol management, and fitness among others. The program has been in place since 1990s and the company has been enjoying average cost savings of \$200 per participant per year. Similar results have been shown by Northeast Utilities that has been utilizing smoking “quitlines” since 1992, a telephone line designed to assist employees stop tobacco consumption. The company was able to save \$1.4 million in expenditures. Moreover, Cigna has annual savings of \$949 per participant enrolled in a smoking cessation program, representing \$9.50 in ROI (Health Improvement, 2004).

**Health Risk Assessments.** A recent issue by the National Business Group on Health published successful program implementation results aimed at reducing chronic diseases through Health Risk Assessments (HRAs). Examples include Caterpillar, reporting 96%

participation rates led to 23% decrease in direct medical costs; Citibank observed \$4.56 to \$4.73 returns on investment per dollar spent; Johnson & Johnson showed lower healthcare costs, hospital admissions, and hospital stays, resulting in cost savings of \$225 per employee per year; and Motorola reported an overall return on investment of \$3.93. All these companies combined the use of HRAs with other health promotion initiatives targeting low and high risk employees and have been in place since the mid 1990s (2004).

A study of more than 38,000 auto company employees under the age of 65 analyzed health risks such as high blood pressure, high cholesterol, and physical inactivity and compared them by Body Mass Index (BMI) category. Each category showed higher medical costs and ranged from \$3,094 for people with zero risks to \$7,289 for employee with four or more risks. When BMI was factored in, healthiest employees represented \$2,655 in annual healthcare costs compared to \$6,555 for individuals with four or more health risks (Heinen, 2005).

**Nutrition Counseling & Wellness Programs...**The U.S. Bureau of Labor and Statistics reported that the number of wellness and fitness centers has increased by 7 and 4% respectively between 1999 and 2006 (Good for You, 2007). This boost coincides with the alarming figure that obesity in America costs U.S. companies more than \$13 billion each year (Preventive Care, 2005). According to the Bureau of National Affairs, Inc., a recent survey shows that employers observed up to \$3.50 in savings after implementing wellness programs (Health Promotion, 2006).

Results in a survey of over 900 large employers performed by Hewitt Associates showed that 83% of these employers offer initiatives designed to raise awareness of promotion of healthy behaviors among employees and means to support behavior modification. For instance, these risk factors can be changed by offering smoke-free workplaces, health fairs and onsite fitness centers (Managing Benefits Plan, 2003).

A recent article in *Best Review Magazine* reported that 97% of health plans offer one or more wellness programs (Chordas, 2003). It is not surprising to realize that the trend employers are moving is certainly on prevention.

Onsite fitness centers are in fact recommended to be the best way to help low risk employees maintain their good health. Researchers at the University of Michigan Health Management Research Center found that “moderately or very active” workers incurred lower healthcare costs than sedentary ones, representing savings of \$250 (Micco, 2004).

### **Increased Productivity**

Worksite health promotion programs are not only believed to improve the overall health of employees but also increase worker productivity. Recent research shows in fact that promotion of healthy lifestyle behaviors may lead to significant benefits to employers through enhancing employee performance, which in turn can result in higher productivity. The National Business Group on Health, for instance, surveyed employers who were able to track absentee information and found that employees with chronic diseases missed considerably more work days a year than their “healthy” counterparts (Finch, 2005).

Despite the various studies reporting positive outcomes from these preventive programs, many employers have experienced challenges in assessing their return on investment. A recent survey conducted by the International Foundation of Employee Benefit Plans shows that there is a gap between the implementation of wellness plans and measuring outcomes within a certain timeframe, and that it may take years to evaluate their effectiveness (Many Employers Offer Wellness Programs, 2006).

Labor productivity is usually measured by total output produced divided by hours worked (U.S. Department of Labor, 2008). Major concerns arise in this regard when it relates to absenteeism and presenteeism. Absenteeism refers to actual days absent from work, commonly known as sick days, due to illness or disability, among others. Presenteeism, on the other hand, “refers to the problem of employees

who are physically present at work but not fully engaged” (Heinen, 2007). The cost of these phenomena is a significant burden to the employer, estimated at \$7.4 in sick days and reduced productivity (Emard, 2008).

Favorable studies supporting wellness initiatives aimed at reducing the risk of cardiovascular disease documented an average reduction of 26% in sick time and a 30% in workers’ compensation claims and disability costs (Finch, 2005). Similar reporting was published in an issue of the *Journal of Occupational and Environmental Medicine* that surveyed employees with increased health risks were less productive. This was calculated by using employee time lost due to illness multiplied by average salaries (Heinen, 2007).

Des Moines-based Principal Financial Group also showed positive implications of wellness programs. The company invested approximately \$1.4 million in an on-site wellness facility and compared the work performance of user to non-users. Regular exercise users mean scores were slightly higher than their non-user counterparts. Moreover, those employees who used the wellness facility had longer employment tenure than employees who did not use such a program. Even though the results are far from being conclusive, they demonstrate that health promotion programs can positively impact employee retention while motivating employees to perform at higher levels, which in turns may lead to higher productivity (Reese, 2001).

Another study reported the relationship between changes in health risks and work productivity. The study sought to analyze these changes before and after employee participation at a wellness program provided by a large employer. The results proved that employees who reduced one health risk improved their presenteeism by 9% and reduced absenteeism by 2%. Therefore, reduction in health risks clearly demonstrated that can improve productivity (Pelletier, Boles & Lynch, 2004).

### **Employee Retention**

In addition to contributing to reducing healthcare costs and improving worker productivity, employer-provided health

promotion programs have the potential of aiding in retaining qualified employees, therefore reducing expenses for recruiting and training purposes.

Job satisfaction, which can lead to employee retention, can be measured in different ways. A study carried out by Masanori Ohta et. al. analyzed the factors that contributed to the improvement of job satisfaction outside the workplace. The analysis indicated a positive correlation between job satisfaction and age and good sleep compared to negative correlations between job satisfaction and irregularity of eating, subjective factors like fatigue and poor lifestyle among other factors. The study concluded that wellness programs positively impact the improvement of job satisfaction probably through the acquirement of appropriate ways of coping with stress (2006).

Another survey carried out by the American Association of Occupational Health Nurses, Inc. revealed that 56% of surveyed employees agreed that health and wellness programs would be an important factor considered in the decision to take or remain in a job. Moreover, almost 60% of half of the surveyed employees participate in the wellness programs offered at work. Further results revealed that stress management programs are the favorite ones (85%), followed by exercise and fitness programs (84%), health insurance education (82%), disease management seminars (80%), nutrition seminars (70%), and smoking cessation seminars (67%) (Health, Wellness Programs Have Retention Power, 2003).

There is ample literature that has demonstrated that reduction of employee health risk behaviors is associated with reduced healthcare costs and absenteeism, which helped establish the adverse relationship between chronic diseases and productivity. Research regarding implementation of wellness programs solely to improve employee retention and recruitment is scarce. One of the reasons for lack of availability of this literature may be the difficult way of measuring the benefits that health promotion programs bring to employee retention (Sherman, 2002).

In a 2005 report carried out by the Employee Benefit Research Institute, employee recruiting and retention is listed as one of the main objectives for establishing health promotion programs. Once again, the effectiveness of these programs is hindered by methodological challenges in regard to implementation design and /or outcomes measures.

All in all, research suggests that there is a positive correlation between health promotion programs and employee retention. The evidence, however, is inconclusive to determine for a fact that wellness plans are successful in workforce retention strategies. If any, program success is also measured by other factors such as reduced healthcare costs and increased productivity among others.

### **IMPROVING IMPLEMENTATION**

Health improvement and preventive program success depends on many variables, such as clear set objectives, utilization, cost-effectiveness and measurable outcomes. The available data has shown a positive relationship between the implementation of such initiatives and employee health status, reduction of medical costs, and employee retention among others.

The National Business Group on Health has put together a guide to implementing employer-sponsored health promotion and preventive services which suggests employers should (Improving Health, 2008):

1. Assess the need for preventive care and select program type
2. Develop/Purchase high quality preventive services
3. Communicate the preventive care program
4. Measure the success of preventive services

### **Program Assessment**

“Experts believe that reducing employees’ health risk levels and keeping low-risk employees at their current level could have the potential of reducing medical claims by a third” (Improving Health Improving Business, 2008). This step includes identifying the need for behavioral and clinical preventive services, corporate commitment on such initiatives, as well as establishing appropriate measures to assess the effectiveness of the outcomes, such as in regards to workers’ compensation, absenteeism, and employee retention. It also includes carrying out a cost-benefits analysis to

determine its success. The steps in the assessment process are described in TABLE 1.

**Developing/Purchasing**

Once objectives have been established, organizations need to identify whether or not prevention programs will be developed by outside vendors. Objectives, needs, and available financial resources will highly determine the need to contract these services out, especially when the employer lacks experienced personnel in the area of wellness programs. The developing and purchasing

<b>Step 1:</b> Assess Prevention Interest and Need	Defining corporate commitment to preventive services, understanding beneficiaries’ needs and identifying realistic measures are pivotal to this step. This involves meeting with management, conducting health risk assessments, examining the more expensive medical claims, and determining how preventive intervention can assist the company in improving the overall health of employees, and reducing absenteeism, among other things.
<b>Step 2:</b> Consult Established Prevention Recommendations	This step consists of identifying core preventive care services. The U.S. Preventive Services Task Force and other experts in the behavioral change field have conducted several studies and their recommendations are a resourceful tool.
<b>Step 3:</b> Assess Coverable Preventive Services	Analyzing internal and external factors that may affect the design and implementation of a preventive program is crucial to its success. For instance, companies should consider the feasibility of opening a wellness program in house or contracting it out to an external company due to lack of space. Moreover, careful consideration should be given to Internal Revenue Service regulations and comply with their guidelines when it relates to health care services. Some preventive services such as screenings are covered through health insurance packages and health savings accounts.
<b>Step 4:</b> Evaluate the Costs and Benefits of Selected Services	An analysis of 32 studies showed that 28 of them in fact had positive ROI, resulting in an average \$3.48 per dollar spent (Aldana May/June 2001 American Journal of Health Promotion). Other studies showed benefits that ranged \$3.14 to \$8.88 per dollar invested. Other benefits may not be financial such as higher employee morale and satisfaction.
<b>Step 5:</b> Communicate the Results of Assessment	Engaging senior management in the importance of offering preventive services can contribute to the plan’s effectiveness. Hence is the importance of indentifying clear and measurable goals over a period of time and presenting the evidence in a professional manner.

process is described in TABLE 2

**TABLE 2 – DEVELOPING AND PURCHASING**

<b>Step 1:</b> Set Prevention Objectives	Define the health risk of employees to determine the type of preventive program that would be most successfully to target those issues.
<b>Step 2:</b> Determine Whether to Purchase or Create Preventive Health Programs	In designing a preventive plan, companies should look at those services that would meet the health risks of the workforce. This process relates to analyzing which plans cover the needed services and how those are coordinated with outside vendors and health care providers. Recommendations provided by the U.S. Prevention Services Task Force become a crucial tool to adequately deliver the services needed. When selecting vendors, employers should consider their ability to meet the health needs of the workforce, tracking methods, their network of health care providers, and their effectiveness in communicating and encouraging employees to increase the utilization of such programs.
<b>Step 3:</b> Establish Utilization Goals	Clear, realistic and measurable goals must be established to provide direction to the design and implementation of health promotion services while ensuring its success. Goals may vary based on employees’ health risks and industry standards
<b>Step 4:</b> Set Limitations to Assure Quality	Program costs may vary depending on whether services are provided by in-network or out-of-network options. Employers may need to work with health care representatives to ensure the quality of services while containing program costs.
<b>Step 5:</b> Request Quality Assessment Measures	This step encourages standardization of methods utilized to assess the quality of these preventive services. This may be easier to conduct if services are provided by the same network of health care providers required to use standard forms and reporting methods
<b>Step 6:</b> Develop Protocols for Access and Claims	Clear guidelines to program utilization and what services are covered need to be indentified and communicated to enhance program effectiveness.

**Communicating**

Employer’s needs might not necessarily align with employees’ needs. Therefore, communication strategies should carefully be designed to customize messages to the diverse target audiences. The company might have a varied mix of high and low-risk employees and messages about wellness programs need to be modified accordingly for maximum effectiveness. The communication process is described in TABLE 3.

**Measuring**

Last but not least is the need to evaluate program outcomes. Has the health promotion program achieved its desired objectives while managing the program budget? For instance, the effectiveness might be evaluated by analyzing the reduction in healthcare costs, increased worker performance, and improved employee retention rates. The results might be related to short term gains, so employers may want to start looking at long term effects for higher rates of

success. The measurement process is described in TABLE 4.

co-pays or membership discounts to fitness centers. On the other hand, some organizations

<b>TABLE 3 – COMMUNICATION</b>	
<b>Step 1:</b> Assessing Attitudes among Target Audiences	Different stakeholders will view the need for preventive services from a different perspective. Management may be mostly interested in return on investments; for employees, raising awareness about the quality of their health and increasing healthcare costs that may be passed down onto them; the information provided by vendors should be reviewed to ensure that their products match the needs of the workforce. Comparable industry information can be obtained from the National Committee for Quality Assurance (NCQA) and its reports can provide valuable information to assist in the program design and effective administration.
<b>Step 2:</b> Establish Communication Objectives	After gathering evidence of the need to implement preventive services, it is vital that the program gains acceptance internally from all its constituents. The program needs to be introduced and explained in detail to maximize its rate of success. Employee participation is also crucial and motivational factors need to be identified to contribute to the success of the program. Different communication channels can be utilized to reach wider audiences, such as online interactive tools, company newsletter, employee bulletin, etc.
<b>Step 3:</b> Identify Target Audiences and Key Messages	Different employees should be approached differently since their interest in health promotion programs may vary. Target audiences will determine the most appropriate message and channel of communication.
<b>Step 4:</b> Involve Key People in the Process	Designing the plan may include management and employees. Management needs to be in accord with the need for such a program and employees need to participate in them to contribute to their success.
<b>Step 5:</b> Implement and Evaluate	Continuous monitoring and tracking assessment criteria will aid in determining what areas need improvement. The workforce and the company may be in constant change and a successful program should reflect these changes and be able to adapt the new needs.

**INCENTIVES**

In order to increase participation in wellness programs, and therefore contribute to their effectiveness, employers have tried different ways of enhancing employee program utilization. Most of these motivational factors are incentives such as reimbursement on certain

have recurred to original ways of motivating – or forcing – employees to utilize such preventive services, also known as disincentives. In determining incentive plans, companies should understand what motivates their own employees (McCarthy, 2002). After all, employers want to make sure that implementation of these programs will lead to a sound return on investment.

<b>Step 1:</b> Assess Effectiveness to Determine Employee Satisfaction with Services	Employers need to evaluate whether the program designed is in fact the program delivered. Employees’ opinions need to be taken into account as well as evaluating what services are being used the least and the most. Raising and assessing awareness are essential to evaluating the effectiveness of these programs.
<b>Step 2:</b> Evaluating Program Outcomes	This step is concerned with the effectiveness of these programs in improving employee health, behavior change and risk reduction, and the financial impact in terms of reduced absenteeism, improved productivity and reduced healthcare costs.
<b>Step 3:</b> Conduct Ongoing Evaluations of all Employee Health Improvement and Preventive Service Programs	Behavioral change programs need to be based on adequate, safe, cost-effective recommendations by experts in the field. A well planned program will be measurable on clear objectives, but it should be subjected to continuous improvement.

Financial incentives are by far the most common utilized way to encourage enrollee program utilization. These are derived from the “pay for performance” concept. In other words, people are somehow compensated if they are able to reduce or eliminate a health risk factor. Financial incentives are concrete and tax exempt if part of a health pre-tax plan. They are deductible to the employer while not being part of earned income to the employee. Companies offering such an incentive should be aware of the implications they have in regards to Health Insurance Portability and Accountability Act of 1996 (HIPAA), the regulations established by the Department of Labor (DOL), and the Employee Retirement Income Security Act of 1974 (ERISA). Legal regulation will be explored in detail in the following section.

Some examples of wellness programs financial incentives include (McCarthy, 2002):

- Quaker Oats’ Live Well Be Well Program \$600 in cash deposited towards employees’ flexible benefits account; \$150 for completing the HRA ; \$50 for taking part in the free on site health screening; \$50 for pledging to avoid tobacco, refrain from abusing alcohol consumption, and exercise a

minimum of 20 minutes three times a week. With an 80% participation rate, the company claimed to have save \$2 million a year in health expenses.

- “Wellbucks” program at The Nebraska Health System encourages employees toward healthy choices and goals. Employees can exchange wellbucks for several things (i.e. movie tickets, gift certificates to mall, paid day off) after participating in approved activities such as exercise, healthy eating and prevention screening among others.
- Providence Everett Medical Center’s Wellness Challenge pays eligible employees \$350 in cash if they can meet four of six wellness criteria, such as healthy eating, exercise, and no work loss due to injury or illness. After ten years since its implementation, the company observed a 65% participation rate which led to \$3.5 return on investment.

In addition to the benefits mentioned above, employers can offer lower monthly premiums to employees if for instance they complete an HRA or participate in the wellness center. Monetary

rewards can also be in the form of a reimbursement or health-related items, such as pedometers (Using Incentives, 2007).

Employers are also using creative ways for encouraging employee use of health promotion programs. “Well for Work”, Washington Hospital mobile clinic, for example, provides health services to the area’s individuals regardless of their health insurance enrollment. The hospital charges employers \$25 to \$55 per employee for health screenings and other services (Szabo, 2008).

Even though financial incentives are the most popular ones, recent research suggests that they might not be the most effective type of incentives (Certain Incentives Influence Productivity, 2008). In fact, employers said that return-to-work benefits with full salary have the highest impact. On a scale of 1 to 5, this incentive scored 4.0.

Behavior modification can also be achieved by disincentives. For instance, Clarian Health, an Indianapolis-based hospital system, “announced that starting in 2009, it will fine employees \$10 per paycheck if their body mass index (BMI) is over 30. Moreover, if their cholesterol, blood pressure, and glucose levels are too high, they’ll charge \$5 for each standard they do not meet” (McGregor, 2007). Clarian had already been implementing smoke cessation programs and encouraging employees to take health risk tests. Therefore, this harsh measure is in compliance with HIPAA laws. This relates back to the fact that chronic diseases such as heart disease, cancer, and diabetes are the leading causes of disability and death in the United States while also being the most preventable ones (The Burden of Chronic Diseases, 2004). This unusual approach penalizes rather than rewarding employees for unhealthy behaviors.

Along the same lines, Cleveland Clinic no longer hires anyone who tests positive for regular tobacco use. Administrators at this institution believe in the promotion of wellness throughout the organization and the surrounding community. Critics opposing such initiative think it is a violation of privacy (Bush, 2007).

## LEGAL IMPLICATIONS

There is a strong belief that health plans, including preventive services, can improve the quality of employees who participate in them. When considering its implementation, employers should take into account the legal regulations that govern such benefits, such as Health Insurance Portability and Accountability Act of 1996 (HIPAA), The U.S. Department of Labor through the Employee Benefits Security Administration, and the Employee Retirement Income Security Act of 1974 (ERISA).

### HIPAA

HIPAA regulates health plans and prohibits them from discriminating against individuals on the basis of their health status. Rules under HIPAA provide specific limits on financial incentives for living healthy lifestyles. Health plans are required to be reviewed carefully to make sure they do not discriminate against enrollees with respect to eligibility, premiums or contributions on the basis of health status, unless discrimination is designed to be an incentive for a “bona fide wellness program.” In this case, the program must reward the participating employee for achieving a particular health goal, and the incentive is limited to 20% of the cost of a single employee’s premium and offer the reward in conjunction with a “bona fide wellness program” (Cline Earles, 2005).

Non compliance with the law could result in a fine up to \$500,000. HIPAA rules are enforced by the Internal Revenue Service and the Department of Labor.

### ERISA

The Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans (U.S. Department of Labor, 2008). ERISA provides that those who manage health plans, among other employment benefits, must meet certain standards of conduct. The intent of the law is to make health insurance more portable and secure for employees. Wellness programs must therefore comply with this federal law.

### **Employer and Employee Perception of Wellness Initiatives**

A 2007 Health Confidence Survey revealed employees' perceptions towards wellness initiatives. In fact, 82% of surveyed employees feel positive about employer-sponsored wellness programs. Moreover, comfort levels decrease as wellness programs get more specific. For instance, six in ten workers are very comfortable with programs that provide low-cost opportunities for health screenings and programs. On the other end, only few employees feel comfortable with programs that offer insurance at reduced cost to workers in good health or who take steps to lower their health risk. A favorable attitude was shown by workers who would likely participate in a wellness program if it reduced their health insurance premiums by 5% (70%) and 10% (77%). Almost all employees are in favor of wellness programs implementation. However, a strong number of employees feel that wellness initiatives are implemented to improve the employers' bottom line (33%) and many also believe that these plans intrude on worker privacy (54%) (Employee Benefit Research Institute).

Even though most employers strongly believe in the positive effects health promotion programs have in improving employee health, reducing healthcare costs, aiding with recruitment and retention strategies, among other benefits, a recent survey also revealed that many companies cannot measure the return on investment. In fact, the International Foundation of Employee Benefits Plans Survey reported that 87% of participant employers that offer wellness programs did not know the return on investment spent on such initiatives (Many Employers Offer Wellness Programs, 2006).

### **APPROACH TO BEHAVIORAL CHANGES**

A last consideration to health promotion programs effectiveness is given to its resemblance with the Transtheoretical Model of Change.

### **Transtheoretical Model**

This is a theoretical model of behavior change which has been the basis for developing effective interventions to promote health behavior change (Prochaska & DiClemente, 1983; Prochaska, DiClemente, & Norcross, 1992; Prochaska & Velicer, 1997). This is a model of intentional change and focuses on the decision making of the individual. This model has been used extensively to transform health areas as they relate to smoking cessation, dieting, reduced alcohol and substance abuse, among others. The central idea revolves around a series of stages an individual goes through until the desired behavior is attained. In this way, the individual navigates from the precontemplation to maintenance stages.

Health behavioral interventions focus on reducing unhealthy lifestyle habits, such as smoking, poor nutrition and physical inactivity.

Individuals in the precontemplation stage do not intend to change their health risk factors in the near future either due to being uninformed or underinformed about the benefits of their particular unhealthy behaviors.

Those people in the contemplation stage have intentions to change health risk behaviors but show a certain degree of procrastination that is inhibiting them from taking action. Health promotion programs are not intended to attract individuals in these beginning stages since their responses would probably indicate a complete lack of interest.

Individuals in the preparation stage have demonstrated a genuine interest in modifying their health risk behaviors in the immediate future and have a plan of action, such as joining a fitness center or smoking cessation program. The degree of effectiveness of these health plans therefore is much higher due to the level of individual motivation to change.

Action describes the stage in which people are fully devoted to their behavior modification plan of action. However, the behavior change must be related to a certain criterion, such as reduction in cigarette consumption or complete tobacco abstinence. In this stage, individuals

may be tempted to revert to the unhealthy behavior.

The last stage in this model is maintenance. People in this stage are still working on maintaining the behavior modification and they are less prone to relapse due to their higher confidence that they achieved what they set to change.

The Transtheoretical Model can help employers increase the success rate of their sponsored health promotion programs. After recognizing that individuals going through the first two stages of this model have no or minimal intentions to modify their poor health habits, employers can customize their initiatives to increase health awareness among the workforce. The remaining stages are crucial to the effectiveness of these plans. Employers need to support employees along the model's continuum to avoid relapse. This approach may require accommodation of certain employees' needs to the maximum extent possible and assist them throughout the behavioral change, i.e. flexible work schedules so employees can use the gym when attempting to lose weight.

### **CONCLUSION**

Changes in work organization due to globalization among other factors have led employees to work longer hours which in turns affects the quality of their health. This reality combined with personal unhealthy behaviors such as tobacco and alcohol consumption, unmanageable stress, and an overall sedentary lifestyle continue to be a major cause of skyrocketing healthcare costs.

Employers have been exploring different ways of coping with an overall unhealthy workforce by implementing health promotion programs. Evidence suggests that these initiatives are favorable at reducing medical costs, improving productivity and assisting in retaining qualified candidates. Most studies presented in this paper show a strong positive correlation between the employer's investment in these programs and a direct reduction in business expenditures related to healthcare. Moreover, there are enough reports that favor the utilization of preventive services as a way to reduce absenteeism and presenteeism, which in

turn leads to improved productivity. Very few evidence exists in regards to wellness plans and improved employee retention strategies; if any, this human resources function is tied as a side effect of employees who have successfully modified a health risk factor.

The effectiveness of these programs depends on various factors. Program design, company's financial resources, employees' needs, participation rates, evaluation methodology, and supportive corporate environment are just a few that influence their rate of success. Moreover, employees who cannot self initiate behavior change will most probably fail the employer's initiatives to modify their unhealthy habits. If there is a slight chance of success due to the implementation of monetary and non monetary incentives, behavior modification will likely happen in the short term. A truly effective program may in fact need to be more holistic in its approach and go beyond the needs of the workplace environment to integrate prevention at home, health and injury risk management and provide incentives for behavioral change (Wolff, 2008). This approach implies an ongoing health promotion plan and its effectiveness requires constant monitoring.

The large body of evidence advantageous towards health promotion programs cannot conclude that they successfully impact healthy behaviors in the population in the long term. Not all studies have conducted cost-benefits analysis, and those which had, cannot ascertain that the behavioral changes will be sustained in the long term. Can one claim that a clear reduction in healthcare costs resulting from wellness programs is an effective measure to the employer? It depends. If the employer has in fact set the objective of reducing medical care costs by 5% in a certain quarter, and that goal is attained, then the company can attest that the program was successful. I do question the fact that a short term goal of such a crucial magnitude can be considered effective.

As defined by the American Journal of Health Promotion, health promotion is "the science and art of helping people change their lifestyle to move toward a state of optimal health. Optimal health is defined as a balance of physical, emotional, social, spiritual, and

intellectual. Lifestyle change can be facilitated through a combination of efforts to enhance awareness, change behavior and create environments that support good health practices” (O’Donnell, 2004). I doubt that the fast-paced, challenging business environment will facilitate the support employees need to modify and maintain a balanced lifestyle.

There is an increasing concern about the continuing decline of quality of health among the U.S. population and its disproportional medical costs that are not forecasted to decrease anytime soon. Employers have been able to curve some of these expenses as higher co-pays and deductibles employees are responsible for but this trend may force employees to opt out of the health care benefit if their other living expenses exceed their net incomes. Health promotion and preventive services have been implemented as a test that tries to cope with such a turbulent situation. Investing in these plans will highly depend on the availability of resources and concrete favorable data that the return will be economically sound and foster long term healthy behaviors among employees.

Maybe it is time that the healthcare system in the United States goes through pivotal changes. After all, the general welfare of the people is a right granted by the US Constitution independently of employment status. That health promotion programs can be successful at improving employees health may not be the appropriate question to ask. If there is instead a way to verify that these programs are the solely contributor to such an improvement and that their effects will remain in the long run may be the real determinant of their effectiveness. However, individuals are complex human beings and isolating them from the forces that shape their daily behaviors might not be in fact possible to measure.

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