

## Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

---

Kabrina Smith

---

Date

**EVALUATION OF  
EXCELth'S WORKPLACE WELLNESS PROGRAM**

BY

Kabrina Smith  
Degree to be awarded: M.P.H.  
Career MPH

Iris E. Smith, PhD, MPH  
Committee Chair \_\_\_\_\_ Date

Mary Crooks, MPH  
Committee Member \_\_\_\_\_ Date

Melissa Alperin, MPH, CHES  
Chair, Career MPH Program \_\_\_\_\_ Date

**EVALUATION OF  
EXCELth'S WORKPLACE WELLNESS PROGRAM**

BY

Kabrina Smith  
M.P.H., Emory University, 2012  
M.S., Michigan State University, 1992  
B.S., Dillard University, 1990

Thesis Committee Chair: Iris E. Smith, PhD, MPH

An abstract of  
A thesis submitted to the Faculty of the  
Rollins School of Public Health of Emory University  
In partial fulfillment of the requirements for the degree of  
Master of Public Health in the Career MPH program  
2012

## **ABSTRACT**

### **EVALUATION OF EXCELth's WORKPLACE WELLNESS PROGRAM**

By

Kabrina Smith

A workplace wellness program developed and implemented by EXCELth Incorporated staff was evaluated for effectiveness of program activities. The evaluation was undertaken to determine ways to improve the program and focus on how well the program was being marketed and reactions of participating employees to the various program components. Factors reviewed to determine whether the program was being properly administered were reach, awareness, satisfaction, knowledge gained and improved health habits or conditions. The primary questions the evaluation sought to address and the associated indicators were:

1. Did the program reach those employees at greatest need?
2. Was there a high level of awareness of the program?
3. Were employees satisfied with the program?
4. Did the program help to improve the health habits and/or conditions of employees?
5. Did the program help to improve the knowledge of employees?
6. Was the program activities delivered as planned?

A mixed method approach was utilized to assess the program from a variety of perspectives. An online survey was developed and administered to gather retrospective information on program participation, behaviors changed and current information on health issues and needs. In addition, information was gathered from wellness committee members delivering wellness activities through open-end interviews via phone or in person.

Findings from this evaluation may provide a starting point to further develop, adapt, and expand the wellness program. Also, findings can be utilized to solicit additional program funding and conduct further evaluations of the program.

## **ACKNOWLEDGEMENTS**

To my committee chair, Dr. Iris Smith, my EXCELth field advisor, Mrs. Mary Crooks and EXCELth's Wellness committee members. Thanks for the time and dedication assisting and guiding me with this project. I couldn't have done this without all of you. I would also like to thank my Emory cohort and Dr. Shelia Webb for their support and keeping me motivated. Lastly, I would like to thank Mr. Michael A. Andry, CEO of EXCELth, for allowing me to undertake this project.

## TABLE OF CONTENTS

|                                                                                     |    |
|-------------------------------------------------------------------------------------|----|
| Chapter I. Introduction.....                                                        | 1  |
| Program Description.....                                                            | 1  |
| Public Health Problem.....                                                          | 2  |
| Program Theory and Description.....                                                 | 9  |
| Evaluation Purpose.....                                                             | 13 |
| Evaluation Stakeholders and Users.....                                              | 15 |
| Evaluation Questions.....                                                           | 16 |
| Logic Model.....                                                                    | 18 |
| Chapter II. Review of Literature.....                                               | 20 |
| Chapter III. Methodology.....                                                       | 29 |
| Population and Sample.....                                                          | 29 |
| Evaluation Design.....                                                              | 29 |
| Data Collection.....                                                                | 30 |
| Data Collection Instruments.....                                                    | 31 |
| Data Analysis.....                                                                  | 31 |
| Privacy and Security.....                                                           | 32 |
| Limitations and Delimitations.....                                                  | 33 |
| Summary.....                                                                        | 34 |
| Chapter IV. Results.....                                                            | 35 |
| Evaluation Question 1: Did the program reach those employees at greatest need?..... | 36 |
| Evaluation Question 2: Was there a high level of awareness of the program?.....     | 37 |
| Evaluation Question 3: Were employees satisfied with the program?.....              | 38 |

|                                                                                                               |    |
|---------------------------------------------------------------------------------------------------------------|----|
| Evaluation Question 4: Did the program help to improve the health habits and/or conditions of employees?..... | 39 |
| Evaluation Question 5: Did the program help to improve the knowledge of employees?.....                       | 39 |
| Evaluation Question 6: Was the program activities delivered as planned?.....                                  | 40 |
| Other Findings.....                                                                                           | 40 |
| Summary.....                                                                                                  | 41 |
| Chapter V. Conclusions and Recommendations.....                                                               | 42 |
| Introduction.....                                                                                             | 42 |
| Conclusions.....                                                                                              | 42 |
| Recommendations.....                                                                                          | 46 |
| References.....                                                                                               | 49 |
| Appendix A. Logic Model.....                                                                                  | 54 |
| Appendix B. Survey Instruments.....                                                                           | 55 |
| Appendix C. EXCELth’s Wellness Program Wellness Committee Interview Questions.....                            | 70 |
| Appendix D. Emory University Institutional Review Board Exemption Letter.....                                 | 72 |
| <b>Figures</b>                                                                                                |    |
| Figure 1. Dimensions of Wellness.....                                                                         | 7  |
| Figure 2. Health Belief Model.....                                                                            | 11 |
| Figure 3. The Stages of Change Model.....                                                                     | 12 |
| <b>Tables</b>                                                                                                 |    |
| Table 1. Workplace Wellness Program Evaluation Questions and Indicators.....                                  | 17 |
| Table 2. Demographic Characteristics of Survey Respondents.....                                               | 35 |

|                                                      |    |
|------------------------------------------------------|----|
| Table 3. Wellness Committee Members' Roles.....      | 36 |
| Table 4. Personal Goal(s).....                       | 37 |
| Table 5. Personal Health Goals.....                  | 39 |
| Table 6. Participation in Physical Activity.....     | 40 |
| Table 7. Level of Stress and Coping with Stress..... | 41 |



## **CHAPTER I INTRODUCTION**

This report describes the evaluation of a workplace wellness program implemented by EXCELth Incorporated staff. EXCELth is a private, non-profit organization founded in 1991 whose mission is *“To provide excellence in community-based health care that increases access, reduces health disparities, and improves health outcomes”*. EXCELth is funded as a federally qualified health center (FQHC) by the U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Primary Health Care. From this funding, EXCELth provides primary medical care, behavioral health, social and dental services to uninsured and under-insured populations in Orleans, Jefferson, and East Baton Rouge parishes (counties) (EXCELth, 2011).

### **PROGRAM DESCRIPTION**

In February 2010, EXCELth celebrated “Wear Red Day” with a healthy heart workplace wellness activity. During the event, staff members made healthy action pledges and stated their intentions for achieving the healthy action in 2010. The pledges centered around six healthy lifestyles areas: physical activity, emotional health, diet and nutrition, weight control, physical health, and spiritual health. In follow-up, several staff members formed a committee to develop the workplace wellness program specifically tailored to assist their colleagues in achieving their personal healthy action goals for the year (Committee, 2010).

In March 2010, EXCELth kicked off the start of its workplace wellness program. The purpose of this program was to support and encourage staff members to keep their healthy action pledges during 2010. The goal of the program was to create a workplace culture of health and

well-being for EXCELth employees that enhances and optimizes opportunity for achieving personal healthy action pledges (Committee, 2010).

The program consisted of the following components:

- Focus on Healthy Actions – One of the six healthy action areas were to be focused for an entire week. This component included reinforcement, educational materials, and other resources.
- Group Sessions – On the 7<sup>th</sup> week, staff gathered for a group session to share their experiences and discuss successes and removing any barriers.
- Tracking and Monitoring – Progress toward goals were to be tracked and reported during the group sessions to encourage personal accountability and celebrate successes.

### **PUBLIC HEALTH PROBLEM**

According to the Centers for Disease Control and Prevention (CDC), chronic diseases—such as heart disease, stroke, cancer, diabetes, and arthritis are among the most common, costly, and preventable of all health problems in the United States. More than 90 million Americans live with chronic diseases, which account for three fourths of the nation's \$1.4 trillion in medical care costs and one third of the years of potential life lost before age 65 (Jack, et al., 2006). Chronic diseases are the leading cause of death and disability in the U.S (Healey & Zimmerman, 2010). Seven out of 10 deaths among Americans each year are from chronic diseases (Healey & Zimmerman, 2010; Jack, et al., 2006). Heart disease, cancer and stroke account for more than 50% of all deaths each year (Kung, Hoyert, Xu, & Murphy, 2008). Approximately one-fourth of

people with chronic conditions have one or more daily activity limitations (Centers for Disease Control and Prevention, 2009b).

Currently, more than 83 million U.S. adults live with cardiovascular disease. In the U.S., heart disease and stroke are among the leading causes of disability with about 4 million people reporting disability from these causes (Centers for Disease Control and Prevention, 2011c). About 68 million adults have high blood pressure, and roughly half do not have the condition under control (Centers for Disease Control and Prevention, 2011h). An estimated 71 million of adults in the U.S. have high cholesterol and around 2 of 3 do not have the condition under control (Centers for Disease Control and Prevention, 2011g). In 2010, the economic burden of cardiovascular disease in the U.S. was \$108.9 billion for coronary heart disease, \$93.5 billion for hypertensive disease, \$53.9 billion for stroke and \$34.3 billion for heart failure (Heidenreich, 2011).

Cancer is the second leading cause of death in the United States, exceeded only by heart disease (Centers for Disease Control and Prevention, 2011a). In 2007, more than 562,000 people died of cancer, and more than 1.45 million people had a diagnosis of cancer (Centers for Disease Control and Prevention, 2011a). The cost of cancer extends beyond the number of lives lost and new diagnoses each year (Centers for Disease Control and Prevention, 2011a). Cancer survivors, as well as their family members, friends, and caregivers, may face physical, emotional, social, and spiritual challenges as a result of their cancer diagnosis and treatment (Centers for Disease Control and Prevention, 2011a). The financial costs of cancer also are overwhelming. According to the National Institutes of Health, cancer cost the United States an estimated \$263.8 billion in medical costs and lost productivity in 2010 (Centers for Disease Control and Prevention, 2011a).

More than 8% of the U.S. population has diabetes and of these, 7 million have undiagnosed diabetes (Centers for Disease Control and Prevention, 2011b). In 2010, 1.9 million new cases were diagnosed in people age 20 years and older (Centers for Disease Control and Prevention, 2011b). Among adults aged 20-74, diabetes continues to be the leading cause of kidney failure, non-traumatic amputations, and blindness (Centers for Disease Control and Prevention, 2011b). In 2007, the total direct cost of diabetes was \$174 million and direct medical costs were \$116 billion (Centers for Disease Control and Prevention, 2011b).

In the U.S, obesity has become a major health concern, 33.8% of adults are obese and 34.2% are overweight (Centers for Disease Control and Prevention, 2010). During the past decades, obesity rates for all population groups, regardless of age, sex, race, ethnicity, socioeconomic status, education level or geographic region, have increased noticeably (Centers for Disease Control and Prevention, 2011e). Obesity increases the risk of the following health conditions: coronary heart disease, type II diabetes, high total cholesterol, liver and gallbladder disease, sleep apnea and respiratory disease, certain cancers, and mental health conditions (Centers for Disease Control and Prevention, 2011e). In 2008, overall medical costs related to obesity for U.S. adults were estimated to be as high as \$147 billion (Centers for Disease Control and Prevention, 2011e). Also, obesity has been linked with reduced worker productivity and chronic absence from work (Centers for Disease Control and Prevention, 2011e).

Arthritis is the most common cause of disability, with about 19 million Americans reporting activity limitations (Centers for Disease Control and Prevention, 2009a). Nearly two-thirds of people with arthritis are younger than age 65 years (Centers for Disease Control and Prevention, 2009a). Arthritis is more common among women (24.3%) than men (18.7%) in every age group, and it affects members of all racial and ethnic groups (Centers for Disease

Control and Prevention, 2009a). Arthritis also is more common among adults who are obese than among those who are normal weight or underweight (Centers for Disease Control and Prevention, 2009a).

In the United States, tobacco use is the single most preventable cause of disease, disability and death (Danaei, et al., 2009). Annually, an estimated 443,000 people die prematurely from smoking or exposure to secondhand smoke, and another 8.6 million live with a serious illness caused by smoking (Centers for Disease Control and Prevention, 2011f). Coupled with this enormous health toll is the significant economic burden of tobacco use—more than \$96 billion a year in medical costs and another \$97 billion a year from lost productivity (Centers for Disease Control and Prevention, 2011f).

According to the 2009 Behavioral Risk Factor Surveillance System, 67.5% of U.S. adults aged 18 years or older do not eat fruit at least 2 times a day, and 73.7% do not eat vegetables at least 3 times a day (Centers for Disease Control and Prevention, 2011d). The 2008 National Health Interview Survey found that 36.2% of adults report no leisure-time physical activity and 81.8% do not meet current federal guidelines for physical activity and muscle strengthening (Centers for Disease Control and Prevention, 2011d). Results from the 2009 Youth Risk Behavior Surveillance System found that 81.6% of adolescents do not meet current guidelines for aerobic physical activity (Centers for Disease Control and Prevention, 2011d). Physical inactivity is estimated to cost the United States about \$75 billion in medical costs each year (Centers for Disease Control and Prevention, 2011d). Some Americans, including those with disabilities, experience more barriers in their pursuit of healthy lifestyles than others (Centers for Disease Control and Prevention, 2011d). For example, the quality and accessibility of a community's food and physical activity environment affects the health of its residents. People

who live in neighborhoods in which more residents have low incomes or are members of racial or ethnic minority groups often have poor access to healthy foods and few places for safe physical activity (Centers for Disease Control and Prevention, 2011d). Such conditions contribute to significant health disparities related to obesity (Centers for Disease Control and Prevention, 2011d).

As the ever increasing burden of chronic diseases in the United States continues, greater efforts are being made to indentify and implement interventions that successfully reduce disease risk, especially in the workplace (Jack, et al., 2006). Workplace health and wellness programs are about early identification of chronic disease and lifestyle related (preventable) risks. They also encompass manageable population-wide intervention strategies deployed to mitigate these risks (weight management, smoking cessation, alcohol awareness, exercise prescription/adherence, stress management etc.).

Workplace wellness is an organized program to assist and support employees in establishing healthier lifestyles. This can include increasing employee awareness on health topics, scheduling behavior change programs, and/or establishing company policies that support health-related objectives. Programs and policies that promote increased physical activity, tobacco use prevention and cessation, and healthy food selections are a few examples.

Wellness programs may range from handing out pamphlets about managing stress to a well-developed educational program that also provides an excellent fitness center. In addition to the variety of wellness applications, wellness outcomes are difficult to track. Programs are voluntary and participation often is sporadic, making longitudinal analysis difficult to establish, and typically the “most fit” employees comprise the majority of participants.

Wellness is more than physical fitness and can be conceptualized as consisting of the

following dimensions: intellectual, emotional, physical, social, environmental, and spiritual. This interdependent model, developed by Dr. Bill Hettler of National Wellness Institute, is commonly referred to as the 6 Dimensions of Wellness. A comprehensive workplace wellness program addresses most, if not all of the dimensions of wellness which include emotional, social, spiritual, physical, environmental and intellectual health (see Figure 1.)

**Figure 1 – Dimensions of Wellness**



Lifestyle change is facilitated through a combination of efforts to enhance awareness, change behavior and create environments that support good health practices. These dimensions are often depicted as a "life wheel" with examples of health components that include fitness, nutrition, purpose in life, financial planning, social connections & support systems, stress management, mind-body health, career planning and continued learning. The key for individual health is keeping the "life wheel" in balance. Of the three, supportive environments probably have the greatest impact in producing lasting change (O'Donnell, 1989).

Because employees spend a significant portion of their waking hours on the job, employers are in a position to positively influence lifestyles. People often know what they should

do; skills, motivation, and opportunity are the missing elements that keep them from making permanent, healthy changes (O'Donnell, 2005). Worksite programs provide the supportive environment and structure people need to maintain healthy behaviors.

Emerging research renews the value of prevention — that it makes good business sense to help people stay healthy. For instance, some of the measures identified by the U.S. Preventive Services Task Force, such as counseling adults to quit smoking, screening for colorectal cancer, and providing influenza vaccination, reduce mortality either at low cost or at a cost savings (Maciosek, et al., 2006). Also, a multi-year CDC-funded case study of an employer's integrated population health and enhancement initiative demonstrated significant reduction in the burden of health risk and illness (Loeppke, et al., 2008). Now, human resources professionals, medical directors, and health promotion practitioners are armed with evidence. A wealth of cost-effective worksite interventions — from education materials to team competitions — can support efforts to keep healthy people healthy.

The workplace presents an ideal setting for introducing and maintaining health promotion programs for the following reasons:

- Workplace programs can reach large segments of the population that normally would not be exposed to and engaged in organized health improvement efforts;
- Workplaces contain a concentrated group of people who usually live in relative proximity to one another and share a common purpose and common culture;
- Communication with workers is relatively straightforward;
- Social and organizational supports are available when employees are attempting to change unhealthy behaviors;



- Certain policies, procedures and practices can be introduced into the workplace and organizational norms can be established to promote certain behaviors and discourage others; and
- Financial or other types of incentives can be offered to gain participation in programs.

Employers also tend to have long-term relationships with their employees; as a result, the duration of interventions can be longer, making it more probable that employees will attain benefits. Also, workplace health promotion can be combined with existing efforts such as those related to health surveillance, workplace health and safety, and regulatory compliance.

### **PROGRAM THEORY AND DESCRIPTION**

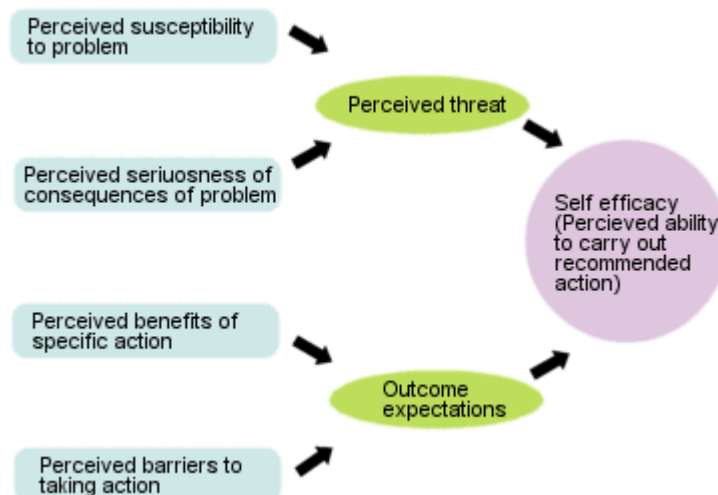
To be most effective health promotion programs should rely on sound theoretical perspectives related to health education and health promotion (Lindsay, 2000). Sound theory leads to good ideas and provides guidance of what works and what does not work. It also prevents wasted time and money. Most health behavior and health promotion theories are adapted from the social and behavioral sciences (Glanz & National Cancer Institute (U.S.), 2005). Health behavior and health promotion theories draw upon various disciplines, such as psychology, sociology, anthropology, consumer behavior, and marketing (Glanz & National Cancer Institute (U.S.), 2005; McLeroy, Bibeau, Steckler, & Glanz, 1988). No single theory dominates health education and promotion because the problems, behaviors, populations, cultures, and contexts of public health practice are broad and varied (Glanz & National Cancer Institute (U.S.), 2005; Lindsay, 2000). Some relevant theories related to health promotion, which help ensure effective programs include: the Health Belief Model, Social Learning Theory, Social

Marketing, Decision Theory, Stages of Change Model, and Diffusion Theory (Glanz & National Cancer Institute (U.S.), 2005; Lindsay, 2000; McLeroy, et al., 1988).

An ecological perspective shows the advantages of multilevel interventions that combine behavioral and environmental components (Glanz & National Cancer Institute (U.S.), 2005; McLeroy, et al., 1988). At the individual level, which is the most basic one in health promotion practice, planners must be able to explain and influence the behavior of individuals. Many health practitioners spend most of their work time in one-on-one activities such as counseling or patient education, and individuals are often the primary target audience for health education materials. In addition to exploring behavior, individual-level theories focus on intrapersonal factors (those existing or occurring within the individual self or mind). Intrapersonal factors include knowledge, attitudes, beliefs, motivation, self-concept, developmental history, past experience, and skills. Several theories are applicable at the individual level. For this report, the Health Belief Model and the Stages of Change Model are discussed.

The Health Belief Model (HBM) is a psychological model and was developed in the 1950s as part of an effort by social psychologists in the United States Public Health Service to explain the lack of public participation in health screening and prevention programs (e.g., a free and conveniently located tuberculosis screening project) (Glanz & National Cancer Institute (U.S.), 2005; Lindsay, 2000). Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors. The HBM addresses the individual's perceptions of threat posed by a health problem, the benefits of avoiding the threat and factors influencing the decision to act such as, barriers, cues to action, and self-efficacy (Glanz & National Cancer Institute (U.S.), 2005). The key variables of the HBM are illustrated below in Figure 2.

**Figure 2 - Health Belief Model**



Source: Rosenstock I., Strecher, V., and Becker, M. (1994). The Health Belief Model and HIV risk behavior change. In R.J. DiClemente and J.L. Peterson (Eds.), *Preventing AIDS: Theories and methods of behavioral interventions* (pp. 5-24). New York: Plenum Press

HBM research has been used to explore a variety of health behaviors in diverse populations such as, influenza vaccination, high blood pressure screening, smoking cessation, exercise, nutrition, breast self-examination and sexual risk behaviors.

The Stages of Change Model, developed by Prochaska and DiClemente, evolved out of studies comparing the experiences of smokers receiving professional treatment (Glanz & National Cancer Institute (U.S.), 2005; Lindsay, 2000). The model's basic principle is that behavior change is a process, not an event. As a person tries to change a behavior, he or she moves through five stages: pre-contemplation, contemplation, preparation, action, and maintenance (see Figure 3).

**Figure 3 - The Stages of Change Model**



“Whether individuals use self-management methods or take part in professional program, they go through the same stages of change (Glanz & National Cancer Institute (U.S.), 2005).”

The Stages of Change Model describes individual’s motivation and readiness to change a behavior and has been applied to both individual behaviors, as well as to organizational change (Glanz & National Cancer Institute (U.S.), 2005). In this model, individuals do not systematically advance from one stage to the next, ultimately graduating from the behavior change process. Instead, they may enter the change process at any stage, relapse to an earlier stage, and begin the process once more (Glanz & National Cancer Institute (U.S.), 2005).

“At the interpersonal level, theories of health behavior assume individuals exist within, and are influenced by, a social environment. The opinions, thoughts, behavior, advice, and support of the people surrounding an individual has a reciprocal effect on those people (Glanz & National Cancer Institute (U.S.), 2005).” The social environment consists of family members, friends, coworkers, health professionals and others. Because the social environment affects behavior, the social environment also impacts health. Many theories focus at the interpersonal level. Social Cognitive Theory (SCT) is one of the most frequently used and robust health behavior theories. SCT describes an ongoing process in which personal factor, environmental

factors, and human behavior exert influence upon each other. Three main factors affect the likelihood that a person will change a health behavior: self-efficacy, goals and outcome expectancies. SCT integrates concepts and processes from cognitive, behaviorist, and emotional models of behavior change hence it includes the following constructs (Glanz & National Cancer Institute (U.S.), 2005):

- **Reciprocal determinism** – interactions between behavior, personal factors, and environment where each influences the others.
- **Behavioral capability** – to perform a behavior, a person must know what to do and how to do it.
- **Expectations** – results an individual anticipates from taking action.
- **Self-efficacy** – confidence in one's ability to take action and overcome barriers.
- **Observational learning** – process whereby people learn through the experiences of others.
- **Reinforcements** – responses to behavior that affect whether or not one will repeat it.

### EVALUATION PURPOSE

Evaluation of health promotion interventions is essential in order to collect evidence about the efficacy of a program, identify ways to improve practice, justify the use of resources, and identify unexpected outcomes. Public health and health promotion are broadly-defined activities that are evaluated using a wide variety of approaches and designs. No single method can be used to answer all relevant questions about all public health and health promotion problems and interventions.

The purpose of this evaluation is to assess how well EXCELth's Workplace Wellness Program has been implemented and the effectiveness of program activities. The evaluation is being undertaken to determine ways to improve the program: finding out what works and what doesn't work; assessing needs of target population; □ improving the usefulness of program materials; and identify ways of improving the program, such as ensuring that all activities are relevant and appropriate to the health needs of EXCELth's employees, and removing potential barriers to participation. In addition, this evaluation seeks to identify other positive outcomes being accomplished, even if they are different than what is expected, if activities are being conducted as planned and the strengths (or weaknesses) of the program. Another key indicator of the program's success is the level of employee participation. Has the program been successful in attracting and keeping participants? This can be measured by tracking the number of employees who set a healthy goal (s), attend health education classes, attend the health fairs, seek out counseling, participate in the health screenings or exercise classes, etc. Some of the methods that can be used to track participation data include sign-in or attendance sheets and self-reporting participation logs.

Another measure of program effectiveness is the participants' satisfaction with the program content, the instructors, the materials, the facilities, etc. Employees' satisfaction with the program can have a major impact upon their perception of the quality of the program. It can also play a key role in the employees' decision to continue participating in the program.

Administering employee satisfaction surveys can provide information on what elements of the program the employees like and dislike and can identify areas where you may need to fine tune or modify the program. Using an evaluation form which participants can complete after

attending a brown bag seminar or health education class is another way of eliciting information regarding their satisfaction.

### **EVALUATION STAKEHOLDERS AND USERS**

For this evaluation, the primary stakeholders of this evaluation are EXCELth's wellness committee (i.e. practitioners and program managers) and leadership. Practitioners are responsible for the operation and running of health promotion programs and services. They find evaluations most useful when they engage in the implementation process and provide feedback from people and others involved. Evaluations which play a developmental or formative role, identifying areas for change or improvement, are particularly valued.

Program managers are budget holders responsible for the delivery of health promotion program need evaluations which provide feedback on the success of a range of different programs and initiatives and the extent to which they contribute to the achievement of strategies. Success is probably assessed in terms of achieving defined objectives, reaching the targeted population and the extent to which the program is sustainable.

Other stakeholders include staff, persons interested in developing workplace wellness programs and community based organizations. The population likely to benefit from the services or program (e.g. clients, users, and the community) is concerned with the quality of service delivered, the extent to which services are relevant to their perceived needs, and the extent to which its operation is participatory or consultative. This group is most likely to value evaluations which provide an avenue for feedback and involvement, address quality issues and assess user concerns and satisfaction. Whether an initiative delivers tangible benefits to the population is a

form of effectiveness evaluation that is likely to be valued by local people, whether or not they form part of the target population.

The wellness committee is the primary users of the evaluation findings. In addition, service providers, staff and program developers and leadership are potential users of these findings.

### **EVALUATION QUESTIONS**

The evaluation of program effectiveness focuses on how well the program is being marketed and implemented and the reactions of participating employees to the various program components. Factors that can be reviewed to determine whether the program is being properly administered are reach, awareness, satisfaction, knowledge gained and improved health habits or conditions. The primary questions the evaluation seeks to address and the associated indicators are displayed in Table 1.



| <b>TABLE 1</b>                                                                                                                                                                          |                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Workplace Wellness Program Evaluation Questions and Indicators</b>                                                                                                                   |                                                                                                                                                                                                                          |
| <b>Evaluation Questions</b>                                                                                                                                                             | <b>Indicators</b>                                                                                                                                                                                                        |
| 1. Did the program reach those employees at greatest need (i.e., those setting a personal goal, having a chronic condition, a behavior or situation in need of modification or change)? | <ul style="list-style-type: none"> <li>• Number/proportion participating in core area activities</li> <li>• Frequency of delivery of activities</li> <li>• Mode of delivery</li> <li>• Participation tracking</li> </ul> |
| 2. Was there a high level of awareness of the program?                                                                                                                                  | <ul style="list-style-type: none"> <li>• Mode of advertisement</li> <li>• Number/proportion of participants aware of program</li> <li>• Number/proportion of respondents employed by organization in 2010</li> </ul>     |
| 3. Were employees satisfied with the program?                                                                                                                                           | <ul style="list-style-type: none"> <li>• Number/proportion satisfied with program</li> </ul>                                                                                                                             |
| 4. Did the program help to improve the health habits and/or conditions of employees?                                                                                                    | <ul style="list-style-type: none"> <li>• Number/proportion making personal life changes</li> <li>• Barriers to making changes</li> <li>• Number/proportion achieving at least one personal health goal</li> </ul>        |
| 5. Did the program help to improve the knowledge of employees?                                                                                                                          | <ul style="list-style-type: none"> <li>• Knowledge gained</li> </ul>                                                                                                                                                     |
| 6. Was the program activities delivered as planned?                                                                                                                                     | <ul style="list-style-type: none"> <li>• Frequency of delivery of activities</li> <li>• Mode of delivery</li> <li>• Activities delivered</li> <li>• Program materials distributed</li> </ul>                             |

## LOGIC MODEL

After the conduct of a stakeholders' meeting, a logic model of EXCELth's Workplace Wellness Program is created to describe the program and guide the evaluation (See Appendix A). The model depicts the program's inputs/resources, activities, outputs, and short-term, intermediate and long-term outcomes.

Inputs include those things that are invested in a program and provide an opportunity to communicate the quality of the program. The major inputs considered necessary to implement EXCELth's program to support and deliver activities include management support, the wellness committee, wellness program participants, monetary resources, marketing, and program materials.

Activities consist of the actions needed to implement the program and what a program does with its inputs to achieve program outcomes and goals. Wellness activities include committee meetings, distribution and development of program materials, and delivery of services intended to lead to the desired change.

Program outputs are the direct results of activities and processes and are those things that are done and the people reached. The workplace wellness program outputs consist of the following: number of committee meetings held and number of attendees; number of components/topics/services offered, number of program material distributed and number of participants; percent of employees making healthy action pledges; number of health screenings performed; and percent of employees participating in program. These outputs help assess how well the program is being implemented.

Short-term outcomes focus on expected changes in participant's knowledge, awareness, attitudes, motivation or skills. The workplace wellness program expects to increase participant's

awareness of physical activity, spiritual wellness and healthy behaviors; increase participant's knowledge of healthy eating practices and emotional health and increase the number of employees participating in wellness activities and events.

Intermediate outcomes focus on expected changes in participant's behavior, practice or decisions based upon earlier acquisition of knowledge. As a result of awareness and knowledge gained, the program expects participants to increase levels of physical activity, consumption of healthy foods, and spirituality and decrease stress levels and consumption of energy and calorie dense foods and drinks.

Long-term outcomes focus on changes in condition or altered status based on earlier modifications in behavior. As a result of changes in behavior, the program expects improved health status and quality of life; achievement of healthy body weight and stress levels; and reduction in the prevalence and incidence of chronic disease or condition.

## CHAPTER II LITERATURE REVIEW

Keeping healthy people healthy is the cornerstone of a population health strategy (Systems, 2007). Population health management seeks to improve the health of a defined group by segmenting members into health-related subsets and targeting interventions to meet the needs of each.

Workplace health promotion programs are employer-sponsored initiatives directed at improving the health and well-being of workers (Goetzel & Ozminkowski, 2008). Comprehensive worksite health programs (WHP) commonly include health-related educational services (e.g., nutrition education); individual health risk identification (e.g., confidential health risk assessments; health risk reduction services (e.g., health counseling and support groups); preventive health services (e.g., immunizations); treatment health services (e.g., care at worksite medical clinic); and health-related regulation (e.g., worksite nonsmoking policy). Some WHP services like flu shots are simpler to implement and quicker to pay off than others like weight-management programs that require sustained behavioral change (Berry & Mirabito, 2011).

The workplace provides a setting in which a large number of adults can be reached by efforts to encourage healthy behaviors. In addition to providing access to a large number of people, workplaces provide several further advantages as settings for health promotion interventions. First, the workplace has potential for higher participation rates than non-workplace environments, especially when the program is during paid working hours (Cahill, Moher, & Lancaster, 2008). Second, the programs are usually provided on-site so employees are not required to travel, which can also improve participation rates (Cahill, et al., 2008). Third, there is likely a low level of attrition as the working population is relatively stable (Harden, Peersman,

Oliver, Mauthner, & Oakley, 1999). Lastly, there are already established channels of communication, which can make it easier to promote and implement programs (Harden, et al., 1999).

Using the workplace as a setting for health promotion interventions is also advantageous for employers. There is evidence that workplace health promotion is associated with higher employee morale and job satisfaction, reductions in employee absenteeism, increased employee health, increased productivity, and improved organizational effectiveness (Goetzel & Ozminkowski, 2008). These factors should provide a rationale for employers to invest in workplace health promotion.

### **Health Promotion Interventions in the Workplace**

Workplace health promotion interventions mainly focus on physical activity, healthy eating, or a combination of health behaviors such as physical activity, stress management, healthy eating, tobacco cessation and cancer screening. The Task Force of Community Preventive Services recommended interventions that include both physical activity and healthy eating strategies to control overweight and obesity in a workplace setting (Katz, et al., 2005).

Most researchers agreed that the most effective health promotion interventions are those with a multifaceted approach (Harden, et al., 1999; Sahay, Ashbury, Roberts, & Rootman, 2006; Wetter, et al., 2001). It was clear that in order to achieve improvements in health behaviors such as physical activity and healthy eating among employees, multi-level interventions were needed that target social and physical determinants of health at the individual, organizational, and environmental levels (Wetter, et al., 2001). A review by Peersman, Harden, and Oliver (1998), classified workplace health promotion interventions into three categories: awareness programs,

lifestyle change programs, and supportive environment programs, with interventions involving a combination of all three categories having the most effective results.

Lifestyle change and awareness programs were individual-level interventions (Harden, et al., 1999). Awareness programs referred to interventions that attempt to increase knowledge about a specific health topic in order to change employees' health behaviors. This was done using health literature, health screenings, and educational classes. Lifestyle change programs referred to interventions that use strategies such as self-help or worksite counseling aimed directly at changing employees' health behaviors. Supportive environment programs referred to interventions aimed at reducing barriers or increasing opportunities for healthy choices within the workplace. This was done using environmental modifications such as providing more healthy options, making healthy choices more accessible and changing policies to support healthy choices (Harden, et al., 1999).

Previous reviews on physical activity interventions in a workplace setting have reported mixed results. One review concluded that workplace physical activity interventions had only a small, non-significant effect on physical activity (Dishman, Oldenburg, O'Neal, & Shephard, 1998). A meta-analysis of workplace physical activity interventions reported similar findings (Conn, Hafdahl, Cooper, Brown, & Lusk, 2009). The majority of studies included in these reviews were based on individual-level physical activity interventions, although some studies had an environmental-level component as well.

Dishman and colleagues (1998) recommended that future studies on physical activity interventions be based on theories of behavior change, describe interventions by specifying the presumed mechanisms for behavior change and the outcome measures used in evaluating their effectiveness, use an equivalent comparison group matched with the intervention group on

relevant characteristics when randomization is not possible, use validated measures of physical activity, and assess follow-up measures of physical activity after the intervention is completed in order to overcome the shortcomings of previous studies.

The results from studies designed to increase adult fruit and vegetable intake were more promising than those for physical activity. For example, a review of 11 workplace interventions found an increase of between 0.13 and 0.7 servings of fruit and vegetables per day. Most of the interventions included individual- and environmental-level components (Pomerleau, Lock, Knai, & McKee, 2005). A disadvantage of these studies was that they did not determine the contribution of each component separately. Some researchers suggested that the effectiveness of individual- and environmental-level components should first be examined separately and then be combined to see if there is an added value of a comprehensive approach and to determine if one component is more effective at changing behavior than another (Matson-Koffman, Brownstein, Neiner, & Greaney, 2005; Muller-Riemenschneider, Reinhold, Nocon, & Willich, 2008).

Historically, the typical worksite health promotion program overlooked mental health needs. Fortunately this has changed. A 1992 survey indicated that 81% of all worksites with 50 or more employees have health promotion activities. The most frequently offered activities were injury prevention, exercise, smoking cessation, stress management, and alcohol and drug rehabilitation. In 1992, 25% of worksites offered programs on mental health, compared with 15% in 1985 (Vaccaro, 1994). Employers are investing more and more in programs to educate employees and their families about mental health problems. Taking into account U.S. regional differences, today, approximately 40% to 60% of worksites with 50 or more employees offer some type of mental health program. This is particularly true if stress management programs are considered part of a company's mental health program.

Job stress is attributed to a wide range of physical and mental ill health, and is caused by a number of factors such as increased workload, job insecurity, multi-skilling and rotating shift work. It is usually linked to corporate culture and the work climate, with corporate change programs and individual stress management training used as the major interventions

From the literature, spiritual wellness was an element of emerging interest in health education and in counseling, but relative to intellectual, emotional, physical, social and occupational, it continued to lack clarity in definition and application.

### **Why Evaluate Workplace Health Promotion Programs?**

Evaluations are an important component of health promotion interventions. The literature identified a number of reasons for conducting program evaluations. First, program evaluations helped health promotion practitioners judge the success and impact of a program by determining if the program had reached its objectives (Nutbeam, 1998). Evaluation provided information to help improve the program; information on whether goals were being met; and on how different aspects of a program worked and was essential to a continuous improvement process. In addition, and equally important, evaluation frequently provided new insights or new information that was not anticipated. What are frequently called “unanticipated consequences” of a program are among the most useful outcomes of the assessment enterprise (Frechtlin, 2002). The results of evaluations are used by managers or other public health professionals to support decision-making about how to allocate resources and improve programs (Nutbeam, 1998). Evaluation provided information for communicating to a variety of stakeholders. It allowed projects to better tell their story and prove their worth. It also gave managers the data they need to report “up the line,” to inform senior decision makers about the outcomes of their investments, demonstrate the



value of the program and the contribution that it's making to the organization as a whole (Frechtlin, 2002; Hunnicutt, 2007). Evaluations were used to inform policy and show funders and community representatives if the intervention is worth sustained investment (Glasgow, Vogt, & Boles, 1999). Lastly, researchers were use evaluations as a tool to obtain evidence needed to improve knowledge and understanding of health behavior change (Baranowski, Cerin, & Baranowski, 2009).

### **Employer Participation in Workplace Health Promotion Programs**

There has generally been a lack of information in the literature on the participation of workplaces in health promotion programs. Bull and colleagues (2003) reviewed 24 studies, with only six studies (25%) including information on the proportion of workplaces participating and no studies including information on the representativeness of participating workplaces among those eligible.

Low participation rates among workplaces appeared to be common in studies that have included this information. Reviews reported participation rates ranging from 9% to 55% among eligible workplaces (Bull, Gillette, Glasgow, & Estabrooks, 2003; Glasgow, McCaul, & Fisher, 1993; Kwak, Kremers, van Baak, & Brug, 2006). One study discussed the challenge of recruiting workplaces to participate in interventions when there was a randomized study design and suggested that workplace health promotion evaluations use a quasi-experimental study design (Kwak, et al., 2007). Researchers stated that the main problem with low adoption among workplace health promotion programs is that it reduces the number of employees who have access to the programs (Linnan, Sorensen, Colditz, Klar, & Emmons, 2001).

Although studies reported characteristics of workplaces that participated in health promotion programs, generally no information was given on workplaces that did not participate in the programs (Bull, et al., 2003). Therefore, there was no way to tell if the workplaces that participated were representative of all workplaces contacted.

Of workplaces that did participate in health promotion programs, larger workplaces were found to implement a greater number of health promotion programs than smaller workplaces (Fielding & Piserchia, 1989). Possible explanations for this finding was larger workplaces were more likely to have personnel, benefits and health staff dedicated to implementing health promotion activities (Fielding & Piserchia, 1989). Other studies provided evidence that workplaces that are smaller in size, defined as fewer than 50 employees, and workplaces that support types of industry such as agriculture, mining, construction, and retail were not as likely to offer health promotion programs to their employees (Linnan, et al., 2001). The most common types of workplaces reported to participate in workplace health promotion programs were education or health services, government, and manufacturing (Conn, et al., 2009). The most cited reason for workplaces not choosing to participate in workplace health promotion interventions were lack of time and resources (Kwak, et al., 2006).

Most studies of worksite health promotion examined health promotion in large businesses. However, most American workers are employed by small businesses (those with 2 to 500 employees). Several factors hindered health promotion programming at small to midsized businesses. One challenge was the additional cost in money and time required for such programming, making it a low priority for smaller businesses focused on survival, operating efficiency, and growth (Hughes, Patrick, Hannon, Harris, & Ghosh). Small to midsized companies often lacked a formal department or staff personnel dedicated to employee health.

Another challenge was that those companies may not offer health insurance or employee benefits, which are often the source for preventative health care programs. Lastly, many businesses of this size already felt over-burdened by occupational safety and health regulations and resisted adopting additional health-related programs not mandated by law (Linnan & Birken, 2006).

### **Employee Participation in Workplace Health Promotion Programs**

There has also been little reporting of employee participation rates and the characteristics of employees participating in workplace health promotion programs. In response to this problem, some researchers requested information on the characteristics of participating and non-participating employees and detailed information on recruitment to be reported (Benedict & Arterburn, 2008). Furthermore, Bull and colleagues (2003) recommended that at the employee-level, studies should include information on the percentage of eligible employees who were included and excluded from the study, and how representative the participating employees were of the entire workforce.

Employee participation rates varied widely in studies that have reported them. For instance, in a recent systematic review, participation levels ranged from 10% to 64% (Robroek, van Lenthe, van Empelen, & Burdorf, 2009). This included participation in educational or counseling programs as well as other multi-component programs. Furthermore, in a review of twenty-four workplace health promotion programs, participation rates among employees were found to range from 8% to 97%. There was some evidence that smaller workplaces had higher rates of employee participation (Glasgow, et al., 1993). In addition, high rates of participation were found when incentives were given and when programs focused on multiple behaviors and components (Robroek, et al., 2009).

Most studies discussed participant characteristics and inclusion criteria. A review of studies showed that employees who participated were more likely to be female (except for fitness programs, in which men had slightly higher participation), older, white-collar workers, and the healthiest in the workplace (Glasgow, Lichtenstein, & Marcus, 2003). For instance, an evaluation of a worksite chronic disease prevention program determined that approximately 86% of participants were female with the largest group having at least a college degree (>40%) (Aldana, Merrill, Price, Hardy, & Hager, 2005). Another review determined that female employees had higher participation rates than males, but there was inconsistent evidence for other demographic and health- and work-related characteristics (Robroek, et al., 2009). Most studies lacked information on characteristics of employees who did not participate in workplace health promotion programs. Therefore, it was difficult to determine whether an intervention can be generalized to other populations of employees.

## **CHAPTER III METHODOLOGY**

### **POPULATION AND SAMPLE**

The population of focus consisted of all paid employees of EXCELth with a company email address. The fifty plus employees were comprised of physicians, nurses, social workers, behavioral health clinicians, medical support, front and back office clinic staff and administrative staff.

Since the survey was developed to gather retrospective information on program participation, satisfaction, behaviors changed and current information on health issues and needs, the sample included all full-time (i.e., 32 hours or more per week), paid employees of EXCELth with a company email address. This consisted of 51 of a total of 59 employees. The principal investigator was excluded from participation. In addition, several Wellness committee members, staff of EXCELth, delivering activities were interviewed.

### **EVALUATION DESIGN**

A mixed methods approach was utilized to assess the program from a variety of perspectives. This is an approach that combines techniques traditionally labeled “quantitative” with those traditionally labeled “qualitative” to develop a full picture of why a program may or may not be having hoped-for results and to document outcomes (Frechtling, Sharp, & Foundation., 1997). The use of both quantitative and qualitative assists in providing a more complete understanding of the program than either approach alone. Also, combining methods provide a way to validate findings. In other words, mixed methods provide for cross-checks and increased validity. It may also lead to the modification or expansion of the evaluation design and/or the data collection methods.

## DATA COLLECTION

An online survey through Survey Monkey was utilized to capture data on program participation, and current health issues and needs. Online survey was the chosen method of data collection due to widespread computer and email accessibility in the workplace. In addition, the method required minimal time and cost to the study respondents. The self-administered survey guided the respondent through the online questionnaire. The estimated time to complete the survey was 20 minutes.

At the end of the survey, respondents wanting to enter the incentive drawing had the opportunity to click on a hyperlink that directed them to a second Survey Monkey survey. This survey contained one question asking for the respondent to input an e-mail address of choice. The e-mail addresses were not linked to the respondents first survey's data. At the end of data collection, all e-mail addresses were grouped and two addresses were randomly chosen to receive an incentive. The two respondents chosen were contacted via e-mail to receive instructions on a preferred method of delivery.

An incentive was offered in the form of an arbitrary drawing. Respondents had the option to be entered into a drawing to receive either a gift card of their choice in the amount of \$50 or an iPod shuffle. In total, a \$50 gift card and an iPod shuffle were available for the drawing. Entering the drawing was voluntary.

In addition, information was gathered from wellness committee members and/or staff delivering wellness activities through open-end interviews via phone or in person. The interview lasted no longer than 1 hour and was scheduled according to the interviewee's availability. In order to help them prepare and keep the interview to 1 hour, a copy of the questions was provided to the interviewee prior to the interview

## **DATA COLLECTION INSTRUMENTS**

Survey questions were adapted from the “Health at Work Needs Assessment Questionnaire” developed by the Haldimand-Norfolk Health Unit (Haldimand-Norfolk Health Unit, 2009/2010). The “Health at Work Needs Assessment Questionnaire” consisted of 55 questions covering the following areas: general health, nutrition, physical activity, smoking and alcohol and physical work environment. The Haldimand-Norfolk survey used a comprehensive approach to measure the workplace health, personal health and organizational needs of a workplace. Eighty to ninety percent of the Haldimand-Norfolk Health Unit questionnaire was adapted from the “Workplace Health Needs and Risk Inventory” from Health Canada, which has been independently tested for reliability and validity (The Health Communication Unit, 2006, 2008/2009). No information is available regarding specific users; however, Silico Global (the primary distributor) averages 15-20 client organizations a year.

In addition, input from stakeholders was used to construct the survey tool. The survey administered consisted of 52 questions with topics including demographics, program participation and interest, health issues and needs, physical activity, general health, work environment, and alcohol and smoking.

The open-end interview questionnaire consisted of 21 questions which inquired about the wellness program and wellness related activities. Interview questionnaire inquired about the who, what, when, why, how and how often.

## **DATA ANALYSIS**

In order to examine quantitative data, descriptive statistics were generated. Even though Survey Monkey provided summary statistics reports, EpiInfo was utilized to analyze qualitative

survey responses. Quantitative data included variables such as, gender, age educational level and department worked in. First, survey response data were re-coded. Then survey responses were aggregated and percentages calculated. These results were further compared against the results from Survey Monkey. This cross referencing of results was used to assure the accuracy of findings. Results were displayed in narrative, table, and graphic formats.

Qualitative data from the survey was captured in an Excel spreadsheet via Survey Monkey. Data recorded during wellness committee member interviews were entered into an Excel spreadsheet. Qualitative data included responses to the following types of questions: what activities did you deliver, how did you track participation, what changes you made, and what was the responsibility of the committee. The data were sorted and grouped by common them. Results were displayed in narrative, table, and graphic formats.

### **PRIVACYAND SECURITY**

On September 25, 2011, a study application was submitted to Emory's Internal Review Board (IRB). Since the study was an evaluation and deemed not research requiring IRB review, the application was withdrawn on October 7, 2011 (See Appendix C). The following protocol was followed to protect rights and confidentiality and privacy of survey respondents.

While completing the online survey, username and workstation name and/or location and IP addresses were concealed. Names or other personal identifiers were not obtained from administering the survey. However, EXCELth email was used to send out an invitation to participate containing a link to the survey. While the date of birth was not asked for, age was asked for. After data were collected and exported into Excel files, a unique, random identifier was assigned to each respondent's group of answers.



All data collected was stored on the Survey Monkey server and exported into an Excel data files for analysis. A unique random identifier was assigned to each respondent's group of answers. The data files were password-protected and housed on a password-protected computer. Only the principal investigator had access to the data.

Interview data was stored in a locked filed cabinet. Interviews were recorded in a password-protected Excel file and housed on a password-protected computer.

Lastly, SurveyMonkey have rigorous privacy and security measures in place to protect privacy and security of information. Privacy of information is addressed both at the survey creator level and the survey respondent level. On the security side, areas addressed are user security, physical security, availability, network security, storage security, software, organizational security and handling of security breaches. Detailed information on SurveyMonkey's privacy and security policies can be reviewed on its website.

### **LIMITATIONS AND DELIMITATIONS**

The study design presented several potential limitations and delimitations that could affect the results:

- Recall bias - Since a respondent's answers are affected by not just the correct answer but also by the respondent's memory, there is a possibility of under or over reporting facts.
- Low response rates – Because of low response rates, there is a risk of low accuracy of results.
- Lack of generalization – Evaluation findings are limited to EXCELth Incorporated.
- Self-reported changes – Respondents may have under or over reported changes.

- Staff turnover – Relevant information about wellness program design and deliver could have been lost. Program participants, who were no longer employed by the organization, responses are lost.
- The scope of this evaluation is EXCELth’s Workplace Wellness Program.
- This is a descriptive study reporting the results of EXCELth’s Workplace Wellness Program.

### **SUMMARY**

Specifically, this process evaluation was undertaken and devised for EXCELth Incorporated. Surveys were utilized to gather retrospective data on program activities and acquire information on employees’ current health status and needs and lifestyle and future wellness activity interest. In-depth interviews were conducted to garner information from wellness committee members (i.e., practitioners and program managers) about the program as a whole, as well as specific program activities. Mixed methods were utilized to assess the program from several perspectives.

## CHAPTER IV RESULTS

Of the 51 employees who were eligible to participate in the program, 16 (31%) responded to the survey. Of the respondents, 87% were female and 88% were college graduates. The ages of participants ranged from 30 to 63 years with a mean age of 47.1 years. Additional characteristics of survey respondents are shown in Table 2.

| <b>TABLE 2<br/>Demographic Characteristics of Survey Respondents</b> |          |          |
|----------------------------------------------------------------------|----------|----------|
| <b>Gender</b>                                                        | <b>%</b> | <b>n</b> |
| Male                                                                 | 12.5%    | 2        |
| Female                                                               | 87.5%    | 14       |
| <b>Age</b>                                                           | <b>%</b> | <b>n</b> |
| 30-39                                                                | 31.3%    | 5        |
| 40-49                                                                | 31.3%    | 5        |
| 50-59                                                                | 6.3%     | 1        |
| 60-69                                                                | 31.3%    | 5        |
| <b>Education</b>                                                     | <b>%</b> | <b>n</b> |
| Elementary school                                                    | 0.0%     | 0        |
| High school                                                          | 6.3%     | 1        |
| Community college                                                    | 18.8%    | 3        |
| University degree                                                    | 12.5%    | 2        |
| Graduate degree                                                      | 56.3%    | 9        |
| Other                                                                | 6.3%     | 1        |
| <b>Department Work</b>                                               | <b>%</b> | <b>n</b> |
| Administrative Services                                              | 31.3%    | 5        |
| Primary/Behavioral/Oral Health and Social Services                   | 43.8%    | 7        |
| Finance/Human Resources/Billing Services                             | 12.5%    | 2        |
| Other                                                                | 12.5%    | 2        |

Wellness Committee members interviewed included a case manager, social service coordinator, quality improvement field nurse and community relations/special projects coordinator. Members were recruited on a volunteer basis to develop and deliver program activities to program participants. Other members of the committee chose not to be interviewed or were no longer employees of the agency at the time of the evaluation.

| <b>TABLE 3</b>                                   |                                    |
|--------------------------------------------------|------------------------------------|
| <b>Wellness Committee Members' Roles</b>         |                                    |
| <b>Role in Organization</b>                      | <b>Role in Wellness Program</b>    |
| Case Manager                                     | Emotional Health                   |
| Community Relations/Special Projects Coordinator | Healthy Eating/Program Coordinator |
| Quality Improvement Field Nurse                  | Health Assessments                 |
| Social Service Coordinator                       | Spiritual Health                   |

### **Evaluation Question 1: Did the program reach those employees at greatest need?**

A key indicator of the program's success was the level of employee participation. This was measured by tracking employees who set at least one personal health goal and participated in core area activities. In 2010, 94% of respondents were employees of EXCELth, the year the program was first implemented. Fourteen of 16 respondents set at least one personal health goal and 67% participated in wellness program activities and 12 of 15 respondents are interested in participating in future workplace initiatives and activities. As presented in Table, goals ranged from losing weight, lowering blood pressure and cholesterol levels, eating healthier and consuming more water as presented in Table 4. Also, respondents participated in at least one core area activity. Six respondents reported participating in physical activity, 8 in emotional health activities, 9 in healthy eating activities, 8 in healthy weight activities, 6 in health assessments and 9 in spiritual health activities.

| <b>TABLE 4<br/>Personal Goal(s)</b>    |          |          |
|----------------------------------------|----------|----------|
| <b>What was your personal goal(s)?</b> | <b>%</b> | <b>n</b> |
| Lose weight                            | 84.6%    | 11       |
| Lower blood pressure                   | 15.4%    | 2        |
| Lower cholesterol level                | 7.7%     | 1        |
| Eat healthier                          | 53.8%    | 7        |
| Drink more water                       | 30.8%    | 4        |
| Lower blood glucose levels             | 15.4%    | 2        |
| Decrease debt                          | 7.7%     | 1        |
| Exercise                               | 46.2%    | 6        |
| Stress management                      | 15.4%    | 2        |

According wellness committee members, program activities were delivered every 6 to 7 weeks via direct interaction, handouts and email. The number of participants per session ranged from 8 to 10. Participation was tracked via the following means: number of handouts taken, blood pressure, blood sugar and cholesterol screening logs, staff feedback, and incentives given. Incentives for participation included healthy snacks, gift cards, discount coupons, pocket cards, books and “just plain old fun and laughter.” Also, wellness committee members delivered majority of activities to staff at the administrative office and to staff at the Baton Rouge office and some health assessment and healthy eating activities were delivered organization wide.

### **Evaluation Question 2: Was there a high level of awareness of the program?**

The evaluation of program effectiveness focuses on how well the program is being marketed. From information gathered from interviews, employees were made aware of activities. The overall program and activities were advertised via e-mail, word of mouth and reminders, placement of program materials near sign-in sheets, flyers and brochures. Seventy percent (12 of 16) of respondents were aware of the EXCELth Workplace Wellness Program.

Ninety-four percent (15 of 16) of respondents were employed by EXCELth in 2010, the year the program was implemented.

### **Evaluation Question 3: Were employees satisfied with the program?**

A measure of program effectiveness is the participants' satisfaction with the program content, the instructors, the materials, the facilities, etc. Also, satisfaction with the program can have a major impact upon employees' perception of the quality of the program and can play a key role in the employees' decision to continue participating in the program. In order to address employee satisfaction with the program, respondents were asked about the usefulness of core activities and overall program satisfaction. Of the 9 respondents answering this question, 100% were satisfied with overall wellness program activities. Activities delivered by the wellness committee consisted of preparation of healthy meals with caloric educational material, blood pressure, blood glucose and cholesterol screenings, nutrition counseling and meal planning, spiritual activities focused around forgiveness, salvation, stewardship, inspiration and faith, and emotional health activities related to joy, happiness, enjoying simple pleasures, stress management, emotions and the 5 senses. According to committee members, program activities were delivered as planned and program materials were given to participants. These materials included handouts on hypertension, diabetes mellitus and hyperlipdemia as well as other health topics, activity worksheets, CDs, crayons, healthy recipe cards, educational puzzles, caloric chart, journals, pedometer, polo shirts and caps, gifts, note cards, booklet, post cards, and quarter cards.

**Evaluation Question 4: Did the program help to improve the health habits and/or conditions of employees?**

Since participating in wellness program activities, 9 respondents made personal life changes. Seven of 8 of respondents agreed that setting a personal health goal helped with making changes. While most did not identify issues hindering them from making changes, a few participants felt they did not have enough time, did not have enough money and an increase in work load at intervals made it difficult to maintain changes resulting in setbacks. Seven of 14 respondents achieved at least one personal health goal. These goals are displayed in Table 5.

| <b>TABLE 5<br/>Personal Health Goals</b> |          |          |
|------------------------------------------|----------|----------|
| <b>What goal(s) did you achieve?</b>     | <b>%</b> | <b>n</b> |
| Lost weight                              | 57.1%    | 4        |
| Lowered blood pressure                   | 28.6%    | 2        |
| Lowered cholesterol level                | 14.3%    | 1        |
| Eats healthier/makes better choices      | 57.1%    | 4        |
| Increased water intake                   | 28.6%    | 2        |
| Lowered glucose levels                   | 14.3%    | 1        |
| Exercises                                | 28.6%    | 2        |
| Lowered stress levels                    | 28.6%    | 2        |

**Evaluation Question 5: Did the program help to improve the knowledge of employees?**

Overall, respondents “strongly agreed” or “agreed” that they gained knowledge by participating in the following core area activities: physical activity, emotional health, healthy weight, healthy eating, health assessment and spiritual health. However, at least one respondent did not gain knowledge by participating in the physical activity. Similarly, most of respondents found core activities to be useful.

### Evaluation Question 6: Was the program activities delivered as planned?

To assess program fidelity, wellness committee members were queried about the delivery of program activities. The inquiry about delivery of program activities consisted of which activities were delivered, delivery mode, frequency of delivery and adjustments made. Committee members stated that activities were delivered every 6 to 7 weeks. However, when one of the committee members left the organization another member of the committee assumed the role of Healthy Eating/Program Coordinator and delivered those activities.

### OTHER FINDINGS

Overall the program budget covered incentives but as the program went on, the committee did not have enough resources. In order to deliver activities as intended, committee members came out of pocket for program materials in order to deliver activities as intended. Committee members acknowledged that more money would have allowed the committee to be more creative and innovative.

Eleven of 14 (79%) respondents considered themselves to be overweight. As displayed in Table 6, most did not participate in physical activity more than 3 times a week. Reasons for not being physically active included: no time in schedule, too tired after work, and physical activity takes time away from other things.

| <b>Duration</b>          | <b>Light</b> | <b>Moderate</b> | <b>Vigorous</b> |
|--------------------------|--------------|-----------------|-----------------|
| Never                    | 4(28.6%)     | 3 (25.0%)       | 2 (13.3%)       |
| Less than once a week    | 5 (35.7%)    | 3 (25.0%)       | 2 (13.3%)       |
| 1 -2 times a week        | 2 (14.3%)    | 3 (25.0%)       | 5 (33.3%)       |
| 3 -5 times a week        | 3 (21.4%)    | 2 (16.7%)       | 4 (26.7%)       |
| More than 5 times a week | 0 (0.0%)     | 1 (8.3%)        | 2 (13.3%)       |



In addition, employees were asked about their stress levels and coping with stress and these results are shown in Table 7.

| <b>TABLE 7</b>                                                            |                  |             |                   |               |                    |
|---------------------------------------------------------------------------|------------------|-------------|-------------------|---------------|--------------------|
| <b>Level of Stress and Coping with Stress</b>                             |                  |             |                   |               |                    |
| <b>Level of Stress</b>                                                    | <b>Very High</b> | <b>High</b> | <b>Moderate</b>   | <b>Low</b>    | <b>Very Low</b>    |
| Overall, what level of stress do you experience at work?                  | 3                | 4           | 6                 | 1             | 1                  |
| Overall, what level of stress do you experience outside of work?          | 0                | 4           | 4                 | 4             | 3                  |
| <b>Coping with Stress</b>                                                 | <b>Very well</b> | <b>Well</b> | <b>Adequately</b> | <b>Poorly</b> | <b>Very Poorly</b> |
| Overall, how well do you feel you are coping with stress at work?         | 2                | 3           | 9                 | 1             | 0                  |
| Overall, how well do you feel you are coping with stress outside of work? | 5                | 3           | 7                 | 0             | 0                  |

## **SUMMARY**

In order to evaluate how well EXCELth's Workplace Wellness Program was implemented and the effectiveness of program activities, information was obtained from 16 EXCELth employees via a survey and 4 wellness committee members through interviews. Results obtained from surveys about interests, needs and satisfaction with activities can be used to further develop, adapt, and expand the wellness program. Also, findings can be utilized to solicit additional program funding and conduct further evaluations of the program.

## **CHAPTER V CONCLUSIONS AND RECOMMENDATIONS**

### **INTRODUCTION**

This chapter presents the conclusions drawn from evaluation findings and recommendations. The findings of this evaluation highlight the importance of regular review and evaluation of the effectiveness the program, particularly with respect to participation in and usefulness of program activities, lifestyle changes made, and goal attainment.

### **CONCLUSIONS**

The goal of this evaluation was to obtain a better understanding of EXCELth's Workplace Wellness Program. Including evaluation is an integral part of program development and enables program managers to determine critical success factors that need to be measured and avoids unnecessary measurement that may not be useful or critical. The leading principles in EXCELth's worksite promotion program were to address the holistic health and wellness needs of its employees in a variety of contexts. Establishing a worksite promotion program is best done by effectively assessing the needs and interests of the target population and establishing clear program goals. The goal and leading principles of EXCELth's wellness program align with the Social Cognitive theory in that EXCELth was a supportive environment and also created a motivational, health-related framework for making behavior change or modification. It is also critical to have an effective marketing and promotion strategy, as the best WHP programs and resources are of little use without the active engagement of the targeted populations.

Even given the limitations relative to process data collection, the use of process data collection methods and the information obtained from them, is useful to wellness program stakeholders. The process data will inform wellness committee members and organization

leadership; about those activities that are popular and those that are not well attended, allowing adjustments to be made and a redesigning of some of the activities as well as increased funding needs. Despite limitations such as, the small sample size, low response rate, recall bias, lack of generalization and self-reported changes, it is believed that this evaluation has merit. The program appears to be gaining acceptance and to be effective. That is both the employee and the organization appear to benefit from the program. From review of the literature, there is very little existing data describing health promotion in the small business sector, particularly among very small businesses and businesses with fewer than 50 employees.

A major reason for choosing the worksite as setting for health promotion is the possibility to reach large groups. Level of program participation and reaching those at greatest need are key indicators of program success. In order to assess program reach, the first evaluation question focused on the program reaching those employees at greatest need. For this evaluation, a high level of participation was reported and the setting of a personal health goal operated as a recruitment method for entry into the program. At least 80% of survey respondents reports setting at least one personal health goal; more than 50% of survey respondents reports participating in wellness program activities; and 12 of 15 respondents are interested in participating in future workplace initiatives and activities. These findings are consistent with the Health Belief Model in which the individual program participants perceived the seriousness of consequences posed by a health problem or condition or unhealthy behavior or situation, noticed the benefits of avoiding the risk by taking action; and perceived barrier or obstacles to change or modify behavior.

In general, worksite programs provide the supportive environment and structure people need to maintain healthy behaviors. EXCELth's program provided support and motivation for change or modification to program participants. The focus of evaluation question 4 was change in health habit and/or condition. While participating in wellness program activities, 9 respondents made personal life changes and 7 of 8 of respondents agreed that setting a personal health goal helped with making changes. While most did not identify issues hindering them from making changes, a few participants felt they did not have enough time, did not have enough money and an increase in work load at intervals made it difficult to maintain changes resulting in setbacks. These findings align with the Stages of Change Model because behavior change is a process, not an event. Participants do not systematically advance from one stage to the next; they may enter the process at any stage, have a relapse and start the process again.

There are several reasons high participation might occur. First, employees in smaller businesses are more likely to know their fellow coworkers and families, and this family-orientation may facilitate participation in health promotion activities. Second, smaller businesses tend to have less diversity among employees than do larger businesses, making it easier for them to tailor programs to suit the needs of their entire staff. Finally, support from top management is critical to the success of a workplace health promotion program, and in smaller businesses, top management is more accessible to employees and more involved in the day-to-day operations of the company.

Communication and marketing are key factors in increasing awareness of and participation in workplace wellness program. Marketing a health promotion program is extremely important, both to make people aware that the program exists and to motivate them to take advantage of it. Level of program awareness was the focus of evaluation question 2.

Wellness committee members utilized email, word of mouth and flyers to advertise, heighten awareness and spread the word. Seventy percent of respondents were aware of EXCELth's Workplace Wellness Program.

Another evaluation target is participant satisfaction. Participant satisfaction rates are important to assess because they will reveal how much people like wellness program offerings. The important thing to understand about assessing satisfaction levels is that not everyone is going to be satisfied with the program. This may be even more important feedback than from those who are satisfied with what is being done because the program might not be meeting the needs of those not satisfied.

Satisfaction with the program can have a major impact upon employees' perception of the quality of the program and can play a key role in the employees' decision to continue participating in the program. Once individuals are engaged in a program, it is important to ensure that they are satisfied with the program, the caliber of instruction or the quality of coaching, and/or the usefulness of program materials received in support of their behavior change efforts. This increases the likelihood that participants will share their successes with others or that their experience can serve as a testimonial to drive further population-level engagement in programs. One positive experience also is more likely to build individual confidence and generate participation in other programs that might require commitment.

Participant feedback ideally should be solicited from all individuals who participate in a program and across all programs offered. Specific strategies are needed to garner high response rates from these surveys because the utility of this feedback is contingent on learning from those who have failed as well as those who have succeeded in lifestyle improvement. Feedback may include overall satisfaction with a program, materials, or services, but also may ask participants

to report if they learned new knowledge, acquired new skills, or met behavior-change goals as a result of their experience with the program.

## **RECOMMENDATIONS**

Based on the results of this evaluation the following recommendations are made to assure long-term success of EXCELth's Workplace Wellness Program.

**1. Develop a formalized system of assessment of the population's health status and needs.**

Such a system may include: goals for long term health improvement specific to diseases and preventive services, a consistent plan for population health status measures, clear and consistent measures to be used over time and review of data which focuses on identifying trends over time. Employee needs and interest surveys and Health Risk Assessments are tools to consider for ongoing assessment.

## **2. Develop a formal process for tracking and monitoring**

A formal process for tracking and monitoring all aspects of program activities should be developed. Individuals should be tracked anonymously and over time to quantify the impact of the program. Specifically, information on participants versus non-participants with respect to the results of wellness interventions, trends in health risks and actual changes in behavior. Wellness program costs, including items such as incentives, should be tracked. There are some components of the evaluation process that should be done on an ongoing basis. Specifically, participation should be monitored and tracked using registration protocols and participant satisfaction should be captured using paper and pencil and/or electronic instruments. What's particularly important in capturing participation and participant satisfaction data is, at least for the first several years, it should be done on an "all the time" basis. In so doing, you'll find that you will better understand the constituents that you serve and in the process significantly improve the overall quality of your programs.

## **3. Create a culture within the organization that supports health improvement.**

Organizations need to take on a more active role in organizational change including staffing, workload, work culture and climate. Work design modifications include increasing autonomy, enhancing communication about job duties and expectations, and clarifying supervisory chains of command. A culture supportive of health improvement would include management commitment (i.e. leading by example by becoming involved in health improvement activities), policies and procedures supportive of a healthy workplace and healthy lifestyle choices of employees, and ensuring that health improvement planning is integrated into the overall structure and mission of EXCELth.

Other wellness program recommendations include the following:

- The logic model should be reviewed and upgraded as needed to concisely show wellness program plan goals and objectives and how they are linked to process, impact and outcome measures.
- Future evaluations need to include a larger sample size.
- Expand wellness activities to all EXCELth sites.
- Develop and use a standard Health Risk Appraisal instrument and a standard employee satisfaction forms.
- Request appropriate funding for delivery of program activities.



## REFERENCES

- Aldana, S. G., Merrill, R. M., Price, K., Hardy, A., & Hager, R. (2005). Financial impact of a comprehensive multisite workplace health promotion program. *Prev Med, 40*(2), 131-137.
- Baranowski, T., Cerin, E., & Baranowski, J. (2009). Steps in the design, development and formative evaluation of obesity prevention-related behavior change trials. *Int J Behav Nutr Phys Act, 6*, 6.
- Benedict, M. A., & Arterburn, D. (2008). Worksite-based weight loss programs: a systematic review of recent literature. *Am J Health Promot, 22*(6), 408-416.
- Berry, L. L., & Mirabito, A. M. (2011). Partnering for prevention with workplace health promotion programs. *Mayo Clin Proc, 86*(4), 335-337.
- Bull, S. S., Gillette, C., Glasgow, R. E., & Estabrooks, P. (2003). Work site health promotion research: to what extent can we generalize the results and what is needed to translate research to practice? *Health Educ Behav, 30*(5), 537-549.
- Cahill, K., Moher, M., & Lancaster, T. (2008). Workplace interventions for smoking cessation. *Cochrane Database Syst Rev*(4), CD003440.
- Centers for Disease Control and Prevention (2009a). Arthritis Meeting the Challenge at a Glance 2009. Retrieved from <http://www.cdc.gov/nccdphp/publications/aag/pdf/arthritis.pdf>
- Centers for Disease Control and Prevention (2009b). Chronic Diseases the Power to Prevent, the Call to Control at a Glance 2009. 1-4. Retrieved from <http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Heart-Disease-and-Stroke-AAG-2011.pdf>
- Centers for Disease Control and Prevention (2010). Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1960-1962 Through 2007-2008. *NCHS Health E-Stat*, 1 - 6. Retrieved from [http://www.cdc.gov/nchs/data/hestat/obesity\\_adult\\_07\\_08/obesity\\_adult\\_07\\_08.pdf](http://www.cdc.gov/nchs/data/hestat/obesity_adult_07_08/obesity_adult_07_08.pdf). doi:June 2010
- Centers for Disease Control and Prevention (2011a). Cancer Addressing the Cancer Burden at a Glance 2011. 1-4. Retrieved from [http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Cancer\\_AAG\\_2011\\_Web\\_508.pdf](http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Cancer_AAG_2011_Web_508.pdf)
- Centers for Disease Control and Prevention (2011b). Diabetes Successes and Opportunities for Population-Based Prevention and Control at a Glance 2011. Retrieved from <http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Diabetes-AAG-2011-508.pdf>

- Centers for Disease Control and Prevention (2011c). Heart Disease and Stroke Prevention Addressing the Nation's Leading Killers at a Glance 2011. 1-4. Retrieved from <http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Heart-Disease-and-Stroke-AAG-2011.pdf>
- Centers for Disease Control and Prevention (2011d). Nutrition and Physical Activity Helping People Choose Healthy Eating and Active Living at a Glance 2011. Retrieved from [http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Nutrition-and-Phys-Activity-AAG\\_WEB\\_PDF.pdf](http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Nutrition-and-Phys-Activity-AAG_WEB_PDF.pdf)
- Centers for Disease Control and Prevention (2011e). Obesity Halting the Epidemic by Making Health Easier at a Glance 2011. Retrieved from [http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Obesity\\_AAG\\_WEB\\_508.pdf](http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Obesity_AAG_WEB_508.pdf)
- Centers for Disease Control and Prevention (2011f). Tobacco Use Targeting the Nation's Leading Killer at a Glance 2011. Retrieved from [http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Tobacco\\_AAG\\_2011\\_508.pdf](http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/Tobacco_AAG_2011_508.pdf)
- Centers for Disease Control and Prevention (2011g). Vital Signs: Prevalence, Treatment, and Control of High Levels of Low-Density Lipoprotein Cholesterol - United States, 1999-2002 and 2005-2008. *MMWR*, 60, 109 - 114. Retrieved from <http://www.cdc.gov/mmwr/pdf/wk/mm60e0201.pdf>
- Centers for Disease Control and Prevention (2011h). Vital Signs: Prevalence, Treatment, and control of Hypertension - United States, 1999-2002 and 2005-2008. *MMWR*, 60, 103-108. Retrieved from <http://www.cdc.gov/mmwr/pdf/wk/mm60e0201.pdf>
- Committee, Wellness (2010). EXCELth's Workplace Wellness Program Retrieved 09/1/2011, 2010
- Conn, V. S., Hafdahl, A. R., Cooper, P. S., Brown, L. M., & Lusk, S. L. (2009). Meta-analysis of workplace physical activity interventions. *Am J Prev Med*, 37(4), 330-339.
- Danaei, G., Ding, E. L., Mozaffarian, D., Taylor, B., Rehm, J., Murray, C. J., et al. (2009). The preventable causes of death in the United States: comparative risk assessment of dietary, lifestyle, and metabolic risk factors. *PLoS Med*, 6(4), e1000058.
- Dishman, R. K., Oldenburg, B., O'Neal, H., & Shephard, R. J. (1998). Worksite physical activity interventions. *Am J Prev Med*, 15(4), 344-361.
- EXCELth, Incorporated (2011). EXCELth Incorporated Retrieved 6/1/2011, 2011, from [www.excelth.com](http://www.excelth.com)

- Fielding, J. E., & Piserchia, P. V. (1989). Frequency of worksite health promotion activities. *Am J Public Health, 79*(1), 16-20.
- Frechtlin, Joy. (2002). The 2002 User Friendly Handbook for Project Evaluation Available from [http://www.nsf.gov/pubs/2002/nsf02057/nsf02057\\_1.pdf](http://www.nsf.gov/pubs/2002/nsf02057/nsf02057_1.pdf)
- Frechtling, Joy A., Sharp, Laure M., & Foundation., National Science (1997). *User-friendly handbook for mixed method evaluations*. Arlington, VA: NSF, Directorate for Education and Human Resources, Division of Research, Evaluation, and Communication.
- Glanz, Karen, & National Cancer Institute (U.S.) (2005). *Theory at a glance : a guide for health promotion practice* (2nd ed.). [Bethesda? Md.]: U.S. Dept. of Health and Human Services, National Cancer Institute.
- Glasgow, R. E., Lichtenstein, E., & Marcus, A. C. (2003). Why don't we see more translation of health promotion research to practice? Rethinking the efficacy-to-effectiveness transition. *Am J Public Health, 93*(8), 1261-1267.
- Glasgow, R. E., McCaul, K. D., & Fisher, K. J. (1993). Participation in worksite health promotion: a critique of the literature and recommendations for future practice. *Health Educ Q, 20*(3), 391-408.
- Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *Am J Public Health, 89*(9), 1322-1327.
- Goetzel, R. Z., & Ozminkowski, R. J. (2008). The health and cost benefits of work site health-promotion programs. *Annu Rev Public Health, 29*, 303-323.
- Haldimand-Norfolk Health Unit (2009/2010). Health at Work Needs Assessment Questionnaire Retrieved 9/1/2010, 2010, from [http://www.hnhu.org/index.php?option=com\\_content&view=article&id=1938&catid=112](http://www.hnhu.org/index.php?option=com_content&view=article&id=1938&catid=112)
- Harden, A., Peersman, G., Oliver, S., Mauthner, M., & Oakley, A. (1999). A systematic review of the effectiveness of health promotion interventions in the workplace. *Occup Med (Lond), 49*(8), 540-548.
- Healey, Bernard J., & Zimmerman, Robert S. (2010). *The new world of health promotion : new program development, implementation, and evaluation*. Sudbury, Mass.: Jones and Bartlett Publishers.
- Heidenreich, P. A, Trogon J.G., Khavjou O.A., et al. (2011). Forecasting the future of cardiovascular disease in the United States: a policy statement from the American Heart Association. *Circulation, 123*, 933-944. Retrieved from doi:January 24, 2011

- Hughes, M. C., Patrick, D. L., Hannon, P. A., Harris, J. R., & Ghosh, D. L. Understanding the decision-making process for health promotion programming at small to midsized businesses. *Health Promot Pract*, 12(4), 512-521.
- Hunnicut, David (2007). The Fundamentals of Evaluation. *WELCOA's Absolute Advantage Magazine*, 6, 13-19.
- Jack, L., Jr., Mukhtar, Q., Martin, M., Rivera, M., Lavinghouze, S. R., Jernigan, J., et al. (2006). Program evaluation and chronic diseases: methods, approaches, and implications for public health. *Prev Chronic Dis*, 3(1), A02.
- Katz, D. L., O'Connell, M., Yeh, M. C., Nawaz, H., Njike, V., Anderson, L. M., et al. (2005). Public health strategies for preventing and controlling overweight and obesity in school and worksite settings: a report on recommendations of the Task Force on Community Preventive Services. *MMWR Recomm Rep*, 54(RR-10), 1-12.
- Kung, H. C., Hoyert, D. L., Xu, J., & Murphy, S. L. (2008). Deaths: final data for 2005. *Natl Vital Stat Rep*, 56(10), 1-120.
- Kwak, L., Kremers, S. P., van Baak, M. A., & Brug, J. (2006). Participation rates in worksite-based intervention studies: health promotion context as a crucial quality criterion. *Health Promot Int*, 21(1), 66-69.
- Kwak, L., Kremers, S. P., Werkman, A., Visscher, T. L., van Baak, M. A., & Brug, J. (2007). The NHF-NRG In Balance-project: the application of Intervention Mapping in the development, implementation and evaluation of weight gain prevention at the worksite. *Obes Rev*, 8(4), 347-361.
- Lindsay, G. M. (2000). Auditing health promotion. *Occup Med (Lond)*, 50(2), 137-140.
- Linnan, L. A., & Birken, B. E. (2006). Small businesses, worksite wellness, and public health: a time for action. *N C Med J*, 67(6), 433-437.
- Linnan, L. A., Sorensen, G., Colditz, G., Klar, D. N., & Emmons, K. M. (2001). Using theory to understand the multiple determinants of low participation in worksite health promotion programs. *Health Educ Behav*, 28(5), 591-607.
- Loeppke, R., Nicholson, S., Taitel, M., Sweeney, M., Haufle, V., & Kessler, R. C. (2008). The impact of an integrated population health enhancement and disease management program on employee health risk, health conditions, and productivity. *Popul Health Manag*, 11(6), 287-296.
- Maciosek, M. V., Coffield, A. B., Edwards, N. M., Flottemesch, T. J., Goodman, M. J., & Solberg, L. I. (2006). Priorities among effective clinical preventive services: results of a systematic review and analysis. *Am J Prev Med*, 31(1), 52-61.
- Matson-Koffman, D. M., Brownstein, J. N., Neiner, J. A., & Greaney, M. L. (2005). A site-specific literature review of policy and environmental interventions that promote physical

- activity and nutrition for cardiovascular health: what works? *Am J Health Promot*, 19(3), 167-193.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Educ Q*, 15(4), 351-377.
- Muller-Riemenschneider, F., Reinhold, T., Nocon, M., & Willich, S. N. (2008). Long-term effectiveness of interventions promoting physical activity: a systematic review. *Prev Med*, 47(4), 354-368.
- Nutbeam, D. (1998). Promoting the health of Australians--how strong is our infrastructure support? *Aust N Z J Public Health*, 22(3 Suppl), 301-302.
- O'Donnell, M. P. (1989). Definition of health promotion: Part III: Expanding the definition. *Am J Health Promot*, 3(3), 5.
- O'Donnell, M. P. (2005). A simple framework to describe what works best: improving awareness, enhancing motivation, building skills, and providing opportunity. *Am J Health Promot*, 20(1), suppl 1-7 following 84, iii.
- Pomerleau, J., Lock, K., Knai, C., & McKee, M. (2005). Interventions designed to increase adult fruit and vegetable intake can be effective: a systematic review of the literature. *J Nutr*, 135(10), 2486-2495.
- Robroek, S. J., van Lenthe, F. J., van Empelen, P., & Burdorf, A. (2009). Determinants of participation in worksite health promotion programmes: a systematic review. *Int J Behav Nutr Phys Act*, 6, 26.
- Sahay, T. B., Ashbury, F. D., Roberts, M., & Rootman, I. (2006). Effective components for nutrition interventions: a review and application of the literature. *Health Promot Pract*, 7(4), 418-427.
- Systems, Health Enhancement (2007). Keeping Healthy People Healthy The Business Case. Retrieved from [www.HealthEnhancementSystems.com](http://www.HealthEnhancementSystems.com)
- The Health Communication Unit (2006). THCU Workplace Situational Assessment Toolkit Retrieved 9/1/2010, 200, from [http://www.thcu.ca/workplace/sat/tool\\_details.cfm?toolID=81](http://www.thcu.ca/workplace/sat/tool_details.cfm?toolID=81)
- The Health Communication Unit (2008/2009). THCU Workplace Situational Assessment Toolkit Retrieved 9/1/2010, 2010, from [http://www.thcu.ca/workplace/sat/pubs/tool\\_77.pdf](http://www.thcu.ca/workplace/sat/pubs/tool_77.pdf)
- Vaccaro, Veronica (1994). *Depression: Corporate Experiences and Innovations*. Washington, D. C.: National Institute of Mental Health.
- Wetter, A. C., Goldberg, J. P., King, A. C., Sigman-Grant, M., Baer, R., Crayton, E., et al. (2001). How and why do individuals make food and physical activity choices? *Nutr Rev*, 59(3 Pt 2), S11-20; discussion S57-65.

APPENDIX A

**Logic Model for the EXCELth’s Workplace Wellness Program**

**Goal: To create a workplace culture of health and well-being for EXCELth employees that enhances and optimizes opportunity for achieving personal healthy action goals.**

| Resource/Inputs              | Activities                         | Outputs                                              | Outcomes                                                                      |                                                                    |                                                            |
|------------------------------|------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------|
|                              |                                    |                                                      | Short-term                                                                    | Intermediate                                                       | Long-term                                                  |
| Management support           | Committee meetings                 | # of committee meetings                              | Increased awareness of the benefits of healthy behaviors                      | Increased levels of physical activity                              | Improved health status                                     |
| Workplace Wellness Committee | Launch of Wellness Program         | % of committee members attending meetings            | Increased number of employees participating in wellness activities and events | Increased consumption of healthy foods                             | Improved quality of life                                   |
| Marketing                    | Development of program materials   | # of components/topics offered                       | Increased knowledge of benefits of healthy eating practices                   | Decreased stress levels                                            | Healthy body weight levels                                 |
| Participants                 | Distribution of program materials  | # of participants per component/services             | Increased awareness of benefits of physical activity                          | Decreased consumption of energy and calorie dense foods and drinks | Healthy stress levels                                      |
| Funding                      | Conduct of components and services | % of employees making healthy action pledges (goals) | Increased awareness of benefits of physical activity                          | Increased spirituality                                             | Reduce prevalence & incidence of chronic disease/condition |
| Program Materials            |                                    | % of total employees participating in program        | Increased knowledge of emotional health                                       |                                                                    |                                                            |
| Incentives                   |                                    | # of health screenings performed                     | Increased awareness of spiritual wellness                                     |                                                                    |                                                            |
| Email                        |                                    | # of program materials distributed                   |                                                                               |                                                                    |                                                            |
| Time                         |                                    |                                                      |                                                                               |                                                                    |                                                            |

## APPENDIX B

**Title:** An Evaluation of EXCELth's Workplace Wellness Program

**Principal Investigator:** Kabrina Smith

**Co-Investigator:** Iris Smith, PhD

Dear Participant,

### Introduction and Purpose

You are being invited to participate in a research study because you are a full-time member of EXCELth's paid workforce. This project seeks to develop a greater understanding of staff's needs, participation, interest, satisfaction and outcomes as it relates to workplace wellness. This study is being conducted for my masters' special study project under the direction of Dr. Iris Smith.

### Procedure

If you agree to participate, you will be asked at most 52 questions. The estimated time to complete the survey is 20 minutes. With your consent, the interview will be taped by me.

### Risks

There are no foreseeable political or social risks associated with participation in this interview.

### Benefits

Taking part in this research study may not benefit you personally. The information you provide, however, will add to our knowledge about EXCELth's Wellness Program.

### Confidentiality

Names or other personal identifiers will not be obtained from the survey. Age will be asked, however, the date of birth will not be asked for. After data is collected and exported into an Excel file, a unique, random identifier will be assigned to each respondent's group of answers.

All data will be stored on the Survey Monkey server and exported data files will be password-protected and housed on a password-protected computer. Only the principal investigator will have access to the data. People other than those involved in the research may look at the study records. Agencies and Emory departments and committees that make rules and policy about how research is done have the right to review these records. All records that produce will be kept private to the extent we are required to do so by law.

### Contact

If you have any questions about this study or your part in it, or

If you have questions, concerns or complaints about the research, or

If you have any questions about the study later, you may contact me at [kssmith6@emory.edu](mailto:kssmith6@emory.edu) or 504-524-1210. You may also contact my advisor, Dr. Iris Smith, at [ismith@emory.edu](mailto:ismith@emory.edu) or 404-727-2925.

If you have questions about your rights as a research subject or if you have questions, concerns or complaints about the research, you may contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or [irb@emory.edu](mailto:irb@emory.edu).

Consent: You may print a copy of this consent form to keep. Do not agree to this consent form unless you have had a chance to ask questions and get answers that make sense to you.

Nothing in this form can make you give up any legal rights. By agreeing to this form you will not give up any legal rights.

**ELECTRONIC CONSENT:** Please select your choice below.

Clicking on the "agree" button below indicates that:

You have read the above information

If you do not wish to participate in the research study, please decline by clicking the "disagree" button.

- Agree
- Disagree (*Skip to Thank You*)



**SECTION ONE: YOUR PROFILE:** The following questions will help complete our understanding of our workplace and other programming needs. Your answers will remain confidential.

1. What is your sex?
  - Male
  - Female
  
2. How old are you? \_\_\_\_\_
  
3. What is your highest level of education?
  - Elementary school
  - High school
  - Community college
  - University degree
  - Graduate degree
  - Other (please specify) \_\_\_\_\_
  
4. What department do you work (at least 50% of the time)?
  - Administrative Services
  - Primary/Behavioral/Oral Health and Social Services
  - Finance/Human Resources/Billing Services
  - Other (please specify) \_\_\_\_\_
  
5. Are you aware of EXCELth workplace wellness program?
  - Yes
  - No
  
6. Were you an EXCELth employee in 2010?
  - Yes
  - No → (Please go to question 22)

**SECTION TWO: WELLNESS PROGRAM PARTICIPATION:** The following questions will help complete our understanding of who participated in wellness activities, their satisfaction with activities and any outcomes that occurred. Your answers will remain confidential.

7. Did you set a personal health goal(s) in 2010?
- Yes
- No → *(Please go to question 14)*
- Not Sure → *(Please go to question 14)*
8. What was your personal goal(s)?
- Lose weight
- Lower blood pressure
- Lower cholesterol level
- Eat healthier
- Quit smoking
- Drink more water
- Lower blood glucose levels
- Medication management
- Decrease debt
- Get to know God
- Meditate
- Exercise
- Stress management
- Other (please specify) \_\_\_\_\_
9. Did you achieve your goal(s)?
- Yes
- No → *(Please go to question 14)*
- Not Sure → *(Please go to question 14)*
10. What goal(s) did you achieve?
- Lost weight
- Lowered blood pressure
- Lowered cholesterol level
- Eats healthier/makes better choices
- Quit smoking
- Increased water intake
- Lowered glucose levels
- Decreased debt
- Meditates
- Exercises
- Lowered stress levels
- Other (please specify) \_\_\_\_\_
11. Did setting a personal goal help you with making changes?
- Yes
- No → *(Please go to question 13)*
- Not Sure → *(Please go to question 13)*

12. What change(s) did you make?

---



---



---

13. What if anything, stopped you from making changes? [**Check all answers that apply**]

- It's too hard  
 Problem isn't serious enough  
 Not enough time  
 Not enough money  
 Too depressed  
 I don't know how to get started  
 No encouragement from family and friends  
 No encouragement from employer  
 Don't want to change my ways  
 Not sure I can really make a difference  
 Too much stress right now  
 Fear of the unknown  
 Lack of self-confidence  
 I don't know what's stopping me  
 Nothing  
 Other (please specify) \_\_\_\_\_

14. Did you participate in any wellness program activities in 2010?

- Yes  
 No → (Please go to question 22)  
 Not Sure → (Please go to question 22)

15. Overall, have you been satisfied with wellness program activities?

- Yes  
 No

16. Overall, which core area initiatives/activities have you participated in?

| Core Area             | Yes | No | Not sure |
|-----------------------|-----|----|----------|
| A. Physical Activity  |     |    |          |
| B. Emotional Health   |     |    |          |
| C. Healthy Eating     |     |    |          |
| D. Healthy Weight     |     |    |          |
| E. Healthy Assessment |     |    |          |
| F. Spiritual Health   |     |    |          |

17. In your opinion, I found the following core area activities to be useful to me:

| Core Area             | Strongly agree | Agree | Neither Agree or Disagree | Disagree | Strongly disagree |
|-----------------------|----------------|-------|---------------------------|----------|-------------------|
| A. Physical Activity  |                |       |                           |          |                   |
| B. Emotional Health   |                |       |                           |          |                   |
| C. Healthy Eating     |                |       |                           |          |                   |
| D. Healthy Weight     |                |       |                           |          |                   |
| E. Healthy Assessment |                |       |                           |          |                   |
| F. Spiritual Health   |                |       |                           |          |                   |

18. In your opinion, I gained knowledge by participating in following core area activities:

| Core Area             | Strongly disagree | Agree | Neither Agree or Disagree | Disagree | Strongly disagree |
|-----------------------|-------------------|-------|---------------------------|----------|-------------------|
| A. Physical Activity  |                   |       |                           |          |                   |
| B. Emotional Health   |                   |       |                           |          |                   |
| C. Healthy Eating     |                   |       |                           |          |                   |
| D. Healthy Weight     |                   |       |                           |          |                   |
| E. Healthy Assessment |                   |       |                           |          |                   |
| F. Spiritual Health   |                   |       |                           |          |                   |

19. Since participating in wellness program activities, have you made any changes?

- Yes  
 No → (Please go to question 21)  
 Not Sure → (Please go to question 21)

20. What change(s) did you make?

---



---



---

21. What if anything, stopped you from making changes? [**Pease check all that apply to you**]

- It's too hard  
 Problem isn't serious enough  
 Not enough time  
 Not enough money  
 Too depressed  
 I don't know how to get started  
 No encouragement from family and friends  
 No encouragement from employer  
 Don't want to change my ways  
 Not sure I can really make a difference  
 Too much stress right now  
 Fear of the unknown  
 Lack of self-confidence  
 I don't know what's stopping me  
 Nothing  
 Other (please specify) \_\_\_\_\_

**SECTION THREE: INTEREST IN WORKPLACE HEALTH PROGRAM.** The responses to questions in this section will help us better understand your health interests. Your answers will remain confidential.

22. Would you be interested in participating in future EXCELth's healthy workplace initiatives and activities?
- Yes
- No → (Please go to question 26)
- Don't know → (Please go to question 26)
23. Are you willing to participate in workplace health programs on your own time?
- Yes
- No
24. Would you be willing to participate in workplace health programs if they occurred partly on your time and partly on work time?
- Yes
- No
25. What topics would you be interested in learning more about? [**Please check all that apply to you**]
- I would like to learn more about:
- Chronic disease prevention (heart disease, cancer, diabetes)
- Herbal medications, vitamin/mineral supplements
- Injury prevention (e.g. trips/slips, bike helmets, road safety)
- Sexual health/ sexually transmitted diseases (STD)
- HIV/ AIDS
- Women's Health
- Reproductive health/Before & During Pregnancy.
- Parenting/ child health
- Care giving for older adult
- Depression
- Adult immunization
- Control of infectious diseases
- Food safety
- Water safety
- Sun safety
- Oral-Dental Health
- Debt management
- Stress management
- Spiritual wellness
- Emotional wellness
- Nothing
- Other (please specify) \_\_\_\_\_

**SECTION FOUR: YOUR HEALTH PROFILE.** The responses to questions in this section will help us better understand your health issues and needs. Your answers will remain confidential.

### General Health

26. In your opinion, would you say your health is:

- Excellent
- Very good
- Good
- Fair
- Poor

27. What, if anything, would you like to do in the next year to improve or maintain your health? **[Please check all that apply to you]**

- Eat better
- Exercise more
- Drink less coffee
- Skip fewer meals
- Remove a major source of worry, or stress from life
- Learn to cope better with worry, or stress
- Get more sleep
- Change jobs
- Change my home situation
- Quit smoking, or smoke less
- Drink less alcohol
- Cut down on painkiller, anti-depressants, sleeping or calming medications
- Cut down on other medication
- Cut down on non-medical drug use
- Get medical treatment
- Learn to be more assertive
- Learn to control anger
- Learn to communicate better
- Learn to manage time better
- Improve the way I feel about how I look
- Meditate
- Spend more time with my family/ balance work and family life
- Get out more often, make new friends, socialize
- Get more job skills
- Have more involvement in the decisions related to my job
- Nothing
- Other (please specify) \_\_\_\_\_

28. What if anything, is stopping you from making this change? **[Please check all that apply to you]**

- It's too hard
- Problem isn't serious enough
- Not enough time
- Not enough money
- Too depressed
- I don't know how to get started
- No encouragement from family and friends
- No encouragement from employer
- Don't want to change my ways
- Not sure I can really make a difference
- Too much stress right now
- Fear of the unknown
- Lack of self-confidence
- I don't know what's stopping me
- Nothing
- Other (please specify) \_\_\_\_\_

### Nutrition

29. What would you like to do to improve your eating habits? **[Please check all that apply to you]**

- Eat more vegetables and fruit
- Eat lower fat foods more often
- Eat more wholegrain breads/ cereals (e.g. bran, whole-wheat)
- Cut back on fast foods and/ or "junk" foods
- Eat less meat
- Cut back on salt
- Skip fewer meals or eat regularly
- Eat less often on the run
- Eat more often with my family (or with others)
- Learn more about healthy eating (nutrition)
- Eat smaller portions
- Take vitamin/ mineral supplements
- Nothing
- Other (please specify) \_\_\_\_\_

30. What, if anything, would stop you from improving your eating habits? **[Please check all that apply to you]**

- Limited choices in cafeteria or in eating places near where I work
- Job pressures (e.g., job schedule, job travel)
- Not enough time
- Too hard to change my ways
- I don't know how to prepare healthy foods
- I don't know how to choose healthy foods
- Too expensive
- No support from family or friends
- Too much stress at home
- I don't know how to get started
- I don't know what is stopping me
- Nothing
- Other (please specify) \_\_\_\_\_

31. Do you consider yourself
- 1. Overweight
  - 2. Underweight
  - 3. Just about right
  - 4. Don't know

### Physical Activity

32. In a typical week how often do you spend at least 15 minutes in **vigorous** physical activity?

*[Vigorous physical activity involves breathing much harder than normally and feeling so warm that you are sweating from doing such things as: aerobics, using exercise machines, bicycling, fast walking, running, sports, moving heavy objects, swimming, etc.]*

- never
- less than once a week
- 1-2 times a week
- 3-5 times a week
- more than 5 times a week

33. In a typical week, how often do you spend at least 30 minutes in **moderate** physical activity?

*[Moderate physical activity involves breathing harder than normally and the body feels warm from doing such things as: brisk walking, bicycling, golfing, heavy gardening, etc.]*

- Never
- Less than once a week
- 1-2 times a week
- 3-5 times a week
- More than 5 times a week

34. In a typical week, how often do you spend at least 30 minutes in **light** physical activity?

*[Light physical activity refers to such things as taking a stroll, light gardening, housecleaning, bowling, stretch exercises, etc.]*

- Never
- Less than once a week
- 1-2 times a week
- 3-5 times a week
- More than 5 times a week



35. What, if anything, is stopping you from being physically active? [**Pease check all that apply to you**]

- No time in my schedule
- No support from family or friends
- Too tired after work
- I'm getting older so physical activity can be risky
- I don't have the skills for any activity
- I don't have access to jogging trails, swimming pools, bike paths, etc.
- I'm embarrassed about how I will look
- Physical activity takes time away from other commitments (e.g., work, family)
- Too expensive (i.e., join a club or buy fitness equipment)
- I can't seem to make myself stick to anything
- If we had facilities and showers at work, then I would more likely be active
- I don't know how to get started
- I don't know what is stopping me
- Nothing
- Other (please specify) \_\_\_\_\_

### Smoking & Alcohol

36. At the present time do you smoke cigarettes?

- Daily
- Occasionally
- Not at all

37. Do you intend to quit smoking?

- I have never smoked
- yes
- no

38. Do you need help with smoking cessation?

- I have never smoked
- yes
- no

39. In a typical week, how many regular size bottles of beer do you drink?  
[12 oz or 360 ml] \_\_\_\_\_

40. In a typical week, how many shots of hard liquor or spirits do you drink?  
[1.5 oz or 45 ml] \_\_\_\_\_

41. In a typical week, how many glasses of wine do you drink?  
[5 oz or 150 ml] \_\_\_\_\_

42. What day or days of the week would you say you consume most of the alcohol?

- Monday –Thursday
- Friday
- Saturday
- Sunday

### Social Work Environment

43. What caused you excess worry or stress at work in the last six months? [**Pease check all that apply to you**]

- Changes within my job
- I don't like the hours
- Too much time pressure
- Unscheduled overtime
- My duties are not clear
- Management tries to control my work too much
- Not enough control/ influence over what I do and when I do it
- Too much responsibility
- Supervisors or managers have unrealistic expectations of me
- Deadlines
- Not enough feedback on how I'm doing
- I don't feel adequately rewarded for my work
- I'm not treated fairly
- I'm afraid of being laid off
- Money issues
- My work tires me physically
- My work tires me mentally
- My work is boring
- I am being sexually harassed by someone at work
- I'm being harassed by someone at work (other than sexually)
- I am being discriminated against
- Conflict with other people at work
- I feel isolated from my co-workers
- Not receiving a cost of living raise
- Nothing
- Other (please specify) \_\_\_\_\_

44. Of the people you know right now, who would really listen to you carefully and sympathetically if you were seriously upset about something? [**Pease check all that apply to you**]

- No one
- One or more co-workers
- My spouse/partner
- One or more other family members
- One or more close friends
- A doctor or other health care professional
- A clergyman or religious official
- My boss
- Internet chat group
- Other (please specify) \_\_\_\_\_

45. Please check the appropriate box for each of the following statements. **[Please check only one answer per statement]**

| Overall, what level of stress do you experience          | Very High | High | Moderate   | Low    | Very Low    |
|----------------------------------------------------------|-----------|------|------------|--------|-------------|
| A. at work?                                              |           |      |            |        |             |
| B. outside of work?                                      |           |      |            |        |             |
| Overall, how well do you feel you are coping with stress | Very Well | Well | Adequately | Poorly | Very Poorly |
| C. at work?                                              |           |      |            |        |             |
| D. outside of work?                                      |           |      |            |        |             |

### Spirituality

46. Please check the appropriate box for each of the following statements. **[Please check only one answer per statement]**

|                                                                                        | Yes/<br>Almost<br>Always | Very<br>Often | Sometimes | Occasionally | No/<br>Almost<br>Never |
|----------------------------------------------------------------------------------------|--------------------------|---------------|-----------|--------------|------------------------|
| A. I know my values and beliefs                                                        |                          |               |           |              |                        |
| B. My life has meaning and direction                                                   |                          |               |           |              |                        |
| C. I derive strength from my spiritual life daily                                      |                          |               |           |              |                        |
| D. I have life goals that I strive to achieve everyday                                 |                          |               |           |              |                        |
| E. I am tolerant of the values and beliefs of others                                   |                          |               |           |              |                        |
| F. I view life as a learning experience and look forward to the future                 |                          |               |           |              |                        |
| G. I am satisfied with the degree to which my activities are consistent with my values |                          |               |           |              |                        |
| H. I have a sense of peace about my life                                               |                          |               |           |              |                        |
| I. Personal reflection is an important part of my life                                 |                          |               |           |              |                        |

### Emotional Wellness

47. Please check the appropriate box for each of the following statements. [**Please check only one answer per statement**]

|                                                                             | Yes/Almost Always | Very Often | Sometimes | Occasionally | No/Almost Never |
|-----------------------------------------------------------------------------|-------------------|------------|-----------|--------------|-----------------|
| A. I feel positive about myself and my life                                 |                   |            |           |              |                 |
| B. I am able to be the person I choose to be                                |                   |            |           |              |                 |
| C. I am satisfied that I am performing to the best of my ability            |                   |            |           |              |                 |
| D. I can cope with life's ups and downs effectively and in a healthy manner |                   |            |           |              |                 |
| E. I am nonjudgmental in my approach to others                              |                   |            |           |              |                 |
| F. I feel there is an appropriate amount of excitement in my life           |                   |            |           |              |                 |
| G. When I make mistakes, I learn from them                                  |                   |            |           |              |                 |
| H. can say "no" without feeling guilty                                      |                   |            |           |              |                 |
| I. I find it easy to laugh                                                  |                   |            |           |              |                 |
| J. I avoid blaming others for my failures or problems                       |                   |            |           |              |                 |

### My Health and My Job

48. Which of the following best describes your usual work schedule?

- Regular daytime schedule
- Regular evening shift
- Regular night or graveyard shift
- Rotating shift (that changes periodically from days to evening or nights)
- Split shift (consisting of two distinct periods each day)
- Irregular schedule
- Other (please specify)\_\_\_\_\_

49. Work schedules affect workers differently. We are interested in how your work schedule affects you.

| For each of the following statements, please check the appropriate box.              | Never | Seldom | Sometimes | Often | Always |
|--------------------------------------------------------------------------------------|-------|--------|-----------|-------|--------|
| A. I feel like I need to “catch up” on my sleep                                      |       |        |           |       |        |
| B. I have problems sleeping                                                          |       |        |           |       |        |
| C. I wake up feeling refreshed                                                       |       |        |           |       |        |
| D. I have enough energy to do everything I need or want to do each day               |       |        |           |       |        |
| E. I use alcohol and/or sleeping pills to help me sleep                              |       |        |           |       |        |
| F. I have fallen asleep while driving                                                |       |        |           |       |        |
| G. I have enough time with my family                                                 |       |        |           |       |        |
| H. I eat regular meals a day spaced at regular times regardless of what hours I work |       |        |           |       |        |

50. How many hours of sleep do you get on a typical night (or day if shift work)? \_\_\_\_\_

51. In the last year how many sick days did you take? \_\_\_\_\_

52. In the last year, how many days in total were you away from work because you were injured? (Include injuries caused at work and injuries caused at home).

Number of days = \_\_\_\_\_

*Thank You for Taking the Time to Provide Valuable Information!*

If you wish to be entered into a random drawing for a \$50 gift card of your choice or iPod shuffle, please click the “COMPLETE” button below. You will be redirected to a page to enter an e-mail address. Otherwise, you can close your Internet browser at this time.

**COMPLETE**

## APPENDIX C

### EXCELth's Wellness Program Wellness Committee Interview Questions

1. What is your role in the organization?
2. What was your role in the wellness program in 2010?
3. How was the committee formed?
4. What was the responsibility of the committee?
5. How many Wellness Committee meetings were conducted in 2010?
6. How many meetings did you participate in?
7. Did you develop a component?
  - a. If yes, which component did you develop?
8. Did you deliver activities in 2010?
  - a. If yes,:
    - i. What activities did you deliver?
    - ii. How often did you deliver your activity?
    - iii. What was the mode of delivery?
    - iv. How many sessions did you deliver?
    - v. How many participants were there per session?
    - vi. How did you track participation?
    - vii. At what locations were activities delivered?
    - viii. Were your activities delivered as planned?
      1. If not, what adjustments were made?
    - ix. Was staff made aware that activities were being or would be delivered?
    - x. How did you advertise the program?
    - xi. Were materials given out to participants?
      1. If yes, what materials were given?

- xii. Did you give incentives for participation?
  - 1. If yes, what types of incentives were given?
- xiii. Were the resources allocated to your program adequate for the delivery of services you planned?
  - 1. If not, what additional resources might have been helpful?

**APPENDIX D**  
**Emory University Institutional Review Board Exemption Letter**



**EMORY**  
UNIVERSITY

Institutional Review Board

---

October 7, 2011

**RE: Determination: No IRB Review Required**  
**Title: Program Evaluation of a Workplace Wellness Program**  
**PI: Kabrina Smith**

Dear Ms. Smith:

Thank you for requesting a determination from our office about the above-referenced project. Based on our review of the materials you provided, we have determined that it does not require IRB review because it does not meet the definition(s) of "research" or the definition of "clinical investigation" as set forth in Emory policies and procedures and federal rules, if applicable. Specifically, in this project, you will be conducting a program evaluation of Workplace Wellness.

This determination could be affected by substantive changes in the study design, subject populations, or identifiability of data. If the project changes in any substantive way, please contact our office for clarification.

Thank you for consulting the IRB.

Sincerely,

Andrea Goosen, MPH  
Research Protocol Analyst  
*This letter has been digitally signed*