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Culture Of Wellness: The Impact Of Worksite Environment And Policies On Health Behavior Change And Outcomes

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Abstract

The nation is facing a crisis in the form of work absenteeism, decreased productivity, increased risk of job-related injury and higher employer claims' costs. What organizational policies and programs help to lower claim cost, decrease absenteeism-related losses and increase overall productivity? What approaches can organizations model in order to provide a safe work environment that supports sustainable behavior change and facilitates increases in health care access and information? Researchers estimate that 117 million adults in the United States suffer from at least one chronic condition[1]. Employers are spending $93 billion a year in medical claims costs and the United States is spending nearly $2 trillion on health care[2, 3]. As the prevalence of chronic conditions and medical care costs rise, employers are choosing an innovative, cost-effective and impactful solution: wellness programs. Employers implementing worksite wellness initiatives are seeing results. Not only are employees lowering instances of disease and risk of other complications, companies with worksite wellness policies and programs are experiencing nearly half the rising market trend of health costs than companies without wellness programs. This extensive literature review examines current wellness program practices, their components and incentives, and the effectiveness of the programs' policies on employee behavior change.

1.Introduction

According to Circadian, an organization with expertise in extended hours operations, "unscheduled absenteeism is a chronic problem for U.S. employers, conservatively costing $3,600 per hourly employee per year, and $2,650 per salaried employee per year" [4]. In 2005, Circadian measured the absenteeism rate among hourly employees in the United States to be 9%[4]. Though this figure refers to absenteeism related to unscheduled absences, scheduled absences and partial shift absences play an integral role in workplace losses. The absenteeism related to these circumstances causes damage on all levels of the organization. Not only is the individual position compromised, overall profit margins, productivity and worksite morale are indirectly affected[4].

The Centers for Disease Control and Prevention (CDC) reports that absenteeism can cost employers several times more than direct medical claims costs[2]. On average, personal and family-related health problems will cost nearly $225.8 billion a year, $1,685 per employee[2]. Furthermore, employers spend $93 billion each year on medical insurance claims related to obesity and complications associated with cardiovascular ailments and disease[2]. The projected cost related to medical claims and absentee-related losses for a 1,000-member organization are roughly $277,000 annually[2]. Given the worksite health related crisis arising in America, companies are responding with an all-encompassing approach to wellness. The implementation of worksite wellness programs provides an opportunity to positively impact morale, health outcomes and costs associated with preventable injuries, illness and absenteeism.

Wellness programs are multidimensional and contingent on success of many areas of implementation. A successful wellness program is designed around employee needs, while also still producing mutually beneficial results for the employer. Careful planning is considered in program design, events and communication.

Furthermore, properly implemented incentives serve an integral role in the continued participation and program interest. The combination of these factors, when successfully implemented, will establish the foundation of a wellness program. The program is rooted in worksite policies and management. This paper review examines current wellness program practices, their components and incentives, and the effectiveness of the programs' policies on employee behavior change. As employers adopt policies and incorporate wellness practices into organizational practices, they begin establishing a culture of wellness. The culture cultivates health behavior change, personal and organizational growth.

2. Culture of Wellness

The business definition of culture is defined as "a way of thinking, behaving, or working that exists in a place or organization"[5]. Culture of wellness is an intangible concept, but innately critical and integrated into the mission of organizations. This culture is brought about through four main conceptual systems: endorsement and participation through executive leadership, human resource capacity established by dedicated wellness staff, the financial capacity of budget and benefits availability, and accountability and benchmark standards[6]. Culture of wellness is born within organizations and is the product of a multifaceted system of support and evaluation.

Executive leadership describes the relationship between upper level management and the wellness teams, in order to better facilitate programming, communication and policy development[6]. Most importantly, it's the connection between the goals and objectives of the wellness program and the greater mission and vision of the organization[7].

Human resource capacity refers to the policy-making group supporting the wellness program. This not only refers to the wellness staff, but also to a dedicated wellness committee, which is representative of the organization as a whole[7]. To ensure sustainability and retain accountability standards, this component of culture of wellness facilitates the creation of benchmarks, communication and operating plans[6].

According to Prevention Partners, financial capacity refers to allocation of funds and resources dedicated to the wellness program. This component is responsible for "providing preventative benefits, allocating staff to wellness, establishing a wellness budget and communicating the value of wellness that will allow a dedicated and responsible wellness approach"[7]. The intentional allocation and dedication of funds for wellness not only ensures quality programming, but it also further solidifies the employer's dedication to its wellness vision and mission.

The evaluation component of any wellness program pertains to the constant assessment of employees' needs. This includes assessing health outcomes, as presented through health risk assessments and other measures, and also surveyed feedback. The most effective type of programming takes into account employees' needs and desires[6].

As employers implement wellness cultures within their organizations, they must be aware of the two possible cultures of health they may face in the worksite. The first culture of wellness in one in which society addresses disease management, offering a solution to the health care crisis only after it becomes a resounding issue[6]. The second culture of wellness is one that focuses on preventative health and lifestyle choices in order to avoid unnecessary ailments and chronic disease[6]. Employers focusing on long-term, sustained behavior change will choose to foster the second, preventative culture of wellness that offers support through health risk reduction, education and programming. Culture of wellness serves an integral role in health promotion, behavior change, programming, policies, management and incentives. The establishment of a culture of wellness within in an organization promotes long-standing health behavioral and environmental change, which ultimately will lead to a reduction in chronic diseases that contribute to lower productivity and sky-rocketing social and health costs.

3. The causes and impact of chronic disease

Chronic disease includes, but isn't limited to, cardiovascular disease, cancer, arthritis, stroke and obesity. Heart disease and cancer accounted for the largest percentage, together responsible for 48% of chronic disease deaths[8]. In 2012, researchers estimated one in four of adults had two or more chronic conditions[1]. Additionally, 70% of all deaths in the United States were attributed to chronic disease. Diabetes accounted for a large portion of medical costs from 2010-2012 considering it was one of the leading causes in amputations, kidney failure, blindness and other related injuries[9]. As instances of chronic diseases begin to rise, so do medical care costs. Through wellness program intervention, employers are able to support and encourage their employees as they adopt behavior change lifestyle modifications. Modifiable factors, such as poor diet, inactive lifestyle and smoking, contribute to chronic

disease. As employers search for solutions to combat rising medical claims cost, they look to the behaviors that cause the high-priced, high-risk chronic conditions consuming their workforce population.

3.1 Modifiable Factors

According to the CDC, modifiable factors, also called health risk behaviors, are changeable lifestyle choices and habits that result in negative health outcomes[10]. These behaviors include, but are not limited to, poor nutrition, tobacco use, physical inactivity and alcohol consumption. Researchers associate 50% of the chronic disease-related deaths in 2005 to be a result of modifiable risk factors. Of the deaths, 8% were associated with obesity and overweight health complications, 8% could be linked to physical inactivity, 16% were associated with complications related to high blood pressure and 19% of chronic disease related deaths were attributed to tobacco use[11].

Smoking, high blood pressure and uncontrolled LDL cholesterol are three main modifiable risk factors associated with heart disease and stroke, two of the leading causes of death. In the United States, 47% of all adults had at least one of risk factors. Additionally, a 2012 survey showed that 1 in 5, 42 million, adults currently smoked cigarettes. Not only is smoking a leading modifiable risk factor in the United States, it's estimated to be responsible for 480,000 deaths every year[12].

3.2 Cost of chronic disease and risk factors

In 2010, the United States spent $315.4 billion on direct medical costs associated with heart disease and stroke[13]. In the same year the United States spent an estimated $157 billion on cancer care[14]. Diagnosed diabetes accounted for $245 billion in 2012, which doesn't account for pre-diabetic instances of care[15]. Even more concerning, only $176 billion could be directly associated with medical care cost. The other $69 billion can be attributed to decreased productivity[15]. Given changes in health care reform, employers, who have been mandated to take more responsibility for health insurance for their employees, are going to feel the effects of the rising medical cost trend. Whether this is felt through medical claims costs, profit losses, absenteeism or lower production level, the employer will soon be faced with a choice: How to increase positive health outcomes to lessen the effects of the rising costs trends of the medical industry.

Due to the complexity of chronic disease and modifiable risk factors, researchers look to behavior change models to better understand the process of health behavior change and to plan interventions. Health behavior change models account for change at the individual level, this includes the reduction and elimination of chronic conditions and the health risk behaviors that contribute to their severity.

4. Health behavior change models

The alleviation of chronic disease burden is not quick or easy, either at an individual or population level. Researchers and health promoters use theories of change models, combined with wellness programs to better support individuals during the health behavior change process. Health behavior change models are theories of change. The Office of Behavioral and Social Sciences Research defines theory as "a set of interrelated concepts, definitions, and propositions that explains or predicts events or situations by specifying relations among variables"[16]. Theories are the core to behavior change models used in the design and implementation of worksite wellness programs.

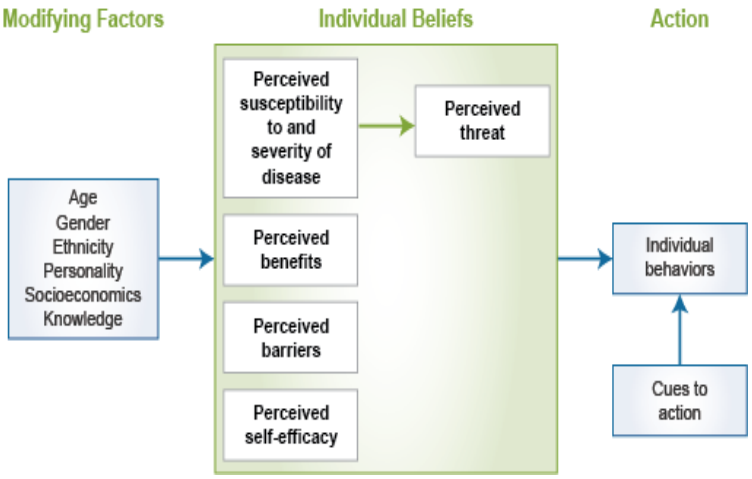
Behavior change models provide further insight into individual perspective throughout lifestyle changes. They also provide worksite wellness programs with the opportunity to tailor programs to their employees, while still providing adequate supplemental support throughout the process. Researchers analyze chronic disease prevalence, combined with morbidity and mortality rates, to better understand health behavior change.

Historically, the Health Belief Model was used to assess preventative care access and resources. Today it's still used to better understand the reasoning behind individuals seeking, or not seeking, preventative care measures. This also includes health screenings, vaccines and preventative measures such as contraceptives[17].

This model is particularly useful in health promotion program planning because it helps explain an individual's readiness and willingness to seek out and participate in preventative care measures[17]. According to the model, an individual's decision to participate in preventative care measures can be affected by the core constructs of the health behavior model. The model contains four main components: "perceived susceptibility and perceived severity,

perceived benefits and perceived barriers, cues to actions and self-efficacy"[17]. Individuals are influenced by specific perceptions, their own orientation to the health situation and awareness of access.

This model is most readily associated with disease and illness prevention, rather than disease management. This model could be used with screenings such as blood pressure and other biometric measurements. Additionally, this theory could be applied to cancer screenings[17].

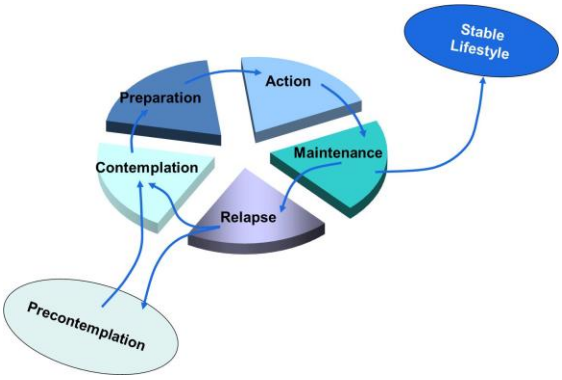


Source: Glanz K, Rimer BK, Viswanath K, eds. 2008. *Health Behavior and Health Education: Theory, Research, and Practice (4th ed)*. San Francisco: Jossey-Bass.

Figure 4.1. Health belief model

Another theory, the Transtheoretical model accounts for the adaptability necessary for long-term health lifestyle change[18]. This theory also represents different stages of change and the actions that are taking place during each crucial step in the behavior change adoption process.

Health behavior models offer beneficial insight into the health behavior change process. For employers and wellness program implementers, these models give particular insight into what an individual is experiencing as they decrease an unhealthy behavior or modifiable risk factor, or adopt a healthy habit, or make a necessary change, and sheds light on possible ways to help improve employee health behaviors. This model is most readily used with smoking cessation, increased physical activity and nutrition changes[18]. Wellness programs offer a variety of support during this process. As they increase education regarding modifiable factors, they reduce the prevalence of chronic health conditions and costs associated with preventable illness and disease.



Source: Changing behaviour. (n.d.). Retrieved October 17, 2014, from http://phprimer.afmc.ca/Part3-racticeImprovingHealth/Chapter8IllnessPreventionAndHealthPromotion /Changingbehaviour

Figure 4.2 Transtheoretical model/Stages of Change

5. Wellness programs prevention orientation and components

Worksite wellness programs are a comprehensive approach to solving workplace losses related to illnesses and absenteeism. They are an obvious choice consider they are customizable, capable of long-term change and as discussed in case studies, they are cost effective. The objectives of wellness programs can be related to awareness, prevention, disease management and lifestyle change. Though these components can operate independently of one another, the combination of components often yields desired sustainable health behavior change.

5.1 Primary And Secondary Prevention

Wellness programming is focused on the dimensions of health, which is rooted in prevention. Preventative measures are implemented through wellness programming to prevent instances of chronic disease and decrease health risk factors. Primary prevention is associated with lifestyle management programs. These programs include, but are not limited to weight management programs, smoking cessation programs, fitness opportunities, access to substance abuse interventions, health education and stress management techniques[19].

Of the wellness programs observed by U.S. Department of Labor and the U.S. Department of Health and Human Services, 77% of employers targeted primary prevention programming. Among the programming, 77% of these organizations offer on-site smoking cessation program options and 80% target nutrition education and weight management opportunities[19]. Organizations implementing primary prevention techniques are utilizing an array of services ranging from company-wide weight loss competitions, to personalized health coaches[19].

Secondary prevention programs target disease management. Diseases targeted through these programs include depression, cancer, heart disease, diabetes, COPD and emphysema, and coronary artery disease. Comparatively, only 56% of organizations with wellness programs offer a secondary prevention programs[19]. Companies oriented from a disease management perspective have vested interest in on-site clinics, care managers, healthy food policies and options, on-site vaccinations and continuous wellness programming events and initiatives[19].

5.2 Worksite Wellness Program Structure

Worksite wellness programs are designed to satisfy many dimensions of health including physical, emotional, spiritual, intellectual, social and occupational. In order to best meet the needs of all employees, programming is targeted to the different and varying needs of the individual. Physical components of a wellness program include activities such as onsite fitness instruction, walking meetings, competitions and initiatives[20]. This category is not limited, as it reaches into having safe and clean hygiene facilities, preventative screenings and vaccinations, as well as reimbursement for health activities outside of the worksite[20].

Intellectual wellness program events could include seminars on the mind, trivia and training sessions[20]. Whereas intellectual events are tailored to the individual, social wellness programs are very much focused on the team dynamic. Social wellness programming can include team building activities, wellness initiative councils, mentorships and the sponsorship of community events[20]. Though less commonly implemented through worksite wellness programs, spiritual health components play an important role in worksite wellness programs as a whole. Events could include yoga, meditation, community activities, fundraising for charity and workshops centered on positive spiritual health[20]. Emotional health events are focused on support and stress management. Workshops and educational seminars teaching stress management techniques and awareness serve an integral role in the organization[20].

Occupational health programming is designed to incorporate safety and injury prevention in the worksite environment. Program initiatives could include ergonomic offices changes, which would provide standing desks, yoga balls, or balance ball chairs[20]. This also involves an increased knowledge of wellness policies and regulations at training sessions and orientation. Additionally, worksite safety initiatives, emergency preparedness and CPR training are components of occupational health programming[20].

Any combination of these components would yield successful results depending on employer needs. An employer can determine the appropriate program structure based on employee desires, current health concerns based on health risk assessment results and organizational environment[20].

5.3 Worksite Wellness Policies

According to the Public Health Law Center, long-term individual and community health are positively impacted by worksite wellness policies[21]. Through wellness program implementation, employers observe health behavior change. Through written policy and wellness program commitment, employers are able to help establish a culture of wellness. This culture creates sustainable and effective long-term wellness goal achievement and support[21]. Furthermore, written wellness policies provide not only a sense of accountability and dedication.

5.3.1 food policy in the workplace

Healthy food policies are adopted at worksites to ensure that healthy food options are readily available for employees. Food policy is an employer's dedication for providing quality, nutritious food for staff at meetings, trainings and through vending. Promoting healthy food policy is contingent on the following core principles: increased access to healthy options, subsidized costs as an incentive to purchase products of nutritional quality, marketing healthy choices through informational communication techniques, incentives for employees that choose healthy options and education on the impacts of quality nutrition and diet[22]. Employers have the opportunity to tailor healthy food policies for their organizations. For example, groups will have the opportunity to collectively agree on nutritional standards and policies. Additionally, they have the opportunity to increase access to options in a variety of ways. Employers can target vending machine options, or food provided at meetings, trainings and orientation.

There are barriers regarding worksite food policies. Outside of cost concerns, employers face the possibility of meeting employee resistance, lack of empathy and interest[22]. Employers facing these concerns must recognize the importance of incentivizing the program and making the healthy option, the most convenient and enjoyable option offered. Additionally, changes such as food policy should be supplemented by nutrition education and communication to alleviate concerns regarding the changes being implemented within the organization.

5.3.2 tobacco regulation and cessation

Tobacco cessation is a component of successful wellness programming. Employers are implementing tobacco-free facilities and properties, while providing incentives to for current tobacco users to participate in smoking cessation programs. Organizations offer subsidized cost for nicotine patches, counseling and other forms of therapy. By supporting employees during the smoking cessation process, employers are able to serve a valuable role in health behavior change. Prevention Partners, a North Carolina agency dedicated to the reduction of modifiable risk factors related to poor nutrition, tobacco use and physical inactivity, lead efforts to eliminate tobacco use on hospital campuses in North Carolina[22]. Through the Duke Endowment, Prevention Partners was able to make significant changes among hospital staff across the state. Through their campaign, the group has helped "100% of acute care hospitals implement tobacco-free property policies, assisted more than 30 hospitals implement the highest standard for employee tobacco cessation systems and guided 95 hospitals to create healthy food environments"[22]. Given the increased risks associated with tobacco use and the rising trend of tobacco-related deaths, employers everywhere are encouraged to implement policies supporting tobacco-free environments and smoking cessation programs.

5.3.3 flexible work schedules and paid time for wellness activities

In addition to other worksite policies, employers are also allowing employees to be flexible with their work schedules to support time for wellness activities throughout the day. The Public Health Department of Orange County adopted a policy that supported this type of schedule. They committed to promote the UCLA Lift Off! Campaign, which allowed all employees 10 minutes of paid time a day to participate in wellness activities[23]. Employees can choose when and how to utilize this time. Some choose to add it to their lunch breaks, while others use it as time in the morning and afternoon to step away from their tasks at hand. By supporting policies such as this, employers are sending a resounding message: Wellness is an important component to overall daily success, both for the individual and organization.

5.3.4 paid leave and sick days

In addition to flexible schedules, some employers utilize paid sick leave and medical leave policies. Paid sick leave refers to short-term absences related to illness, brief medical care or leave related to family illness. Long-term leave refers to instances of parental care and disability[24]. Not only does paid leave time provide employees with time away from work to recover without worry of lost wages, it also prevents the spread of infectious illness. In 2009 during the H_1N_1 virus outbreak, the CDC estimates that over 7 million people were infected with the virus by their co-workers[24]. Currently, over 40% of private sector organizations don't offer employees paid sick time options, despite the push for recently legislation supporting the cause[24].

The table below provides examples of environmental policies implemented in the worksite to facilitate health behavior change. The table describes the policy change, the tools necessary for successful implementation and the benefit or reward associated with the change.

Table 5.1 Environmental policy changes in the workplace

Environmental policy that constitutes behavior change	Tools and access necessary	Benefit and reward
Increased accessibility and use of the stairs, as opposed to elevator use	Clean, safe well-lit and maintained stairs	Taking the stairs can contribute to the 30 minutes of suggested daily exercise for an individual[33].
Establishing a healthy food policy and setting standards within an organization	A dedication to providing healthy food options at all organization events, while also increasing access to healthy options throughout the work day	A healthy food policy in the workplace sets a precedent for the types of options provided by the organization. Additionally, providing healthy options increases the opportunity for individuals to make health-conscious decisions[34].
Promoting healthy vending machine options	Reports of existing vending machine sales and list of products that could align with the healthy food policy standards.	Vending machines are a quick way to access food. By providing healthy options, organizations are increasing exposure of healthy foods to individuals.
Paid time off to participate in wellness program activities	Organizational standards for participating in wellness programming	By providing paid time off to participate in wellness activities and health screenings, employers are sending a message of support to their organization about the value of wellness in their lives[35].
Creation of an environment conducive to the establishment of a culture of wellness	Availability of on-site wellness facilities, walking trails and equipment	Providing employees with times and means of participating in wellness activities could greatly influence their decision-making processes related in increasing health and wellness in their own lives[36].

6. Incentives For Healthier Lifestyles

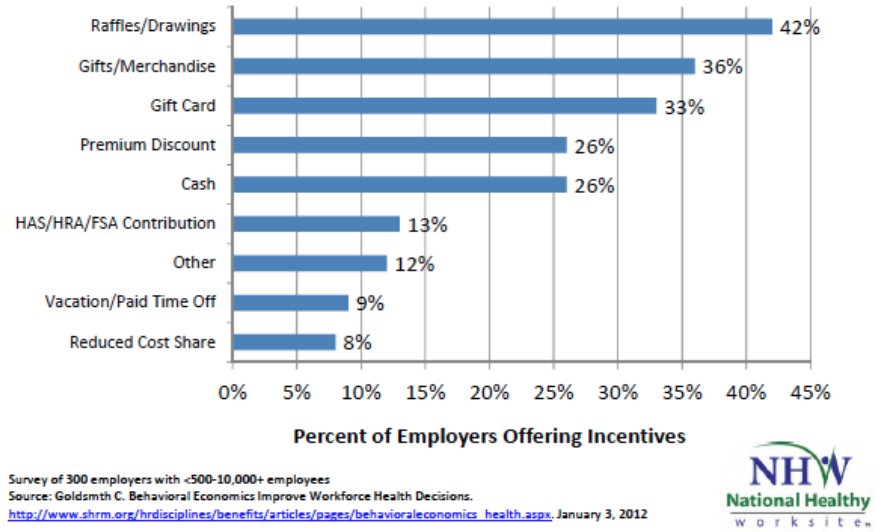
Outside of the intrinsic benefits of wellness programs- positive impacts on health outcomes, reduced morbidity and risk of mortality related to preventable illness and disease- organizations can incentivize participation in wellness program opportunities. When properly implemented, incentives can aid wellness program practitioners by encouraging and motivating further success. Consequently, improperly implemented incentive-based wellness programs can create barriers to health care and discourage participation.

An incentive is defined by as "an anticipated positive or desirable reward designed to influence the performance of an individual or group"[25]. Incentives are often referred to as "carrots", which are positive rewards such as health premium reduction, merchandise or prizes[25]. Contradictorily, disincentives can be described as "an anticipated negative or undesirable consequence designed to influence the performance of an individual or group"[25]. Disincentives are referred to as "sticks", which usually refer to the penalty set in place when an individual or group don't meet a certain goal or standard[25].

Incentives can either be monetary or non-monetary. Monetary incentives include health premium discounts, prizes, paid vacations and gift cards. Examples of non-monetary incentives include various types of recognition, flex time, altered work schedules and gym memberships[25]. These types of incentives appeal to different organizations. Employers use knowledge of their population's needs to assess the most appropriate type of incentive available. Additionally, more programs are beginning to implement non-monetary forms of incentives due to cost-effectiveness, higher program participation and retaining trends[26].

There are different ways employers implement incentives. They could choose to implement a participation-based incentive, which is a financial incentive that can be awarded for either attending an event or program, or meeting a certain standard[26]. Though these types of incentives are great for eliciting interest, they do little to contribute to long-term program interest.

Figure 6.1 shows employers' preferred incentive for participating in wellness program activities. These are organizations with a member size between 500-10,000 employees. The most frequently used method of incentive is raffles and drawings, with gift cards and premium discounts ranking high as well. Fewer organizations are offering reduced cost share or vacation and paid time off.



Source: Goldsmith C. Behavioral Economics Improve Workforce Health Decisions

Figure 6.1. Percent of Employers Offering Incentives

6.1 Types Of Incentive Programs

Wellness programs are based on different types of incentive systems. Both types yield specific results, but differ in success standards, participation and overall health outcomes. Outcomes-based incentives are designed to reward achieving a health outcome standard. This could include meeting goal weights, BMI or cholesterol levels[26]. Additionally, progress-based incentives are designed for individuals who have not yet met a health standard, but have made meaningful strides in order to achieve a goal[26]. This differs from outcomes-based incentives because every employee has the opportunity to be recognized for making progress, whereas not every employee will have the opportunity to reach the desired outcome[26].

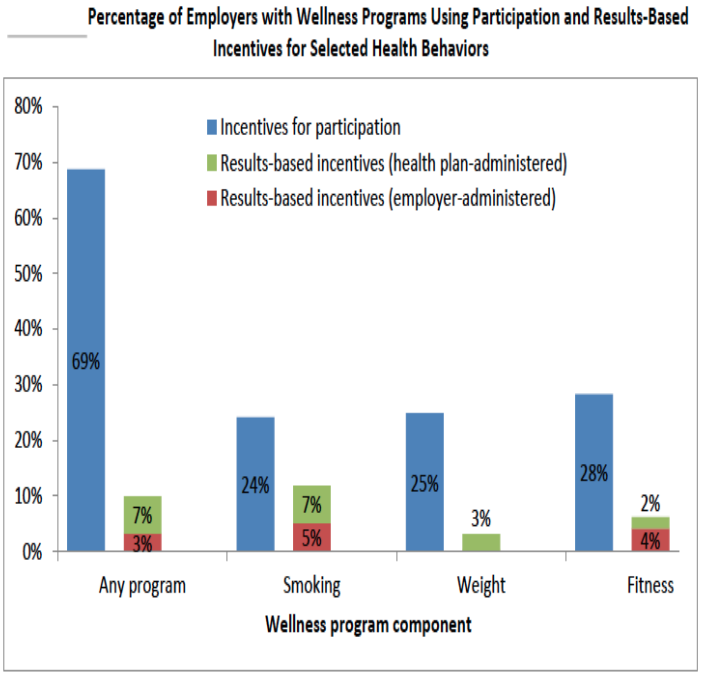
Outcomes-based models are often referred to attainment-based incentives. The negative connotation associated with programs of this type is that they "make no distinction between those who try but fail and those who don't

try"[27]. Without making a distinction and not rewarding all types of effort, the wellness program can appear isolating and discouraging. Furthermore, this model doesn't account for the reasoning motivating participants to not participate, or not reach successful completion.

Incentive-based programs are often marketed to a population of employees who have the physical, mental and emotional capability to successfully participate in health-based programs. Though a target audience for wellness programs would be a lower-paid employee population, due to decreased access to resources, they are often the population who is subjected to increases because of program incompletion. If the lower-paid employee population is in a greater need of medical care and health information, they may be less likely to participate or reach program goals[27]. By penalizing this population, programs are excluding a group that could truly benefit from wellness program initiatives.

Figure 6.2, from the U.S. Department of Labor and U.S. Department of Health and Human Services below shows the different types of incentives being implemented in current wellness programs[19]. Overall, the chart depicts a majority of the companies surveyed as using, or having used, a type of incentive for participation.

As a whole, 69% of wellness program practitioners are incentivizing participation. The chart also surveyed specific result-based incentives[19]. These include both health-plan administered incentives, as well as employer-administered incentives. Smoking cessation programming has a higher rate of result based incentives than weight management and fitness programs. Consequently, of the population surveyed, none of the organizations used employer-administered results-based incentives in weight management programs[19]. Not only are the incentives important, but it's also important to be aware of the source of implementation. Incentives and sources yield both pros and cons.



Source: RAND Employer Survey, 2012.

Figure 6.2 Incentives and participation

6.2 Pros And Cons Of Incentives

New studies show that 60% of employees believe that worksite wellness programs are beneficial to the larger organization. Of that group 30% of employees have the opportunity to participate in worksite wellness programs through their employer[25]. Wellness program implementers must consider intrinsic and extrinsic reward factors when considering the validity of results obtained from wellness program implementation. Participants who have intrinsic interest in wellness will choose to take part in the program, with little concerns of rewards or outcomes[25].

Participants who are extrinsically motivated need promise of reward or compensation to participate. This group also includes the individuals who participate to avoid disincentives[25]. Both types of motivation feed off one another. Though intrinsic motivation may be beneficial when the program begins, extrinsic motivation drives may increase long-term commitment and participation. Additionally, extrinsic motivation may instill a sense of intrinsic motivation overtime.

While incentives may be a component of the wellness strategy, they cannot comprise the whole system. The positive attributes of incentives are that they provide reward options, engage participants, are easily adjusted and can influence participation[25]. The difficulties associated with incentives can including choosing the reward. Finding the appropriate reward and incentive can be difficult if employers have a varied population with differing needs. Additionally, wellness program critics are concerned that incentives can reward poor habits and entail unintended consequences[25].

Table 6.2.1, from National Healthy Worksite shows the varied opinions regarding the effectiveness of incentive-based systems on overall success and health outcomes of wellness programs. The evidence shows differing views of the long-term correlations between incentives and results. This also affirms that there are positive and negative consequences through implementation of reward systems. Assessing the needs of a specific organization and tailoring incentives around the population is the most efficient and effective way to see improvement through wellness programs[20].

Table 6.3 Incentive Effectiveness

Author	Findings
O'Donnell MP American Journal of Health Promotion (2010)	There is minimal evidence that financial incentives have a direct impact on improved health behaviors.
Dudley RA, et al. Agency for Healthcare Research and Quality Report (2007)	Incentives have minimal sustained effects on smoking cessation or weight loss, but can increase participation in smoking cessation or weight loss programs.
Paul-Ebhohimhen V and Avenell A Obesity Reviews (2008)	Financial incentives do not have a significant effect on weight loss or maintenance between 12 and 18 months.
Cochrane Collaboration Review (2011)	Results and success from incentivized programs dwindled after rewards were dispersed, with the exception of one recent trial.
Seaverson EL, et al. (2009) American Journal or Health Promotion	Supportive culture and comprehensive communications increase incentive effectiveness.
Volpp K, et al. (2009) New England Journal of Medicine	Incentives up to $750 increased the rate of smoking cessation over 12 months.
Volpp K, et al. (2008) Journal of the American Medical Association	Weight loss during a 16 week intervention was encouraged with economic incentives. These results were not completely sustained.
Taitel MS, et al. (2008) Journal of Occupational and Environmental Medicine	Value of incentives was a strongly tied to HRA completion rates.

Source: Workplace Health Incentives. (2013, May 20). Retrieved October 17, 2014

7. Success Of Worksite Wellness Programs

Companies have recently started to use Return on Investment (ROI) measurements to measure the success of worksite wellness programs. The ROI suggests that, despite worksite wellness programming costing money initially, there is a positive return on investment based on long-term results[28]. Texas state government conducted a study that measured the effectiveness of 42 different wellness programs in the United States. The positive return on investment established through worksite wellness opportunities reduced health care claim costs by 25 to 30 percent over a 3.6-year period[28].

7.1 Market Trends: The Impact Of Wellness Programs

According to the journal *Health Affairs*, a product of the Center for Health Value Innovation, the United States exceeded health care spending by $2 trillion in 2006. Of the $2 trillion spent, close to three fourths was allocated to the treatment of chronic conditions. Startling enough, two thirds of this allocated portion was dedicated to the treatment of preventative chronic disease, brought about through lifestyle choices such as obesity, smoking and various other habits[3].

The Center for Health Value Innovation, an organization dedicated to reduce the health care cost trend, conducted a cohort study that analyzed health cost trends over a 3-4 year period among 26 companies. These companies accounted for public, private, state, local and county agencies and municipalities. The group was measured while implementing wellness strategies that met their organizations specific needs[29].

The results of the study found that two groups, the innovators and attendees didn't produce the same answers to survey questions, but did derive the same overall wellness concepts and importance given the rising trends in costs associated with negative health outcomes[29]. The innovators was classified as a group with previously established vested interest in wellness, which was made obvious by their perceptions of wellness measures, applications, risk-association and definitions[29]. The attendees were made of a group of individuals attending a conference, comprised of human resources and business representatives from various organizations. Though this group is interested in learning more, their application-related experience is not equivalent to the innovator group[29]. Where the innovator group saw merit in the broader, intrinsic value of worksite wellness programs and policies, the attendees group was focused on measurable outcomes. Additionally, the innovator group was more likely to form an all-encompassing business definition of wellness, accounting for the varying dimensions of health[29]. Though they have different perspectives on wellness and differing measurement standards of success, both groups recognized the importance of worksite policy supporting the implementation of wellness-related programs.

Companies representing both groups implemented wellness programs and analyzed medical-related cost over a 4-year period. Companies without implemented wellness programs saw a market increase cost of 8%-10%[29]. The companies analyzed for the survey observed a 4% increase in the first four years of implementing wellness program strategies[29].

Though companies may not agree what wellness looks like, they agree that wellness is an important and necessary component in their overall business strategy. Based on comparable spending and the trends associated with medical claims costs and profit margin losses due to decreased productivity and absenteeism, companies can't afford to not invest in wellness. Furthermore, by investing in wellness, companies are investing in both short-term and long-term health outcomes and lifestyle choices. Case studies show that there is significant return on investment with wellness programs. Return on investment, coupled with positive health outcomes and lower claims costs is further incentive for employers to adopt wellness program policies.

7.2 Case Studies

The case studies in the following section demonstrate the return on investment associated with wellness programs in organizations over a 4-year period. This demonstrates a monetary reward for employers and an intrinsic reward related to wellness for their employees.

7.2.1 Dell, Inc.

Dell, Inc. has a worldwide workforce of 94,000 employees. Within the United States, they have successfully implemented a worksite wellness program for 10,000 participants that incorporates on-site fitness facilities, healthy food options, on-site medical care and online health programs[28].

The results of the program demonstrate increases in lifestyle choices and health behavior change. Of the 10,000 participants 72% increased regular exercise, 86% improved total cholesterol and 64% met their weight related goals or improved their BMI[28].

7.2.2 Dallas-Fort Worth International Airport

Dallas-Fort Worth International Airport implemented a wellness program for 1,700 employees. Their wellness program initiatives included wellness circulars, award programs and on-site fitness facilities[28]. Additionally, the

organization built a 14,500 square-foot fitness facility, which features an exercise studio, training rooms, showers and recreation courts[28].

The organization measured the program's effectiveness based on a high, moderate, and low risk standards, as indicated on the health risk assessment. Overall, they saw the high-risk population fall by 3.1%, moderate risk group decrease 1.8% and the low risk group increased by 4.8%[28].

7.2.3 City of Hurst

City of Hurst, with a population of 400 employees, incentivizes wellness program participation through use of monetary and gift prizes. These include subsidized cost for gym facilities and weight management program memberships. It also includes eight possible hours of paid vacation and gift allowances to assist with expenses related to wellness[28].

Through program initiatives, the organization was able to lower employee absenteeism by 38%[28] in the time between 2007 and 2009. Additionally, the program responded to concerns of rising health care claims costs, counteracting the measure and providing employees with the tools necessary for healthy outcomes[28].

There is evidenced based support for the cost-effectiveness and overall results of wellness programs. Though employers have previously implemented wellness programs, they now have added incentive to consider wellness in the workplace. The Affordable Care Act, also known as Health Care Reform, now mandates insurance coverage for employees, guaranteed by their employers. Given the prompted medical insurance coverage, employers are considering the cost-effective benefits and returns on investment, therein customizing wellness for their organizations.

8. Health Care Reform

The 2010 Affordable Care Act changed the language of medical insurance requirements in the workplace. For individuals, the act created a mandate that forced everyone to purchase some type of medical insurance plan, while increasing access and knowledge of the options available. This is enforced through a fine system that penalizes individuals who have no yet met the insurance mandate by 2014[30].

For employers with more than 50 employees, the law required insurance for all employees. Organizations smaller than 50 employees have more cost-beneficial options than previously utilized through new state exchange rates and incentives[30].

8.1 Health Care Reform's Regulation Of Wellness Programs

The Affordable Care Act not only changed the language of health and wellness reform, but it also created new guidelines pertaining to wellness programs that protect both employees and employers. Based on the legislation, participatory wellness programs will continue to receive support, so long as they offer a variety of programs that participants can choose to partake in. These programs can include educational seminars, fitness-oriented wellness programming and reimbursements for wellness facility memberships[31].

Nondiscriminatory standards were amended in attainment-based programs called "health-contingent wellness programs". These programs include smoking cessation and other goal-attainment programs[31]. The amendments that were made protected employees. The Affordable Care Act states that the programs had to have distinct purpose, which could include promoting health or preventing disease[31]. To protect consumers, these programs must be reasonably achieved, meaning that any program put into place must include "different, reasonable means of qualifying for the reward to any individual who does not meet the standard based on the measurement, test or screening"[31]. Additionally, the amendments protect those who may be unable to achieve the standard due to medical conditions. The programs must be held to a standard that all individuals can meet, or they must be customizable to account for those who have exceptionalities or circumstantial conditions[31]. Communication of events, program deadlines and other materials must be presented so that all individuals have an equal opportunity to understand and remained informed. This includes the implementation of plain language and easily constructed concepts[31].

While protecting the rights of the employee, the Affordable Care Act offers protection for the employer, as well. By increasing flexibility and customizability, employers have the opportunity to tailor wellness programs to their specific agency's needs. The act does this by increasing "the maximum permissible reward under a health-contingent wellness program from 20% to 30% of the cost of health coverage, and that further increase the

maximum reward to as much as 50% for programs designed to prevent or reduce tobacco use"[31]. Given the increased support from the government and the demand for change related to rising health care costs, employers have increased incentive to implement a worksite wellness program within their organization.

8.2 Health Care Reform's Impact On Wellness Initiatives

Since the Affordable Care Act has recently been implemented, there is little evidence-based research and few cohort studies supporting claims that health care reform has positively impacted wellness initiatives. That being said, employers oriented to save money could benefit from implementing wellness programs to save on medical insurance claims. Harvard Business Review reports that from 2002 to 2008, Johnson and Johnson Corporation saved $250 million on medical insurance claims by the implementation of worksite wellness opportunities and smoking cessation programs[32].

By insuring all employees, the most cost efficient way to save money on medical claims is to reduce the total number of claims by reducing illness and chronic disease management, as evident when analyzing the rising trend of health care costs. Through wellness programming, employers will not only have the opportunity to increase worksite morale, decrease absenteeism and increase productivity, they will also have the opportunity to directly impact the total cost they are spending on medical claims. Despite there being little evidence to date to support this claim, we are able to project possible outcomes based on measured effectiveness of wellness programs in existing organizations.

9. Conclusion

The United States is facing a crisis caused by high instances of disease and morbidity, which has resulted in an exponential increase in medical claims costs on behalf of employers. Subsequently, employers are mandated to insure their employees and are searching for cost efficient ways that decrease medical claim costs and losses related to absenteeism and decreased productivity. The nation is responding to the crisis through implementation of worksite wellness initiatives.

Worksite wellness initiatives are making a positive impact on negative health outcomes and on return on investment. Through primary and secondary prevention techniques and properly incentivized rewards, employers are able to not only respond to the crisis, but to create a culture of behavior that will continue to support sustained health behavior change, while increasing and improving access to quality and appropriate care. Workforces that participate in worksite wellness programs have demonstrated lower rates of absenteeism, losses due to unproductivity and lower costs associated with medical claims. As disease rates and work-related illness and injuries begin to rise, employers will have the opportunity to implement wellness strategies to combat profit margin losses and decreases in morale. Wellness programs are an answer to the crisis: providing a mutually beneficial relationship between employer and employee that promotes and sustains long-term health behavior change.

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