

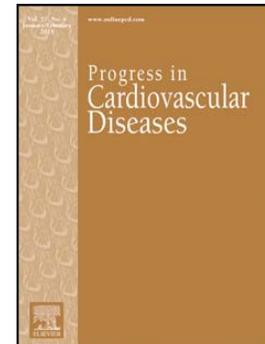
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A Focus on Non-Communicable Disease

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Development and Implementation of Worksite Health and Wellness Programs:**A Focus on Non-Communicable Disease**

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Abbreviations

ACA – Affordable care act

ACO – Accountable care organization

CVD – Cardiovascular disease

EEOC – Employment Opportunity Commission

HIPAA – Health Insurance Portability and Accountability Act

NCD – Non-communicable disease

US – United States

WHWP – Worksite health and wellness program

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Abstract

The development and implementation of worksite health and wellness programs (WHWPs) in the United States (US) holds promise as a means to improve population health and reverse current trends in non-communicable disease incidence and prevalence. However, WHWPs face organizational, economic, systematic, legal, and logistical challenges which have combined to impact program availability and expansion. Even so, there is a burgeoning body of evidence indicating WHWPs can significantly improve the health profile of participating employees in a cost effective manner. This foundation of scientific knowledge justifies further research inquiry to elucidate optimal WHWP models. It is clear that the development, implementation and operation of WHWPs require a strong commitment from organizational leadership, a pervasive culture of health and availability of necessary resources and infrastructure. Since organizations vary significantly, there is a need to have flexibility in creating a customized, effective health and wellness program. Furthermore, several key legal issues must be addressed to facilitate employer and employee needs and responsibilities; the US affordable care act will play a major role moving forward. This purpose of this review is to: 1) examine currently available health and wellness program models and considerations for the future; 2) highlight key legal issues associated with WHWP development and implementation; and 3) identify challenges and solutions for the development and implementation of as well as adherence to WHWPs.

Keywords: Employer; Employee; Healthcare; Lifestyle; Insurance; Law; Access

Introduction

There is a growing worldwide recognition that worksite health and wellness programs (WHWPs) afford an excellent opportunity to positively impact the health profile of a large proportion of a country's population engaged in the workforce.¹⁻⁷ The development, implementation and operation of WHWPs require strong organizational support, which includes weaving the importance of employee health and wellbeing into the culture of the organization. Additionally, there is a need for a commitment of resources both to develop and to operate such a program.⁸ All programs should share a common goal of improving the health of the employees it serves. Non-communicable diseases (NCDs), such as cardiovascular disease (CVD), diabetes, cancer and chronic obstructive pulmonary disease are now the primary health concern in the United States (US) as well as most other countries around the world.⁹⁻¹¹ The prevention and management of NCDs can be largely accomplished by managing associated risk factors: 1) cigarette smoking; 2) hypertension; 3) hyperglycemia; 4) dyslipidemia; 5) obesity; 6) physical inactivity; and 7) poor dietary habits.^{12, 13} Thus, WHWPs should be directed toward the prevention, reversal or management of NCD risk factors, defined as the "Simple 7" by the American Heart Association.¹⁴ **Figure 1** illustrates a WHWP conceptual model that focuses on reducing key NCD risk factors. Note that in this model, the employee is encapsulated in a health- and wellness-promoting environment. While the focus of WHWPs share a universal commonality related to NCD prevention/management (**Figure 1**) the approach to achieving these primary goals will understandably differ. Given the fact that organizations have a wide range of characteristics, responsibilities, resources and infrastructure, it is only logical that there is a need to have flexibility in the type of WHWP offered.

Models used to deliver WHWPs have specific strengths and weaknesses. Identifying the strengths and weaknesses of each WHWP model being considered, in relation to characteristics, resources and infrastructure of a given organization, can facilitate successful program development, implementation, and continued operation for employers interested in providing employees means by which they can improve their health. Legal and regulatory issues, which have grown substantially in recent years, must also be considered when developing and implementing a WHWP; the US Affordable Care Act (ACA) will play a major role moving forward. While the concept of WHWP has been in existence for a number of years, the field, from a research, regulatory/legal, and implementation perspective is in its infancy and continues to evolve. This purpose of this review is to: 1) examine currently available WHWP models and considerations for the future; 2) highlight key legal and regulatory issues associated with WHWP development and implementation; and 3) identify challenges and solutions for the development and implementation of as well as adherence to WHWPs.

Current Worksite Health and Wellness Delivery Models and Key Characteristics

There are three primary models used for delivering WHWPs: 1) internal; 2) external; and 3) hybrid programs.¹⁵ Although not entirely dictated by organization size, many larger companies opt for an *internal program* with personnel employed by the organization to deliver all aspects of the program. Conversely, smaller companies often lack the resources to operate a program and thus commonly contract (i.e., *external program*) with a vendor that specializes in delivering health and wellness interventions. Mid-size companies may choose to use a hybrid approach by providing some internal programming with either full- or part-time personnel with health and wellness expertise employed by the organization combined with an outside vendor contract to provide additional services. A variation of the hybrid approach entails a multi-

organization cooperative agreement whereby companies share resources (personnel, program offerings) or negotiate with external vendors to obtain bundled services.¹⁵ This may be a particularly attractive approach for companies with limited funding or for companies located in rural areas.

Although WHWPs are delivered with different models, they all should incorporate the same two basic components: 1) assessing the needs and health risks of the employees through a screening/assessment process¹⁶; and 2) delivering interventions and programming.^{17, 18} Ideally, the first component should drive the second; i.e., uniquely identified health risk profiles for an organization's employees shapes the type of interventions that are in greatest need and have the greatest impact.

There are a number of health risk and employee wellbeing assessment tools available.¹⁶ Some organizations, particularly those using an internal model, may develop their own instruments to target areas they deem most important. Companies who choose an internal model have free and reputable resources available to help guide program development. For example, the American Heart Association^{14, 19, 20} and Centers for Disease Control²¹⁻²³ provide excellent free resources for worksite wellness programming. The Workplace Health Model illustrated in **Figure 2** has been proposed by the Centers for Disease Control.²⁴ Organizations may also contract with external vendors offering appraisal tools with state-of-the-art administration, analysis of results, and preparation of individualized and group reports. Although some risk factors for poor health can be quantified via questionnaire format, others such as blood pressure, blood tests (e.g., low-density lipoprotein and high-density lipoprotein cholesterol, triglycerides, and glucose), body weight and body fat distribution, and objective measurement of physical activity (pedometer) or fitness (functional test) are more ideally obtained from real-time

measurements. Internal programs may have a clinic to allow employees the opportunity to have such assessments done regularly while at the worksite. Hybrid and external programs can also provide onsite measures, often through periodic screening days. Alternatively, small companies with external programs may need to have employees obtain these measurements through their own healthcare provider and agree to share results with the WHWP. Lastly, regardless of the approach to assessing an employee's health and wellness profile, follow-up is essential. Repeat assessments, following participation in a health and wellness program, is the only way of knowing if a positive change has been made.

The most successful programs target their health and wellness interventions to match the greatest needs identified in the employees' health risk assessments. Key interventional factors include: 1) educational programming (i.e., classes, newsletters, public postings, etc.); 2) individualized instruction and assistance in lifestyle management (i.e., behavioral counseling to support employees with issues such as smoking cessation)²⁵; and 3) a health and wellness-minded built environment (i.e., healthy food choices readily available, smoke-free workplace, an exercise room, walking paths, etc.). Evidence demonstrates these factors are important for program success. Michaels and Greene recently provided a rating of some evidence-based strategies proven to be successful, which included offering healthy food choices in dining areas and providing open access to fitness and recreational facilities at the workplace.²⁶ Kaspin et al. recently performed a meta-analysis on the economic and health profile effects of WHWP, reporting favorable outcomes in both areas.²⁵ Kaspin et al. noted there were several WHWP characteristics that were associated with success: 1) the corporate culture was one that encouraged employees to lead a healthy lifestyle for reasons other than monetary gain by the employer; 2) both employers and employees demonstrate strong support of the health and

wellness culture; 3) employees felt motivated to embrace health lifestyle initiatives by employers who publicized a policy supportive of health and wellness and created a physical environment emulating this philosophy; 4) WHWPs that are adaptable to the ever-evolving needs and changes of employees; 5) community health organizations that partner with WHWPs, providing support in the form of education, treatment, etc.; and 6) WHWPs that capitalize on technology to conduct health risk appraisals and education.

Successful WHWPs must be vigilant in monitoring and adapting to the changing needs of their respective organization. Additionally, the entire health and wellness industry must be responsive to changes that influence healthcare on a national level. For example, as part of the ACA, companies will be able to provide wellness-based incentives of up to 30-50% of health insurance premiums.^{27, 28} Other trends, such as the increasing proportion of the workforce over age 55 will require modified programming to more specifically address age-related issues.²⁹

There have been a number of notable adaptations in WHWP in the past decade.^{30, 31} These include increased use of technology and web-based materials used both for assessment and interventions.³⁰ These newer technologies, particularly ones that allow access from mobile devices have increased the interactive capacity of programs. Another approach that is gaining widespread acceptance is health and wellness coaching. This program feature, which optimally utilizes health-risk appraisal data and web-based resources, has allowed for much more individualized programming to meet the specific needs of the employee. Another current trend is to prioritize the selection of interventions to target employees with high-risk conditions or diseases that typically result in the highest levels of healthcare expenditures. Pelletier reported that there has been a recent surge in the body of literature examining a disease management

approach to worksite health and wellness programming, noting promising results related to improved health status and cost efficacy.³¹

Regardless of the specific model used to deliver WHWPs, there are common characteristics that emulate a high-quality program and are associated with success. These characteristics include: 1) strong support from the organizations' leadership; 2) clear acceptance of the importance of health and wellness as noted by both the organizational culture and environment; 3) program responsiveness to changing needs of employees; 4) utilization of current technology; and 5) support from community health programs.²⁵

The Law and Worksite Health and Wellness Programs

Currently WHWPs under a group or individual health plan are principally governed by Federal law.³²⁻³⁵ Although not a predominant focus, these statutes have consistently constrained WHWPs by prohibiting discrimination.³⁴ The statutes generally prohibit discrimination against participants and beneficiaries based upon a "health factor" and/or "health status related factors."³⁴ Included among these factors are: "1) health status; 2) medical condition (including both physical and mental illnesses); 3) claims experience, 4) receipt of health care; 5) medical history; 6) genetic information; 7) evidence of insurability (including conditions arising out of acts of domestic violence); 8) disability; and 9) any other health status-related factor determined appropriate by the Secretary."³⁴ One of the several agencies charged with promulgating the rules and regulations under the Patient Protection and ACA is the Department of Health and Human Services (HHS). On June 3rd, 2013, the Department of HHS issued rules entitled, "Incentives for Nondiscriminatory Wellness Programs in Group Health Plans."³⁶ The Department of HHS clearly states there is an exception to the general rule prohibiting discrimination in the form of discounts

or rebates in return for "adherence to certain programs of health promotion and disease prevention."³⁶

Under the Health Insurance Portability and Accountability Act (HIPAA), the aforementioned nine factors divided WHWPs into two types: 1) participatory wellness programs; and 2) health-contingent wellness programs.³⁶ Under HIPAA, participatory wellness programs would likely comply with nondiscrimination requirements so long as the program is made available to similarly situated individuals without consideration of health status.³⁶ More simply stated, programs offered to voluntary participants, which may award benefits and/or discounts to the participants, must be offered to all similar individuals regardless of their previous and/or current health factors. Alternatively, "plans and issuers with health contingent wellness programs were permitted to vary benefits including cost-sharing mechanisms, premiums, or contributions based on whether an individual has met the standards of a wellness program."³⁶ The difference is that a participatory program is nondiscriminatory if offered to all similar individuals, while a health-contingent wellness program is nondiscriminatory if the program meets certain conditions. Examples of conditions that must be met may include, but are not limited to: 1) programs that have a reasonable chance of improving health or preventing disease that is not overly burdensome; and 2) programs that provide individuals the opportunity to qualify for a reward once a year, that all individuals in a similar situation have access to the reward, and for which there must be a reasonable alternative for individuals to qualify for the reward if it is medically inadvisable to attempt to satisfy the otherwise applicable standard.^{37, 38}

Under the more recent ACA, the protections afforded against nondiscrimination within the group health plan were expanded to individual health plans under section 1201, which amended the applicable HIPAA subsection.³⁶ The ACA kept the two category distinction of

participatory and contingent wellness programs as it existed under HIPAA, noting that participatory programs may provide reimbursements for all or part of membership to a fitness center or diagnostic testing programs that provides for a reward for participation and not based upon outcomes, while contingent programs might include a program that imposes a surcharge based upon tobacco use, or biometric screening or health risk assessment to identify employees with specified medical conditions or risk factors.³⁶

The Department of HHS believes that appropriately designed WHWPs have the potential to prevent disease and promote health.³⁶ In doing so, employers should carefully craft their programs to meet all necessary requirements so as to avoid discrimination and potential liability. One of the most recent cases filed by the Equal Employment Opportunity Commission (EEOC) relating to wellness programs should serve as a cautionary tale to employers. On August 20th, 2014, the EEOC filed suit against Orion Energy Systems in the U.S. District Court for the Eastern District of Wisconsin.³⁹ The EEOC alleges that that an employee was required to submit to medical examinations as part of a health and wellness program and subsequently fired the employee when the employee refused.³⁹ Nevertheless, programs that are reasonably designed and implemented, which do not discriminate against other employees, and which are offered to all similarly situated individuals, can be an important cost reducing component to group and individual health plans. Employers should, however, seek counsel to ensure statutory and regulatory compliance prior to implementation.

Development and Implementation of as well as Adherence to Worksite Health and Wellness Programs: Challenges and Solutions

Challenges associated with gaining support for, implementing and ensuring employee adherence with WHWPs persists. However, the value of WHWPs is becoming increasingly

recognized in the US (**Table 1**)^{16, 17}, a premise that is demonstrated through initiatives put forth in the ACA.^{27, 28} This legislation allows for a significant portion of insurance premiums to be spent on wellness incentives.^{5,6} Thus, companies may begin to offer health insurance premium incentives to employees for participation in health and wellness initiatives. Offering such incentives has demonstrated an increase in worksite health risk assessment participation.^{40, 41} However, the ability of incentive programs to improve actual health profiles, particularly over the long-term, remains questionable.⁴² Thus, a key challenge for future consideration is how to motivate employees, particularly those with a poor health profile, to initiate and adhere to healthier lifestyle habits for the long-term. In fact, ensuring healthier lifestyle adherence by employees in an organization is the core objective for a WHWP and, as such, program implementation and all resultant initiatives should be focused on realizing this goal. Making a substantial positive change in adherence is certainly not a simple issue to address. However, several factors are central to optimizing the ultimate goal of a WHWP, particularly long-term adherence to healthier lifestyle patterns.

At the onset, strong support for WHWP by an organization's entire leadership structure is imperative.⁴³⁻⁴⁵ Such support should begin with an organization's senior leadership and, from there, spreading to lower levels of management. A key challenge is for organizational leadership, at every level, to embrace worksite health and wellness initiatives and to create an environment where the employees feel supported in choosing to participate. Making a strong case as to why an organization's leadership should adopt such a culture may best be approached from an economic perspective. That is, if organizational leadership supports worksite health and wellness initiatives, there will be a substantial cost savings (i.e., through insurance premiums) and a rise in productivity (i.e., decreased absenteeism/pre-absenteeism). Previous surveys

indicate organizational leadership strongly considers the financial perspective of implementing a WHWP.⁴⁶ There is evidence demonstrating cost savings and increased productivity associated with WHWP.^{2, 16, 17} However, the methods by which such analyses are performed are not uniform. Moreover, given the heterogeneity of organizations across different industries, employee demographics, geographic location, and available resources for WHWP, making a strong universally applicable economic case for program implementation is currently difficult. As more evidence demonstrating the economic benefits of WHWP is put forth in the coming years and integrated into what is already available, a stronger case, will be possible. Thus, a growing body of literature in the area of WHWP economic advantages should help to overcome potential challenges associated with garnering leadership support.

Selecting employees from within an organization to develop and implement a viable and effective WHWP can, be viewed as a challenge, particularly when there is a lack of expertise related to health and wellness within a given organization. At a minimum, if employees from within an organization, with no formal training or expertise, are selected to design and implement a WHWP, they should demonstrate healthy lifestyle habits and a strong passion/desire to assist others in initiating and adhering to a similar lifestyle. Alternatively, strategic partnering with organizations within the community, such as health care systems or universities, who have personnel with expertise in health and wellness, can be explored. Partially or completely outsourcing an organization's health and wellness program to an external provider is another means by which experienced personnel can be brought in for effective program administration and delivery. Strategic partnering with other entities within the community may or may not require financial commitment from an organization while program outsourcing to an external provider certainly requires such a commitment. The emergence of

Accountable Care Organizations (ACOs)^{47, 48}, a concept born out of the ACA, may allow for employers to make a strategic alliance that is economically attractive. An ACO “is a group of health care providers who agree to share responsibility for the quality, cost, and coordination of care for a defined population of patients.”⁴⁷ The ACO financial model is based upon increased reimbursement for high-quality care while reducing costly health care expenditures, such as hospital admissions, diagnostic tests and medical procedures. This represents a paradigm shift away from a fee-for-service healthcare system to a covered-lives model, the latter of which entails an upfront and fixed amount of finances available to provide care of a group of individuals. Thus an ACO that has lower expenditures while still providing quality care will realize a higher profit. It is undeniable that individuals who demonstrate healthier lifestyle characteristics are at significantly lower risk for adverse medical events^{13, 49, 50} and therefore require less healthcare expenditures. Thus, ACOs would greatly benefit from as many individuals in their covered-lives population as possible emulating healthy lifestyle characteristics.⁴⁸ The healthcare and financial structure of ACOs creates the potential for partnerships with employers. For example, scenarios will emerge where an employer, or group of employers, employ a significant number of individuals in an ACO’s covered-lives population. In this scenario, recognizing the potential to reduce healthcare expenditures, an ACO may be willing to provide a portion or all of a WHWP. Employers should seek out these types of partnerships, which would allow them to offer a high quality program in a cost favorable manner. Ultimately, regardless of the model or partnerships formed, the decision to make financial investments in WHWPs by all stakeholders (i.e., employers, ACOs, etc.) intertwine with the ability to make a strong case that there will be a positive return on investment, from a quality of life/wellbeing or financial perspective and ideally both.

Creating an environment conducive to adopting healthy lifestyle habits could be a challenge that requires attention. Three primary considerations are adopting a smoke-free workplace, healthy food options and opportunities for employees to be physically active at or in close proximity to the worksite. In private organizations, adopting a smoke-free workplace policy may be the least challenging, only requiring strong organizational support. Public institutions face barriers which span from policy to legislation to enforcement. If food options (i.e., cafeteria, vending machines) are available in the workplace, healthy options should be readily accessible and promoted. The financial implications for such practices may not be substantial, although the factors that influence making healthier food choices are rather complex.⁵¹ Thus, gaining broad support from organizational leadership, employees and vendors who provide food services in the workplace may present challenges. Having open forums to discuss the logistics and importance of increasing healthy food choice options may assist in building support for such practices. At a minimum, availability of healthier foods and point-of-purchase strategies appears to increase consumption.⁵² Opportunities for increased physical activity in the workplace, such as prompts for use of stairwells and access to fitness facilities, appear to be effective in improving activity patterns.⁵² An environmental assessment, to determine current viable options for opportunities to be physically active (i.e., walking paths, staircases, space for a fitness facility), would help to determine current infrastructure for such practices. Once such an assessment has been performed, discussions and planning centered on the amount of up-front resources needed to increase opportunities for physical activity in the workplace will help to determine what is possible for a given organization. Once again, making the case for a substantial up-front financial investment should be coupled with projections for return on investment.

A final challenge for WHWPs is to motivate individual employees, particularly those with poor baseline health profiles, to initiate healthier lifestyle patterns and adhere to them for the long-term. If there is strong support from organizational leadership for worksite health and wellness, adoption of a healthy lifestyle environment in the workplace, and opportunities for participation in healthy lifestyle activities in the workplace during working hours (e.g., physical activity breaks, healthy food options, health and wellness education sessions), the likelihood for individual employees to increase desirable health behaviors is enhanced. It may also be advantageous to assess an employee's "readiness to change" health behaviors in order to identify those individuals who are most likely to initiate and adhere to a healthier lifestyle.⁵³ Maintaining contact with employees, through face-to-face coaching sessions, telephone/smartphone communication/messaging, and/or web-based modules may also be effective in increasing adherence to healthier lifestyle choices.^{17, 54, 55}

Conclusion

The prevalence of WHWP screenings and subsequent programs will continue to grow, as we increasingly recognize the value of individuals adopting a healthy lifestyle, including improved health outcomes, reduced health care expenditures, reduced absenteeism, and increased work productivity. There are many factors both logistical and legal that require attention when considering the characteristics of a worksite health and wellness screening and subsequent program that will be optimal for a given company. This field will certainly evolve as additional scientific evidence emerges and best practice patterns are put forth. Given the changing US healthcare landscape, one that is shifting toward a quality care, preventive, reduced expenditure model, WHWP initiatives will certainly be afforded greater attention. If the

potential for WHWPs are realized, they will become a central component to the delivery of individual-level preventive interventions.

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Table 1: Program Components, Intervention Strategy and Goals and Overall Outcomes of a Worksite Health and Wellness Program

Program Component	Intervention Strategy	Intervention Goals
Health Screening	Health fairs that assess factors known to increase risk for non-communicable disease	Identify employees at high risk and provide tailored interventions to improve risk profile
Physical Activity and Exercise Training	Educational programs and messaging campaigns to encourage increased physical activity throughout the day (e.g., stairwell signage, walking paths), on-site exercise facilities or discounted off-site fitness facility memberships	Increase daily physical activity patterns and number of employees participating in structured exercise program
Smoking Cessation	Smoke-free workplace policy, educational programs and messaging campaigns highlighting the health consequences of smoking and benefits of quitting, structured smoking cessation programs	Decrease number of employees who smoke
Healthy Food Choices	Educational programs and messaging campaigns on importance of a healthy diet, increase healthy food choices in the workplace – cafeterias, vending machines, onsite farmers market, etc.	Increase healthy food choices and dietary profiles
Weight Management	Educational programs and messaging campaigns on importance of a healthy body weight, structured weight loss programs/counseling	Increase number of employees who achieve a healthy body weight
Overall Program Outcomes	Reduce non-communicable disease risk - Reduce risk of primary or secondary adverse health events - Reduce health care expenditures - Reduce absenteeism and pre-absenteeism - Increase productivity	

Figure 1: The Employee Health and Wellness Bubble – Key Components of a Worksite Health and Wellness Program

Legend: Figure 1 depicts the importance of a comprehensive and interconnected program. Employees should have the opportunity to participate in all facets of the program illustrated in Figure 1.

Figure 2: Centers for Disease Control Worksite Health Model**Legend:**

Figure 2 depicts a workplace health model that describes a systematic process of building a workplace health promotion program. The model has four main steps. Step 1 is Assessment which involves three components: organizational, individual, and community assessment. Step 2 is Planning/Workplace Governance which involves five components: leadership support, management, a workplace health improvement plan, dedicated resources, and communications and informatics. Step 3 is Implementation which involves four components: programs, policies, health benefits, and environmental support. Step 4 is Evaluation which involves four components: worker productivity, healthcare costs, improved health outcomes, and organizational change or “creating a culture of health”. Underlying the four steps are contextual factors such as the size of company or industry sector that need to be considered when building a workplace health promotion program.

Source:

Cenens for Disease Control and Prevention. Worksite Health Model.
<http://www.cdc.gov/workplacehealthpromotion/pdfs/WorkplaceHealthModel.pdf>.

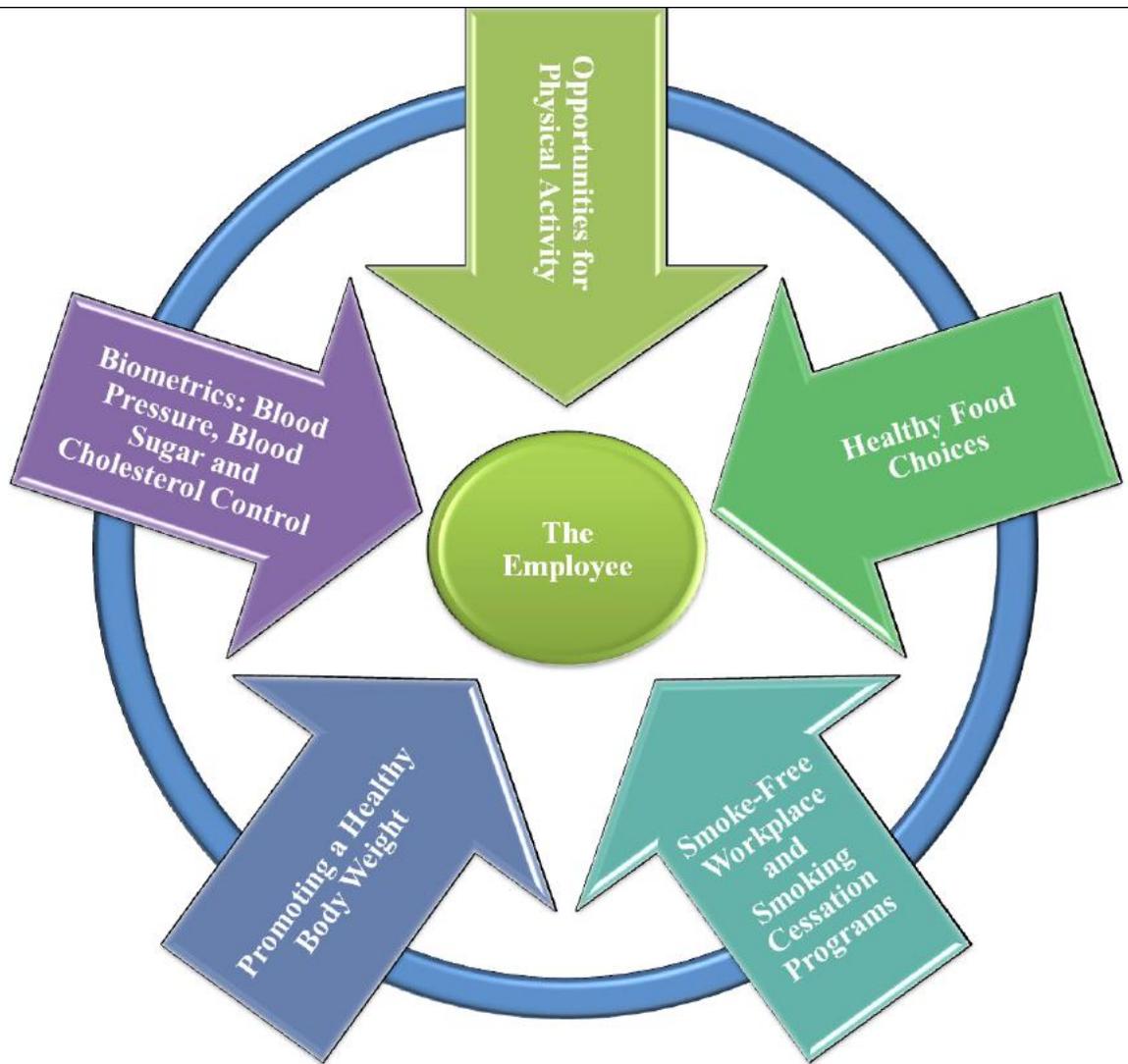


Figure 1

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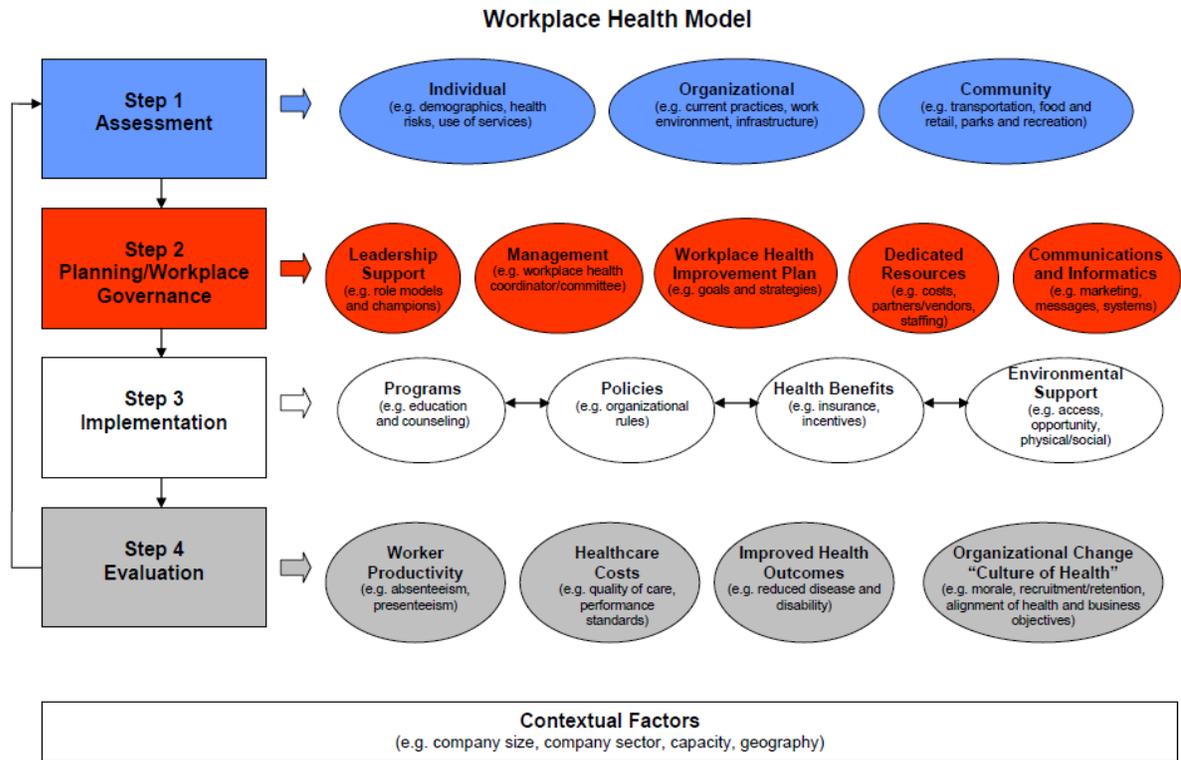


Figure 2