Employee Health Promotion
Disease Prevention Guidebook

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Office of Public Health (10P3), Veterans Health Administration
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Executive Summary

Employee health promotion programs have been shown to be an effective method of improving the health of employees. In 2008 the Office of Public Health and Environmental Hazards funded the VHA Employee Health Promotion Disease Prevention (EHPDP) Program to develop a comprehensive program and to evaluate its effectiveness within the organization. The EHPDP program recognized the need to assist facilities in the development of standardized, effective employee health promotion services. As a result, a multidisciplinary task group created a functional guidebook to provide healthcare professionals with information and references appropriate for establishing and expanding EHPDP programs at individual facilities.

The objectives of this guidebook are to provide:

- Background, purpose, and justification for EHPDP programs;

- Guidance for EHPDP coaches and site facilitators on their roles and responsibilities;

- Recommendations on the formation and management of wellness committees;

- Standardized procedures for core program development;

- Guidance on the development and management of fitness centers;

- Standardized procedures for the establishment of tobacco cessation programs;

- Recommendations for healthy nutrition/weight management, physical activity, and stress management;

- Clarification on documentation and record-keeping requirements; and

- A concise bibliography of EHPDP references and directives.

This guidebook complements and clarifies 5 United States Code (U.S.C.) §7901(c), Health Service Programs, and is a compilation of the best available policies, procedures, and guidelines established to create a comprehensive EHPDP Program. Much of the information contained in this document has been vetted through the EHPDP pilot program and is generic enough to allow for local flexibility in using available resources and creativity to meet identified needs. Each facility should develop a policy that confirms the facility's commitment to support the health and wellness of its employees and to assign responsibility for the actions and decisions required to maintain this commitment. All EHPDP Programs should be consistent with the provisions of this guidebook.

As laws, regulations, directives, and evidence-based EHPDP practices develop and change, updates to this guidebook will be made electronically.

The Program Office, EHPDP (13D), Office of Public Health and Environmental Hazards, is responsible for maintaining this guidebook, including an annual review for accuracy, consistency with current policies and organizational structure, and appropriateness of content and completeness. Updates, revisions, and additions that are identified as necessary will be made following this review.

All policies, procedures, enclosures, and forms used in this printed guidebook are provided on the accompanying CD-ROM. Resources, Web sites, and links were current at the time of guidebook publication.

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Acknowledgements

How to Use This Guidebook

This guidebook is divided into 13 chapters.

Chapter 1: Program Development. This chapter provides background information on employee health promotion disease prevention (EHPDP) programs, including: major components, epidemiological basis, purpose, goals, scope of services, and legal authority within the federal government for program development. It also describes the Employee Wellness Committee and the roles and responsibilities of program staff.

Chapter 2: Setting Up a Program. This chapter describes the planning and implementation processes involved in the creation of employee health promotion programs. This includes how to write a business plan and workload documentation, as well as planning for evaluation and sustainability.

Chapter 3: Program Implementation. This chapter discusses the importance of branding and marketing the program, as well as how to launch a program.

Chapter 4: Special Needs. This chapter provides guidance on issues involving the provision of health promotion activities to population groups that may not be reached through conventional means.

Chapter 5: Wellness Coaching. This chapter discusses the roles, responsibilities, training needs, and challenges of a wellness coach. It also provides a template for coaching visits.

Chapter 6: Screening Tests and Biometrics. This chapter reviews the most common tests and biometrics that are likely to be used or brought to the attention of those coordinating health promotion programs.

Chapter 7: Physical Activity. This chapter describes the benefits of physical activity along with recommendations from the U.S. Department of Health and Human Services. It also provides guidance for the development of fitness programs, including fitness centers in the workplace.

Chapter 8: Tobacco Cessation. This chapter provides information on tobacco use and its health-related impact. It also provides guidance for the evaluation of tobacco use, tobacco addiction, and tobacco cessation counseling.

Chapter 9: Healthy Eating. This chapter discusses the importance of adopting a healthy diet and positive behaviors associated with food. It describes dietary guidelines, MyPlate, and how to set up and manage a nutrition program for employees. Topics include farmers markets, lunch and learns, and the MOVEmployee! Program.

Chapter 10: Stress Management. This chapter provides a background to the sources and results of workload stress and gives an overview of various stress management interventions.

Chapter 11: Motivational Interviewing (MI). The purpose of this chapter is to provide a brief introduction to MI. This is a technique of communication that can increase an individual's motivation for change and can be used to help employees achieve their health and wellness goals.

Chapter 12: Program Evaluation. This chapter simplifies the complex process of program evaluation, which is a systematic process to understand what a program does and how well the program does it. The purpose of program evaluation is to maintain or improve program quality and to ensure that future planning can be more evidence-based.

Chapter 13: Incentives. This chapter describes the purpose and limitations of incentives in an employee health promotion program within the federal workplace.

Note: Standards, directives, and policies referenced in this guidebook were current at the time of publication. Because standards, directives, and policies are revised on a regular basis, it is VA policy that unless specifically indicated, the most recent edition of each standard is to be followed.

References and Web site links were current at the time of publication.

Terms and Acronyms

Employee Health Promotion Disease Prevention Program – this term is often used synonymously with terms such as: Employee Health Promotion Program, Employee Wellness Program, Employee Health and Wellness Program, Employee Health Program, Employee Health Services Program, and Worksite Wellness Program.

Acronym	Definition
AAOHN	American Association of Occupational Health Nurses
ACC	Account Classification Code
ACE	American Council on Exercise
ACSM	American College of Sports Medicine
ADA	American Dietetic Association
AED	Automatic External Defibrillator
AFAA	Aerobics and Fitness Association of America
AHA	American Hospital Association
AHRQ	Agency for Healthcare Research and Quality
AIDS	Acquired Immune Deficiency Syndrome
ALA	Alpha-Linolenic Acid
ARNP	Advanced Registered Nurse Practitioner
ASISTS	Automated Safety Incident Surveillance and Tracking System
BCAA	Branched-Chain Amino Acids
BIA	Bioelectrical Impedance Analysis
BMI	Body Mass Index
BOC	Budget Object Code
BP	Blood Pressure
BRFSS	Behavioral Risk Factor Surveillance System
BV	Biological Value

Acronym	Definition
CBOC	Community Based Outpatient Clinic
CC	Cost Center
CDC	Centers for Disease Control and Prevention
CEOSH	VHA Center for Engineering & Occupational Safety and Health
COPD	Chronic Obstructive Pulmonary Disease
COTR	Contracting Officer's Technical Representative
CP	Control Point
CPR	Cardio-Pulmonary Resuscitation
CPRS	Computerized Patient Record System
CPT	Current Procedural Terminology
CR	Current Reality
CREW	Civility, Respect, and Engagement in the Workplace
DASH	Dietary Approaches to Stop Hypertension
DHA	Docosahexaenoic Acid
DM	Diabetes Management
DoD	Department of Defense
DR	Desired Reality
DSS	Decision Support System
E&M	Evaluation and Management
EAP	Employee Assistance Program
ECBP	Educational and Community Based Programs
EEO	Equal Employment Opportunity
EFA	Essential Fatty Acid
EHPDP	Employee Health Promotion Disease Prevention
EPA	Environmental Protection Agency

Acronym	Definition
ETS	Environmental Tobacco Smoke
F	Fahrenheit
FAQ	Frequently Asked Questions
FBI	Federal Bureau of Investigation
FCDM	Financial Clinical Data Mart
FCP	Fund Control Point
FDA	Food and Drug Administration
FECA	Federal Employees' Compensation Act
FEHB	Federal Employees Health Benefits
FMS	Facility Management Service
FMS	Financial Management System
FOBT	Fecal Occult Blood Test
FSA	Flexible Spending Accounts
FSS	Federal Supply Schedule
FTCA	Federal Torts Claims Act
FTEE	Full-Time Employee Equivalent
FY	Fiscal Year
GAO	Government Accountability Office
GI	Gastrointestinal
GINA	Genetic Information Nondiscrimination Act of 2009
GROW	Goal, Reality, Options, What's Next
GSA	General Services Administration
HCM	Healthcare Cost Management
HDL	High-Density Lipoprotein
HDS	Heart Disease and Stroke
HHS	Health and Human Services

Acronym	Definition
HIV	Human Immunodeficiency Virus
HM	Her Majesty's
HMRC	Health Management Research Center
HP	Healthy People
HPDP	Health Promotion and Disease Prevention
HPQ	Health and Performance Questionnaire
HRA	Health Risk Appraisal
HRSA	Health Resources and Services Administration
IARC	International Agency for Research on Cancer
ICD-9	International Classification of Disease – Ninth Revision
ICF	International Coaching Federation
IFCAP	Integrated Funds Control, Accounting, and Procurement
IRB	Institutional Review Board
IRMS	Information Resource Management Systems
IT	Information Technology
J&A	Justification and Approval
JADA	Journal of the American Dietetic Association
lb	Pound
LDL	Low-Density Lipoprotein
LEAN	Leading Employees to Activity and Nutrition
MBSR	Mindfulness-Based Stress Reduction
mg	Milligram
Mg/dL	Milligrams per Deciliter
MHV	My HealtheVet
MI	Motivational Interviewing
mm	Millimeter

Acronym	Definition
mmHg	Millimeter of Mercury
MMWR	Morbidity and Mortality Weekly Report
MRI	Magnetic Resonance Imaging
MSDS	Material Safety Data Sheet
NAASO	North American Association for the Study of Obesity
NAHIC	National Adolescent Health Information Center
NCOD	National Center for Organizational Development
NCP	National Center for Health Promotion and Disease Prevention
NHANES	National Health and Nutrition Examination Survey
NHLBI	National Heart, Lung, and Blood Institute
NIH	National Institutes of Health
NIOSH	National Institute for Occupational Safety and Health
NPCD	National Patient Care Database
NRT	Nicotine Replacement Therapy
NWS	Nutrition and Weight Status
OBE	Overweight and Obesity
OGC	Office of General Counsel
OHRS	Occupational Health Record-Keeping System
OLAP	Online Analytical Processing
OMB	Office of Management and Budget
OPM	Office of Personnel Management
OSH	Occupational Safety and Health
OSH-MIS	Occupational Safety and Health Management Information System
OSHA	Occupational Safety and Health Administration

Acronym	Definition
OT	Occupational Therapy
OTC	Over-the-Counter
OWCP	Office of Workers' Compensation Programs
PAF	Physical Activity and Fitness
PAID	Paid Accounting Integrated Data
PAR-Q	Physical Activity Readiness Questionnaire
PBM	Pharmacy Benefits Management
PDF	Portable Document Format
PERT	Program Evaluation Review Technique
PFP	Physical Fitness Program
PMDB	Prevention and Management of Destructive Behavior
PMI	Project Management Institute
PT	Physical Therapy
PUFA	Polyunsaturated Fatty Acid
q	Quaque (Latin for Every)
QTR	Quarter
ROI	Return on Investment
ROM	Range-of-Motion
RT	Respiratory Therapy
SDVOSB	Service-Disabled Veteran-Owned Small Business
SIDS	Sudden Infant Death Syndrome
SOP	Standard Operating Procedure
SOW	Scope of Work
SQL	Structured Query Language
SSA	Source Selection Authority
TU	Tobacco Use

Acronym	Definition
U.S.	United States
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
U.S.C.	United States Code
USDA	United States Department of Agriculture
USPSTF	United States Preventive Services Task Force
VA	Department of Veterans Affairs
VAMC	Department of Veterans Affairs Medical Center
VCS	Veterans Canteen Service
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
VISTA	Veterans Health Information Systems and Technology Architecture
VLDL	Very Low-Density Lipoprotein
VSSC	VHA Support Service Center
WC	Workers' Compensation
WELCOA	Wellness Councils of America
WIN	Wellness is Now
WISCORE^{SM}	Wellness Impact Scorecard
WLQ	Work Limitations Questionnaire
WPAI	Work Productivity and Activity Impairment
WSNA	Washington State Nurses Association

Program Development

1.1. Overview

1.1.1. Legal Authority

Employee health promotion programs are authorized under 5 United States Code (U.S.C.) §7901. In addition, clinic visits to enhance the employee's personal health are authorized by Veterans Administration (VA) Handbook 5019, Occupational Health Services. This is in keeping with 5 U.S.C. §7901(a), which states that the head of each agency of the Government of the United States may establish, within the limits of appropriations available, a health promotion program to promote and maintain the physical and mental fitness of employees under their jurisdiction.

Over the years, there have been several opinions from General Counsel to support different components of an employee health promotion program. The VA's Office of General Counsel (OGC) has provided an opinion that supports the development of fitness centers. In addition, the Government Accountability Office (GAO)/OGC-91-5 Appropriations Law-Volume I, Chapter 4, 13.e. states "Subsequent to 64 Comp. Gen. 835, the Office of Personnel Management revised its regulations to include physical fitness programs and facilities as permissible preventive health services".

In the Office of Personnel Management (OPM) Employee Handbook, the following reasons are listed for creating employee health services:

- Help employees understand their risks for disease;

- Help employees obtain preventive health services;

- Reduce the risk of premature morbidity, mortality, and disability;

- Foster healthy lifestyles; and

- Support a healthy working environment.

A decision by the Comptroller General of the United States (B-231543 dated February 3, 1989) held that under 5 U.S.C. §7901, federal agencies have the authority to utilize appropriated funds to pay the costs incurred by employees participating in agency-sponsored smoking cessation programs. The decision held that, because smoking is a major contributing cause of illnesses such as cancer, coronary disease, and emphysema, smoking cessation programs are "preventive" in nature and authorized under 5 U.S.C. §7901(c)(4). This opinion has been upheld by OGC.

1.1.2. Vision

The vision of the Employee Health Promotion Disease Prevention Program (EHPDP) is:

Empowering employees with knowledge, skills, and tools in order to embrace and sustain a personal and organizational culture of health and wellness, and inspire Veterans to live healthier lifestyles.

1.1.3. Mission

The mission of the EHPDP is:

Provide all Veterans Health Administration (VHA) staff with opportunities and resources to nurture the body, mind, and spirit, and create awareness of healthy and positive lifestyle choices in order to reduce the incidence of preventable illness and injury. Create a culture of health that makes VHA a more gratifying place to work, promotes the wellbeing of our workers, patients, and visitors, and reinforces the importance of our service.

1.1.4. Overarching Goals

Overarching goals for the EHPDP include:

- Attain a decrease in the incidence of preventable disease, disability, injury, and premature death;

- Achieve health equity, eliminate disparities, and improve the health of all employee groups; and

- Create social and physical environments that promote good health for all employees.

1.1.5. Goals

Goals for the EHPDP include:

- Identify nationwide health improvement priorities for all VHA employees;

- Enhance employee awareness and understanding of the determinants of health, disease, and disability;

- Increase the opportunities for progress towards better health;

- Provide measurable objectives and goals that are applicable at the national, state, and local levels;

- Engage management, unions, and individual employees to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge; and

- Identify critical research, evaluation, and data collection needs.

1.1.6. Purpose

This guidebook was written to improve and standardize the development, implementation, and evaluation of employee health promotion programs within the VHA medical system. The guidebook provides health professionals and administrators with information and references appropriate for developing employee health promotion programs at individual facilities. By providing a review of best practices, this guidebook will help ensure that resources are used in an optimal fashion. Many of the examples used were taken from programs that have been developed over the past 2 years in VHA's pilot EHPDP Program in Veterans Integrated Service Network (VISN) 23 and elsewhere in the VHA network.

Each facility should develop a health promotion policy that confirms the facility's commitment to maintaining and enhancing the well-being of all employees. All employee health promotion programs should be consistent with the provisions of this guidebook.

1.1.7. Objectives

This guidebook provides:

- Guidance for Employee Wellness staff on their roles and responsibilities as providers of EHPDP;

- Clarification of VA directives pertinent to employee health promotion programs; and

- A bibliography of employee health promotion resources and references.

1.2. Healthy People (HP) 2020 and a Comprehensive Worksite Program

This section looks at the HP 2020 objectives for worksite wellness and describes a comprehensive worksite program as well as the epidemiological basis for components of a comprehensive worksite program.

1.2.1. HP: A National Foundation for VA Objectives

Every 10 years, the U.S. Department of Health and Human Services (HHS) leverages scientific insights and lessons learned from the past decade, along with new knowledge of current data, trends, and innovations. HP 2020 reflects assessments of major risks to health and wellness, changing public health priorities, and emerging issues related to the nation's health preparedness and disease prevention.

HP provides science-based, 10-year national objectives for promoting health and preventing disease. Since 1979, HP has set and monitored national health objectives to meet a broad range of health needs, encouraged collaborations across sectors, guided individuals toward making informed health decisions, and measured the impact of prevention activity. Currently, HP 2020 is leading the way to achieve increased quality and years of healthy life and the elimination of health disparities (U.S. HHS, 2009).

The vision, mission, and overarching goals of HP 2020 provide structure and guidance for achieving set objectives. While general in nature, they offer specific areas of emphasis where action must be taken if the United States is to achieve better health by the year 2020. Developed under the leadership of a Federal Interagency Workgroup, the HP 2020 framework is the product of an exhaustive, collaborative process among HHS and other federal agencies, public stakeholders, and the HHS Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020.

HP provides a framework to understand Wellness is Now (WIN) Programs at VHA. WIN VA started as a pilot program within VHA that was initiated as a systematic effort at EHPDP. VHA plans to roll this program out nationally after pilot evaluation. Each of the major WIN objectives is addressed in HP 2020. The objectives for HP are listed in areas addressed by VHA's WIN Program (U.S. HHS, 2009). It is recommended that EHPDP Programs in VHA utilize this guidebook as a framework.

1.2.2. HP 2020 Objectives for Worksite Wellness

The following educational and community based programs (ECBP) objectives and others are available online at:
http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=11.

ECBP-8: (Developmental) Increase the proportion of worksites that offer an employee health promotion program to their employees.

- Worksites with fewer than 50 employees;

- Worksites with 50 or more employees;

- Worksites with 50 to 99 employees;

- Worksites with 100 to 249 employees;

- Worksites with 250 to 749 employees; and

- Worksites with 750 or more employees.

ECBP-9: (Developmental) Increase the proportion of employees who participate in employer-sponsored health promotion activities.

1.2.2.a. Obesity

Problem overview: The prevalence of obesity in the United States has doubled in the past two decades. Even modest weight loss (e.g., 10 pounds) has positive health benefits, and the prevention of further weight gain is very important.

One of the fastest growing segments of the population is that with a body mass index (BMI) of at least 30.

BMI categories:

- Under weight: BMI is less than 18.5;

- Normal weight: BMI is 18.5 through 24.9;

- Overweight: BMI is 25 through 29.9; and

- Obese: BMI is over 30.

Although the prevalence of obesity has more than doubled since 1980, the prevalence of overweight has remained stable over the same time period. Using measured heights and weights, data indicate that an estimated 32.7 percent of U.S. adults 20 years and older are overweight, 34.3 percent are obese, and 5.9 percent are extremely obese [Centers for Disease Control and Prevention (CDC), 2008].

A high prevalence of overweight and obesity is of great public health concern because excess body fat leads to a higher risk for premature death, Type 2 diabetes, hypertension, dyslipidemia, cardiovascular disease, stroke, gall bladder disease, respiratory dysfunction, gout, osteoarthritis, and some types of cancer (e.g., endometrial, breast, and colon).

HP 2020 Objectives

The following nutrition and weight status (NWS) objectives, in addition to other objectives, are available online at:
http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=29.

Table 1-1: NWS-8: Increase the Proportion of Adults Who Are at a Healthy Weight.

Baseline	30.8 percent of persons aged 20 years and over were at a healthy weight in 2005-2008 (age adjusted to the year 2000 standard population).
Target	33.9 percent
Target-Setting Method	10 percent improvement.

Table 1-2: NWS-9: Reduce the Proportion of Adults Who Are Obese.

Baseline	34 percent of persons aged 20 years and over were obese in 2005-2008 (age adjusted to the year 2000 standard population).
Target	30.6 percent
Target-Setting Method	10 percent improvement.

NWS-11: (Developmental) Prevent inappropriate weight gain in youth and adults.

- Children aged 2 to 5 years;

- Children aged 6 to 11 years;

- Adolescents aged 12 to 19 years;

- Children and adolescents aged 2 to 19 years; and

- Adults aged 20 years and older.

1.2.2.b. Hypertension

Problem overview: The latest health survey data found that 29 percent of all U.S. adults 18 years of age and older were hypertensive and 28 percent were pre-hypertensive.

- Hypertension is present when systolic blood pressure is 140 millimeters of mercury (mmHg) or greater or diastolic blood pressure is 90 mmHg or greater.

- Pre-hypertension is present when systolic blood pressure is 120-139 mmHg or diastolic blood pressure is 80-89 mmHg (Ostchega et al., 2008).

Hypertension is a public health concern because it is the most common risk factor for heart disease and stroke. As the heart pumps against the increased blood pressure, it has to work harder. Over time this causes the heart muscle to thicken, which can lead to heart failure. High blood pressure also contributes to the thickening of the blood vessel walls, increasing the risk of heart attacks and strokes [National Institutes of Health (NIH), 2009].

There are often no noticeable warning signs or symptoms, and many people with high blood pressure do not know that they have hypertension. Because hypertension is a major risk factor for heart disease and stroke, which are the first and third leading causes of death in the United States, it is important that all

individuals be screened regularly. Hypertension or pre-hypertension can be controlled with lifestyle modifications such as exercise and a healthy diet, or medications (CDC, 2007).

HP 2020 Objectives

The following heart disease and stroke (HDS) objectives, in addition to other objectives, are available online at: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=21.

Table 1-3: HDS-12: Increase the Proportion of Adults with Hypertension Whose Blood Pressure is Under Control.

Baseline	43.7 percent of adults aged 18 years and older with high blood pressure/hypertension had it under control in 2005-2008 (age adjusted to the year 2000 standard population).
Target	61.2 percent
Target-Setting Method	Projection (40 percent improvement).

Table 1-4: HDS-4: Increase the Proportion of Adults Who Have Had Their Blood Pressure Measured Within the Preceding 2 Years and Can State Whether Their Blood Pressure Was Normal or High.

Baseline	92.9 percent of adults aged 18 years and older had their blood pressure measured within the preceding 2 years and could state whether it was normal or high in 2008 (age adjusted to the year 2000 standard population).
Target	94.9 percent
Target-Setting Method	2 percent improvement.

Table 1-5: HDS-5.1: Reduce the Proportion of Adults With Hypertension.

Baseline	29.9 percent of adults aged 18 years and older had high blood pressure/hypertension in 2005-2008 (age adjusted to the year 2000 standard population).
Target	26.9 percent
Target-Setting Method	10 percent improvement.

1.2.2.c. Cholesterol

Problem overview: High blood cholesterol is a major risk factor for heart disease, the leading cause of death in the United States. Cholesterol can build up on the artery walls of a person's body and this is known as plaque. Over time, the build-up can cause the arteries to become narrow and less oxygen-rich blood can pass through. When the arteries that carry blood to the heart are affected, coronary artery disease can result, and an individual may have chest pain. A heart attack may occur when a coronary artery becomes blocked (CDC, 2007). Currently, about 17 percent of adult Americans have high blood cholesterol (CDC, 2009).

High blood cholesterol does not produce symptoms, so many people may not know that their blood cholesterol is too high. A blood test is the only way to detect high cholesterol. High cholesterol is one of the major controllable risk factors for coronary heart disease, heart attack, and stroke. Cholesterol can be lowered through lifestyle changes such as eating a nutritious diet, maintaining a healthy weight, exercising, stopping smoking, and/or taking medications (CDC, 2007).

HP 2020 Objectives

The following HDS objectives, in addition to other objectives, are available online at:
http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=21.

Table 1-6: HDS-7: Reduce the Proportion of Adults With High Total Blood Cholesterol Levels.

Baseline	15 percent of adults aged 20 years and older had total blood cholesterol levels of 240 milligrams per deciliter (mg/dL) or greater in 2005-2008 (age adjusted to the year 2000 standard population).
Target	13.5 percent
Target-Setting Method	10 percent improvement.

Table 1-7: HDS-8: Reduce the Mean Total Blood Cholesterol Levels Among Adults.

Baseline	197.7 mg/dL was the mean total blood cholesterol level for adults aged 20 years and older in 2005-2008 (age adjusted to the year 2000 standard population).
Target	177.9 mg/dL (mean)
Target-Setting Method	10 percent improvement.

Table 1-8: HDS-6: Increase the Proportion of Adults Who Have Had Their Blood Cholesterol Checked Within the Preceding 5 Years.

Baseline	74.6 percent of adults aged 18 years and older had their blood cholesterol checked within the preceding 5 years in 2008 (age adjusted to the year 2000 standard population).
Target	82.1 percent
Target-Setting Method	10 percent improvement.

1.2.2.d. Stress

Problem overview: Stress response describes the condition caused by a person's reaction to physical, chemical, emotional, or environmental factors.

Stress can refer to physical effort and mental tension. It is hard to measure emotional or psychological stress. All people feel stress, but they feel it in different amounts and react to it in different ways [American Hospital Association (AHA), 2009].

One of the major stressors for many people is their job. In 2009, the National Institute for Occupational Safety and Health (NIOSH, 2009) found:

- 40 percent of workers reported their job was very or extremely stressful;

- 25 percent view their jobs as the number one stressor in their lives;

- 75 percent of employees believe that workers have more on-the-job stress than a generation ago;

- 29 percent of workers felt quite a bit or extremely stressed at work;

- 26 percent of workers said they were "often or very often burned out or stressed by their work"; and

- Job stress is more strongly associated with health complaints than financial or family problems (NIOSH, 2009).

Stress is a normal part of life. In small quantities, stress is good -- it can motivate people and help them be more productive. However, too much stress, or a strong response to stress can set individuals up for adverse health events. Identifying stressors and learning how to manage stress through exercise, diet, social support, and relaxation are steps individuals can take to reduce the stress in their lives (NIH, 2008).

HP 2020 Objectives

The following occupational safety and health (OSH) objectives, in addition to other objectives, are available online at:
http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=30.

OSH-9: (Developmental) Increase the proportion of employees who have access to workplace programs that prevent or reduce employee stress.

1.2.2.e. Tobacco Use
Problem overview: Tobacco use is the single most preventable cause of disease, disability, and death in the United States. Each year, an estimated 443,000 people die prematurely from conditions related to smoking or exposure to secondhand smoke, and another 8.6 million have a serious illness caused by smoking. More deaths are caused each year by tobacco use than by human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined.

Approximately 43.4 million U.S. adults smoke cigarettes. Smokeless tobacco, cigars, and pipes also have deadly consequences, including lung, larynx, esophageal, and oral cancers (CDC, 2009).

Evidence-based, statewide tobacco control programs have been shown to reduce smoking rates, tobacco-related deaths, and diseases caused by smoking. Research has documented the effectiveness of laws and policies to protect the public from exposure to secondhand smoke, promote cessation, and prevent initiation when they are applied in a comprehensive way. For example, states can increase the unit price of tobacco products; implement smoking bans through policies, regulations, and laws; provide insurance coverage of tobacco use treatment; and limit minors' access to tobacco products (CDC, 2009). In the last 10 years, programs such as those listed above have helped reduce the prevalence of current cigarette smoking among adults from 24 percent in 1998 to 21 percent in 2008 [Morbidity and Mortality Weekly Report (MMWR), 2009].

HP 2020 Objectives

The following tobacco use (TU) objectives, in addition to other objectives, are available online at: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topic id=41.

Table 1-9: TU-1: Reduce Tobacco Use by Adults.

Baseline	20.6 percent of adults aged 18 years and older were current cigarette smokers in 2008 (age adjusted to the year 2000 standard population).
Target	12 percent
Target-Setting Method	Retain HP 2010 target of 12 percent.

Table 1-10: TU-4: Increase Smoking Cessation Attempts by Adult Smokers.

Baseline	48.3 percent of adult smokers aged 18 years and older attempted to stop smoking in the past 12 months in 2008 (age adjusted to the year 2000 standard population).
Target	80 percent
Target-Setting Method	Retain HP 2010 target of 80 percent.

Table 1-11: TU-5: Increase Recent Smoking Cessation Success by Adult Smokers.

Baseline	6 percent of adult smokers aged 18 years and older last smoked 6 months to 1 year ago in 2008 (age adjusted to the year 2000 standard population).
Target	8 percent
Target-Setting Method	2 percent improvement.

Table1-12: TU-6: Increase Smoking Cessation During Pregnancy.

Baseline	11.3 percent of women aged 18 to 49 years (who reported having a live birth in the past 5 years and smoking at any time during their pregnancy with their last child) stopped smoking during the first trimester of their pregnancy and stayed off cigarettes for the rest of their pregnancy in 2005.
Target	30 percent
Target-Setting Method	Retain HP 2010 target.

Table 1-13: TU-9.1: Increase Tobacco Screening in Office-Based Ambulatory Care Settings.

Baseline	62.8 percent of office-based ambulatory care setting visits among patients aged 12 years and older had tobacco screening in 2007.
Target	69.1 percent
Target-Setting Method	10 percent improvement.

Table 1-14: TU-10.1: Increase Tobacco Cessation Counseling in Office-Based Ambulatory Care Settings.

Baseline	19.3 percent of visits to an office-based ambulatory care setting among current tobacco users aged 12 years and older had tobacco cessation counseling ordered or provided during that visit in 2007.
Target	21.2 percent
Target-Setting Method	10 percent improvement.

Table 1-15: TU-12: Increase the Proportion of Persons Covered by Indoor Worksite Policies That Prohibit Smoking.

Baseline	75.3 percent of the employed population aged 18 years and older (who worked in indoor public workplaces) was covered by indoor worksite policies that prohibited smoking in 2006-2007.
Target	100 percent
Target-Setting Method	Projected trend data.

1.2.2.f. Fitness/Physical Activity

Problem overview: Regular physical activity is one of the most important things a person can do for their health because it has the following benefits:

- Controls weight;

- Reduces the risk of cardiovascular disease, Type 2 diabetes, metabolic syndrome, and some cancers;

- Strengthens bones and muscles;

- Improves mental health and mood;

- Improves the ability to do daily activities and prevent falls in the elderly; and

- Increases the likelihood of living longer (CDC, 2008).

Despite the clear health benefits of regular physical activity, over half of U.S. adults do not engage in physical activity at levels consistent with public health recommendations. In 2007, 24 percent did not engage in any level of leisure time physical activity (CDC, 2008). The most common reasons adults give to not exercise include:

- Insufficient time;

- Lack of motivation;

- Don't enjoy exercise;

- Inconvenience;

- Lack of confidence;

- Fear of injury;

- Inability to manage their exercise goals;

- No social support; and

- No access to places to exercise.

Understanding these common barriers to physical activity and creating strategies to overcome them will help employee wellness staff and/or health care providers encourage people to make physical activity a part of daily life (CDC, 2008).

HP 2020 Objectives

The following physical activity and fitness (PAF) objectives, in addition to other objectives, are available online at: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=33.

Table 1-16: PA-1: Reduce the Proportion of Adults Who Engage in No Leisure-Time Physical Activity.

Baseline	36.2 percent of adults engaged in no leisure-time physical activity in 2008.
Target	32.6 percent
Target-Setting Method	10 percent improvement.

PA-2: Increase the proportion of adults who meet current federal physical activity guidelines for aerobic physical activity and for muscle-strengthening activity.

Table 1-17: PA-2.1: Increase the Proportion of Adults Who Engage in Aerobic Physical Activity of at Least Moderate Intensity for at Least 150 Minutes per Week, or 75 Minutes per Week of Vigorous Intensity, or an Equivalent Combination.

Baseline	43.5 percent of adults engaged in aerobic physical activity of at least moderate intensity for at least 150 minutes per week, or 75 minutes per week of vigorous intensity, or an equivalent combination in 2008.
Target	47.9 percent
Target-Setting Method	10 percent improvement.

Table 1-18: PA-2.3: Increase the Proportion of Adults Who Perform Muscle-Strengthening Activities on 2 or More Days of the Week.

Baseline	21.9 percent of adults performed muscle-strengthening activities on 2 or more days of the week in 2008.
Target	24.1 percent
Target-Setting Method	10 percent improvement.

Table 1-19: PA-2.4: Increase the Proportion of Adults Who Meet the Objectives for Aerobic Physical Activity and for Muscle-Strengthening Activity.

Baseline	18.2 percent of adults met the objectives for aerobic physical activity and for muscle-strengthening activity in 2008.
Target	20.1 percent
Target-Setting Method	10 percent improvement.

PA-12: (Developmental) Increase the proportion of employed adults who have access to and participate in employer-based exercise facilities and exercise programs.

PA-13: (Developmental) Increase the proportion of trips made by walking.

PA-14: (Developmental) Increase the proportion of trips made by bicycling.

1.2.2.g. Dietary Behavior

Problem overview: Health professionals recognize the benefits associated with a healthful eating plan based on the Dietary Guidelines for Americans, including decreased risk of:

- Chronic diseases such as Type 2 diabetes, hypertension, and certain cancers;

- Overweight and obesity; and

- Micronutrient deficiencies.

National data indicates that adults in the United States have not achieved national objectives for fruit and vegetable consumption over the last decade. While fruit intake has remained the same, vegetable consumption has dropped in the last decade according to national health survey data (MMWR, 2007).

Only 25 percent of American adults are eating the 5 or more recommended servings of fruits and vegetables daily. This is a public health problem because fruits, vegetables, whole grains, and low-fat dairy products are related to high dietary quality and reduced caloric intake when they replace energy-dense, nutrient-poor foods. Broader health care interventions are needed to increase individual awareness of the value of fruits and vegetables and to change individual eating behaviors (Blanck et al., 2008).

HP 2020 Objectives

The following NWS objectives, in addition to other objectives, are available online at:
http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=29.

Table 1-20: NWS-14: Increase the Contribution of Fruits to the Diets of the Population Aged 2 Years and Older.

Baseline	0.5 cup equivalents of fruits per 1,000 calories were the mean daily intake by persons aged 2 years and older in 2001–2004.
Target	0.9 cup equivalents per 1,000 calories
Target-Setting Method	Evidence-based approach. (Considered the baseline in relation to 2005 Dietary Guidelines for Americans [DGA] recommendations, past trends and potentially achievable shift in the usual intake distribution, and applicability of the target to subpopulations.)

Table 1-21: NWS-15: Increase the Variety and Contribution of Vegetables to the Diets of the Population Aged 2 Years and Older.

Baseline	0.8 cup equivalents of total vegetables per 1,000 calories was the mean daily intake by persons aged 2 years and older in 2001–2004 (age adjusted to the year 2000 standard population).
Target	1.1 cup equivalents per 1,000 calories
Target-Setting Method	Evidence-based approach. (Considered the baseline in relation to 2005 DGA recommendations, past trends and potentially achievable shift in the usual intake distribution, and applicability of the target to subpopulations.)

Table 1-22: NWS-16: Increase the Contribution of Whole Grains to the Diets of the Population Aged 2 Years and Older.

Baseline	0.3 ounce equivalents of whole grains per 1,000 calories was the mean daily intake by persons aged 2 years and older in 2001–2004 (age adjusted to the year 2000 standard population).
Target	0.6 ounce equivalents per 1,000 calories
Target-Setting Method	Evidence-based approach. (Considered the baseline in relation to 2005 DGA recommendations, past trends and potentially achievable shift in the usual intake distribution, and applicability of the target to subpopulations.)

Table 1-23: NWS-18: Reduce Consumption of Saturated Fat in the Population Aged 2 Years and Older.

Baseline	11.3 percent was the mean percentage of total daily calorie intake provided by saturated fat for the population aged 2 years and older in 2003–2006 (age adjusted to the year 2000 standard population).
Target	9.5 percent
Target-Setting Method	Evidence-based approach. (Considered the baseline in relation to 2005 DGA recommendation, past trends and potentially achievable shift in the usual intake distribution, and applicability of the target to subpopulations.)

NWS-7: (Developmental) Increase the proportion of worksites that offer nutrition or weight management classes or counseling.

1.2.3. Epidemiological Basis for Employee Health Promotion Programs

According to Brissette et al., (2008), "Worksite policy and environmental supports that promote physical activity, healthy eating, stress management, and preventive health screenings can contribute to the prevention of cardiovascular disease and lower employer costs." Properly designed and implemented, worksite health promotion programs have the capacity to reach a large segment of the working population.

Overall, there are two methods of worksite health promotion. These are not mutually exclusive and are likely to be complementary. The first is the promotion of worksite policies and environmental changes that promote healthier behaviors. These may include such things as a smoke-free workplace, healthy food menus, and increased opportunities for physical activity. The second is the development of employee health promotion disease prevention programs (EHPDP). This may include such things as cholesterol control programs, nicotine replacement therapy, health coaching, stress management, and/or blood pressure control.

The evidence that prevention works is consistent and strong. However, best practices are an important aspect of all prevention programs. Accordingly, it is important to understand two things. First, what evidence supports different health promotion activities? Second, how strong is the evidence that employee health promotion programs are effective?

It may be that chronic diseases can be controlled using carefully designed interventions; however, it is important that methods be translated into the worksite in an effective manner. As noted by NIOSH, translation focuses on the transfer of research findings, technologies, and information "into effective prevention practices and products that are adopted in the workplace" (NIOSH, 2009).

The need for effective tools and guidance has resulted in the development of a large number of guidelines for employee health promotion programs.

The challenge faced by health promotion efforts is succinctly summarized in a report from the CDC. The report notes: "The epidemic of heart disease and stroke can be expected to continue, with an increasing burden and widening disparities, unless unprecedented public health efforts are mounted to arrest and reverse it. This challenge will test the ability of public health institutions at all levels to fulfill their obligation to protect society against this rising epidemic" (CDC, 2009).

Regardless of the number of available guidelines, there is going to be some variation in the implementation of best practices between different locations. Within the VHA system, some hospitals and clinics are large and others are small. The availability of resources and facility support may vary between institutions. Thus, while there are best practice guidelines, these are meant as tools to facilitate program implementation on a case-by-case basis in a manner that is likely to optimize program success.

In order to provide a background on the efficacy of health promotion, this section will review evidence from two perspectives. The first is that problem-specific interventions have a beneficial impact, and the second is an overview of the benefits from employee health promotion programs. The medical and epidemiological evidence in both areas is extensive and a complete review is beyond the scope of this guidebook. Rather, it will provide the reader with a working knowledge of the topic areas.

1.2.4. Components of a Comprehensive Worksite Wellness Program

It is unlikely that any one single component of a worksite wellness program will be responsible for the positive health outcomes of all staff members. To attain desired program goals, it is necessary to have a comprehensive and integrated approach that impacts on workers through numerous channels.

The following elements of a comprehensive worksite wellness program as defined by HP 2010 are available online at: http://opm.gov/Employment_and_Benefits/WorkLife/HealthWellness/wellnessresources/worksitewellnessprogram.asp#HE#HE.

- Health education;

- Supportive social and physical work environments;

- Integration of the Worksite Wellness Program into the organizational structure;

- Linkages with related programs such as the Employee Assistance Program (EAP); and

- Screening programs.

1.2.4.a. Health Education

Examples of programs and services include:

- Educational sessions such as seminars, classes, and lectures;

- Newsletters;

- Health education or health promotion literature;

- Web-based information or resources; and

- Safety information and training programs (personal and work related).

1.2.4.b. Supportive Environments

http://www.opm.gov/Employment_and_Benefits/WorkLife/HealthWellness/wellnessresources/worksitewellnessprogram.asp#SSPE#SSPE

Supportive Social Work Environments

Examples of programs and services include:

- Health fairs;

- Immunization (seasonal influenza campaigns and availability of other adult immunizations);

- Walking and running groups;

- Exercise and fitness classes or groups;

- Incentives;

- Commercial fitness membership (i.e., group discount);

- Chronic disease management;

- Individual coaching;

- Job-related ergonomics programs;

- Tobacco cessation policies; and

- One-on-one lactation support services.

See Enclosure 1, Outcome Measures for the Supportive Environment, for a checklist.

Supportive Physical Work Environment

- Availability of healthy food choices in the cafeteria and vending machines;

- Availability of microwave and refrigeration for personal food;

- Shower facilities;

- Locker rooms;

- Bike racks or bike storage;

- On-site fitness facilities;

- Walking paths;

- Safe/attractive stairwells; and

- Lactation room.

See Enclosure 2, Supports for Healthy Food Choices and Data Points, for additional information and data points.

1.2.4.c. Integration of Worksite Wellness Program into Organizational Structure

http://www.opm.gov/Employment_and_Benefits/WorkLife/HealthWellness/wellnessresources/worksitewellnessprogram.asp#IWWPOS#IWWPOS

- Employee wellness policies;

- Employee Wellness Committee;

- Employee wellness staff;

- Development of a culture of health through promotion of the program and leadership example;

- Leadership sponsorship of fitness challenges, incentives, and competitions;

- Promotion of healthy meetings;

- Complaints and requests process for employees;

- Management and supervisor support;

- Availability of duty time for participation in wellness activities;

- Support of flexible and/or alternate work schedules;

- Authorized time off for special agency-sponsored physical activity events such as a fitness facility orientation, an agency fun-run, or fitness month activities;

- OSH Committees; and

- Established reporting structure for employee wellness to senior leadership.

See [Enclosure 3, Outcome Measures for Worksite Wellness Program Integration](#), for a checklist.

1.2.4.d. Linkages with Related Programs

http://www.opm.gov/Employment_and_Benefits/WorkLife/HealthWellness/wellnessresources/worksitewellnessprogram.asp#LRP#LRP

- Establish referral patterns to EAP;

- Establish linkage with Federal Employees Health Benefits (FEHB);

- Availability and linkage to WorkLife programs such as child-care subsidies, carpool subsidies, perks card; and

- Integration with traditional OSH programs.

See [Enclosure 4, Outcome Measures for Linkage with Related Programs](#), for a checklist.

1.2.4.e. Screening Programs

Examples of programs and services may include:

- Health risk appraisal (HRA);

- Mental health screenings;

- Blood pressure checks;

- Diabetes screening;

- Substance abuse screening;

- Mammography;

- Stress screening; and

- Cholesterol screening.

1.3. Organization of EHPDP Programs

1.3.1. Scope of Services

Employee health promotion programs are intended to help employees make lifestyle changes that will reduce their risk of injury and improve their overall health. These programs are designed to promote nutritious diets, provide opportunities for more physical activity, help to quit tobacco use, and assist with the management of stress. The primary method used is to improve employee knowledge concerning healthy living assisted by the provision of, and opportunities for, employees to participate in healthy behaviors.

All programs and services related to employee health promotion will be provided by staff or volunteers qualified to deliver the material or services. For example, smoking cessation programs will be provided by individuals who have been certified by organizations utilizing validated, standardized protocols, such as the American Lung Association.

Employee health promotion programs are not meant to replace health insurance, a primary care provider, or a health care clinic. They are not designed to provide care coordination, chronic disease management, or acute medical care except when associated with employment-related health issues or injuries. While there is evidence that family support and involvement can be a deciding factor in whether or not a behavior change is successful, there is no legal authority that allows provision of services to family members.

The use of related employee data is crucial for developing, evaluating, and making appropriate changes to employee health promotion programs. It is important to assure employees that their information is confidential and their supervisor will not be able to see any of their individual health information. Only aggregate reports of the overall data results from health screenings, sick leave information, workers' compensation claims, attendance and participation rates, survey data, and health risk assessments should be provided to upper management. All information will be confidential, secure, and cannot be used for any personnel actions.

1.3.2. Support for Employee Health Promotion Programs

Research has shown that companies who develop a well-informed, health-conscious workforce can lower costs, reduce absenteeism, and raise productivity on the job. This is because healthy workers have lower health care expenses, fewer work-related injuries, fewer sick days, and greater productivity.

The American Journal of Preventive Medicine published a study in 2005 suggesting that employee health promotion programs may be the best way to keep health care costs down and increase employee productivity. Their study claimed a $3 to $4 return for every $1 invested in employee health and wellness.

Their study indicates that educating individuals and promoting the advantages of a healthy lifestyle could mean huge financial and other benefits. Further, if employers can be encouraged by rewarding measurable outcomes and implementing thoughtful, progressive wellness programs that were accepted and utilized by employees, an affordable and effective version of health care reform would be achieved (Maston Koffman et al., 2005). Baicker et al. (2010) conducted a meta-analysis on the costs and savings associated with employer-based wellness and found similar results.

The workplace is an ideal setting for health promotion activities because of the amount of time that people spend at their jobs. Most major U.S. companies understand that a healthy work force is their most valuable economic asset and sponsor some form of health promotion for their employees. They have made a commitment to encourage healthy behaviors by creating a culture of wellness within their organization.

VA leadership recognizes that the health and well-being of the federal workforce is essential to providing Veterans the care and benefits that they have earned. "A healthier workforce means better morale, increased efficiency, reduced absenteeism, and lower health care costs. This translates into better care and services for the nation's Veterans" (Sepúlveda, 2009).

The HealthierUS Working Group stated in its report to the President: "With approximately 1.7 million employees, federal agencies have both an obligation and an enormous opportunity to offer programs and support mechanisms to improve the health of their workforce. In doing so, they can serve as examples of how employers can help alleviate the chronic disease epidemic our Nation faces" (OPM Employee Handbook, n.d.).

Other considerations for health promotion programs can include excused absences. It is up to the discretion of an agency to excuse employees from their duties without loss of pay or charge to leave. Generally, excused absences are brief and directly related to the agency's mission or determined to be in the interest of the agency. Examples would include participation in officially sponsored and administered physical fitness programs, health education classes, medical screenings, or health fairs.

It is the responsibility of agency leadership to balance support for employees' participation in physical fitness activities with employees' work requirements and efficient and effective agency operations. A review of internal guidance on excused absence and applicable collective bargaining agreements is advisable. Regular exercise programs are considered health and fitness activities of long-term duration and cannot ordinarily be accommodated through excused absence.

1.3.3. Employee Wellness Committee

The Employee Wellness Committee is a facility-level group that plans and implements employee wellness programming based on the committee's mission and desired goals. The committee should factor hospital, VISN, VHA, and VA goals, needs assessment, and data analysis for the population, evidenced-based interventions, and resources available in their planning. The committee may develop their own strategic plan to determine short and long-term goals and objectives to effectively promote health throughout the facility.

Committee members can be selected based on area of expertise or as representatives from various work areas of the organization. Suggested membership includes representatives from the following areas:

- Occupational Health;

- Health Promotion Disease Prevention (HPDP) Program Manager and/or Health Behavior Coordinator;

- Nutrition;

- Physical Medicine and Rehabilitation;

- Mental Health;

- Nursing;

- Safety;

- Human Resources;

- Education Service;

- Library;

- Information Technology and/or data specialist;

- Employee association;

- Union/other labor representatives;

- Hospital administration; and

- Clinic or off-station representatives.

Team members should be committed to dedicate time to building and implementing the program. Members should also be responsible for communicating health promotion activities throughout the facility and receiving feedback from employees. Table 1-24 is an example of suggested committee membership and member functions.

Table 1-24: Committee Membership

Member	Function	Name and Contact Information
EHPDP Lead	Acts as team leader: schedules meetings and ensures that tasks are completed and that the project remains on track. Where a wellness committee already exists with an HPDP Program Manager as lead, the EHPDP Lead could co-lead.	
Representative from Management	Provides support and promotes the vision of the project. Facilitates change and removes obstacles.	
Representative from Facility Management	Provides logistical and technical expertise, ensures compatibility with facility planning, and helps develop budget.	
Labor Representative	Provides feedback and support, can serve as a champion and advocate for worker health, safety, and wellness programs to union and organizational leadership.	
Safety Representative	Ensures safety regulation compliance with VA, Occupational Safety and Health Administration (OSHA), etc., can assist with integration of worker protection and health promotion program that benefit the health and safety of workers on and off the job.	

Member	Function	Name and Contact Information
Occupational Health Provider	Provides clinical feedback. Offers input on prevention services, screenings, disease management programming, immunization, and health coaching programs for employees.	
Registered Dietician	Provides expert level guidance on nutrition and weight management programs.	
Mental Health Expert	Provides clinical feedback on stress reduction programs as well as an essential component to any weight management program.	
Education Representative	Assists with development and review of core component educational material, presentations, and dissemination of information.	
Representative from Physical Therapy	Provides clinical feedback for physical activity and weight management programs. Individual can be a physical therapist or a kinesiotherapist.	
Other as Appropriate; Education Representative Content Experts Interior Designer Fiscal Representative Contracting Specialist Public Affairs Regional Counsel	Provide expertise, assistance with budget development, fund delegation, compliance with VA rules and guidelines, communication, etc.	

1.3.4. EHPDP Staff

Employees can be hired specifically to staff the health promotion programs, or existing agency personnel can be assigned with the development, management, and delivery of programs and services. They may be employed either full-time, part-time, or assigned the duties on a collateral basis. Employee health staff and programs may be aligned with one division for more efficient coordination, or they may be representatives from various offices to integrate services, coordinate, and promote programs. These individuals can coordinate efforts through a wellness committee interface.

Whether employed specifically for the Employee Health Promotion Program, assigned associated collateral duties, a contract employee, or a volunteer, there are specific tasks that need to be considered. The following duties can be consolidated into the role of an Employee Wellness Coordinator, or apportioned between several staff members as collateral duties:

- Manage day-to-day operations;

- Develop, plan, and implement health/fitness programs;

- Train, supervise, and schedule staff;

- Interact with contract liaison or board of directors;

- Supervise facility and equipment maintenance;

- Recruit and retain members of the wellness committee;

- Conduct fitness assessments, individual programs, and coaching;

- Help promote and administer all intervention programs and health education classes;

- Assist in overall administration of the program;

- Lead a variety of fitness classes;

- Market and promote the program through newsletters, calendars, special events, etc.;

- Evaluate and ensure quality assurance; and

- Report progress, challenges, and recognition to leadership and employees.

1.3.4.a. Employee Wellness Coordinator

The Employee Wellness Coordinator is responsible for oversight of health promotion activities and programs that are created specifically for employees. Marketing, alignment with facility mission and goals, efficient and effective use of

resources, and the overall success of employee health promotion programs are under the auspices of this individual. The Employee Wellness Coordinator also evaluates the impact of the program on employee health and reports health promotion activities and outcomes to facility leadership.

Personal characteristics and skills beneficial in Employee Wellness Coordinators:

- Enthusiasm for workplace wellness;

- An interest, background, and experience in health and fitness;

- Good communications skills;

- Appreciation of the process of health behavior change;

- Experience in program design and implementation; and

- Good assessment and evaluation skills.

1.3.4.b. Wellness Coach

Coaching is not intended as therapy or treatment. The purpose of coaching is to assist employees in setting and achieving goals. Coaches should be skilled professionals; however, they should not be acting or working as a clinician. This is true even if they have a background in clinical care. The intent of coaching is to develop and improve performance-related skills and knowledge. The coach concentrates on specific goal(s) outlined by the employee and where the outcome is clear. The role of a coach is time-limited and goal-oriented. It is the coach's role to help employees find their own answers and motivation to succeed. A coach could serve as a coach/coordinator, combining both roles. This is the model that was used in VHA's WIN pilot program.

1.3.4.c. Occupational Health Provider Role

The Occupational Health Department is a logical location to provide and coordinate comprehensive health services for employees. Providing services and programs at or near the workplace minimizes employees' time away from work and enhances productivity.

Employee health promotion programs initiate promotion activities such as cholesterol screening. Access to employee records, including laboratory results, are facilitated when the program is located within the Occupational Health Service. When nicotine replacement therapy (NRT) is provided, role-based access to the employee health records, as well as a provider's counter-signature for the medication is needed. Both are readily available in the Occupational Health Service. As indicated by the Genetic Information Nondiscrimination Act of 2009 (GINA), family history obtained via the health risk assessment within the workplace is permissible if aligned with the Occupational Health Department. Access to records and information important to the program can only be accessed by providers, a role filled by occupational health staff.

1.3.4.d. Other Staff

Other supportive staff includes:

1. Clerical staff/administrative support staff:

Clerical and administrative support staff assists with overall administration, phone calls, scheduling, report generation, and marketing.

2. Affiliates:

Affiliates can assist with program planning and implementation, as long as they are being supervised and mentored. Affiliates are an invaluable source of help with data collection and analysis to measure program impact. The benefit of working with affiliates is that the relationship may result in a source of continued student support for the program.

3. Volunteers:

Many agencies rely on volunteer employees to coordinate and communicate health promotion activities. The agency should ensure that volunteers have the skills, qualifications, and knowledge to deliver health promotion activities when necessary. Volunteers should have no commercial interest in the program. Although all volunteer duties are determined by and assigned at the local VHA facility level, a list of duties related to health and wellness can be found in Enclosure 5, Health and Wellness Volunteer Duties.

1.4. References and Resources

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1.5. Enclosures

Enclosure 1   Outcome Measures for the Supportive Environment

Enclosure 2   Supports for Healthy Food Choices and Data Points

Enclosure 3   Outcome Measures for Worksite Wellness Program Integration

Enclosure 4   Outcome Measures for Linkage with Related Programs

Enclosure 5   Health and Wellness Volunteer Duties

Setting Up a Program

2.1. Program Development

2.1.1. Planning

When establishing a new employee health promotion program, appropriate planning will save resources and aid in creating a more effective program. The Employee Wellness Committee and any pertinent stakeholders should participate in the planning process. It is important to first consider the organization's mission and priorities. The committee should determine its overall mission for the Employee Health Promotion Program. The mission should support the Veterans Health Administration's (VHA's) overall mission and goals. Examples of the mission may be:

- Maximizing the health and wellness of the employee population;

- Improving retention, recruitment, and productivity of employees; and/or

- Offering a multi-faceted program for educating employees on health promoting behaviors.

Based on the mission, it will be possible to establish key goals. When thinking strategically, key goals will include short (tactical/1 year) and long-term (strategic/2 to 5 year) goals. Keeping goals broad, but limited in number, will help to maintain focus while also allowing for adjustments over time.

Each goal should be SMART with clear objectives:

S - Specific

M - Measurable

A - Attainable

R - Realistic

T - Time bound

For example:

Mission: Encourage employees to make healthy choices that promote good health.

Goal: By 1st Quarter FY 2011, at least 80 percent of employees state that our facility supports a culture of wellness.

Objectives: Establish weekly Sneaker Days. (For other objectives, see Enclosure 6, Sample Goals and Objectives for Supporting a Culture of Wellness.)

Factor in the employee needs and feedback into creating goals so that the program will have the greatest impact.

Larry Chapman describes three different types of program models in his book, "Do We Need a "Virtual" Program Infrastructure for Worksite Population Health Promotion Efforts?" The program models are: Quality of Work Life, Traditional Approach, and Population Health Management. It is important during planning to consider what kind of program model to follow. The methods for achieving goals may vary depending on the overall mission and resources available.

Program Model	Quality of Work Life	Traditional Approach	Population Health Management
Main Features	• Fun activity focus • No risk reduction • No high risk focus • Not healthcare cost management (HCM) oriented • All voluntary • Site-based only • No personalization • Minimal incentives • No spouses served • No evaluation	• Mostly health focus • Some risk reduction • Little high risk focus • Limited HCM oriented • All voluntary • Site-based only • Weak personalization • Modest incentives • Few spouses served • Weak evaluation	• Add productivity • Strong risk reduction • Strong high risk focus • Strong HCM oriented • Some required activity • Site and virtual based • Strongly personal • Major incentives • Many spouses served • Rigorous evaluation
Primary Focus	Morale-Oriented	Activity-Oriented	Results-Oriented

Figure 1-1: Program Models

Source: Chapman (2006)

An evaluation of institution-specific needs can aid in the development of strategic goals and provide the baseline for both outcome evaluation and feedback leading to program improvement. A formal needs assessment or gap analysis can identify existing institutional values and current employee wellness programs. Completion of a gap analysis will facilitate discussions about institutional needs and resources. Health promotion data can form the basis of a business case for program initiation and sustained viability. See Enclosure 7, Employee Health and Disease Prevention-FY 2008-Gap Analysis.

Results of the assessment/gap analysis will aid in recruiting support and commitment from senior management, which are crucial to program success. Senior management plays a critical role in organizational culture. Leadership can support the program by approving availability of time, space, staff, and serving as

role models. A planning checklist is included in Enclosure 8, Checklist for Planning an Employee Health Promotion Program.

2.1.2. Implementation

If planning is given sufficient attention, implementation is easy. There should be clear objectives stated for each goal. Determining objectives and timelines and having a communications plan ensures successful implementation. The plan may have to be revised following feedback from stakeholders. See Enclosure 9, Project Management, for an overview of planning the program.

A successful launch provides initial momentum for the program. A launch could be a hard launch or soft launch. A hard launch is usually in the form of a large singular event such as a health fair or other kick-off event. A soft launch may be a series of events or promotions leading up to a kick-off event. Examples include a contest, a series of health tips, or mini-challenges that work to create excitement for the kick-off.

Good marketing of the launch event is essential in getting participation and developing program awareness. One of the key concepts to consider is program branding. The American Marketing Association defines a brand as a "name, term, sign, symbol, or design, or a combination of them, intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of other sellers." Program branding provides an identity to reach the target market (employee population). The brand may represent the mission, goals, or overall program content. A logo helps the target market identify programs. Utilization of logos on all program material serves to create loyalty and brand recognition. See Enclosure 10, Example of Naming Convention for Employee Wellness Clinics, for more information on naming the clinic.

Implementation does not end with the kick-off event. Ongoing communications and promotion of the programs available to employees will also be necessary to encourage participation.

2.1.3. Evaluation

Evaluation is an essential part of planning. Details on program evaluation are provided in Chapter 12, Program Evaluation.

2.1.4. Quality Improvement

Ongoing data review and program evaluation facilitate the revision of existing programs and materials, and will ensure innovation and continuous interest in the program.

2.1.5. Sustainability

According to the Centers for Disease Control and Prevention (CDC) (2001), program sustainability is defined as being able to extend a program beyond its implementation cycle or beyond the end of its initial funding period. Sustainability depends on continued relevance to the organization, key stakeholders, and the

capacity to achieve intended outcomes. Even an effective prevention program will have limited impact if it is not sustained. Program sustainability helps assure that the needs of a changing workforce are met. It is critical to plan for sustainability early in the planning and implementation process.

Critical elements for sustainability include:

- The Employee Health Promotion Program is aligned with the organization's mission, vision, and values;

- Goals and objectives are clearly defined and achievable;

- The program is results-oriented;

- Outcomes are tracked and evaluated in order to demonstrate effectiveness;

- Resources are used efficiently;

- Effective communication and collaboration with stakeholders (including all program participants, partners, and leadership) is established and maintained; and

- Program is adapted to changing conditions.

2.2. Organizational Issues

2.2.1. Organizational Buy-In

It is important to recognize the value of employees in building a high performance government that is capable of meeting the challenges of the 21st century. Employee health promotion can play a major role in helping VHA become an employer of choice by strengthening its reputation and enabling it to attract highly productive employees. Lessons from the private sector show us that employee health promotion programs help attract and retain productive, engaged employees, which is directly linked to achievement of the corporate mission.

Understanding how difficult it is to change the culture of the organization is useful when working with groups and individual employees to modify unhealthy behavior. See Enclosure 11, Business Case, for further information on change theory.

Employee health promotion programs are aligned within the organization in a variety of ways. Examples include: Occupational Health, Education, Office of Chief of Staff, Human Resources, or other services. Due to issues of privacy and security, employee health promotion programs, though voluntary in nature, need to be provided in coordination with Occupational Health. Employee health records can only be legally accessed through the Occupational Health Service. If the employee health promotion program administratively falls in a different

department, then a relationship with the Occupational Health Service will need to be developed.

2.2.2. The Business Plan

A business plan is a formal, written document that provides justification for committing resources to a new project. It includes a description of the problem or opportunity, the costs and benefits of several alternative solutions, a summary, and a recommended solution for approval.

The business plan is used as a reference during the project's life cycle to determine if it is on track for completion within the time, cost, and scope outlined. At the end of the project, the business plan is used to measure project success by its ability to meet the goals and objectives defined in the plan. Goals often focus on the impact that the project will make on the organizational mission.

Plan components include the project background, expected organizational benefits, possible options (including maintaining status quo), pros and cons (costs and risks of each option), the expected project costs, a gap analysis, and the expected risks. As the program is developed, the business case can be reviewed and adjusted as needed to reflect changing organizational requirements. See Enclosures 12 and 13, Sample Business Plans, for examples and Enclosure 14, VA Finance Terms and Definitions, for VA financing terminology.

2.3. Clinic Set Up and Workload

All clinical encounters, whether patient or employee, must be documented using clinics set up with the appropriate identifiers or stop codes. Current procedural terminology (CPT) and diagnostic codes should be documented with each encounter (group or individual encounters). If the incorrect codes are used, workload is lost.

A decision support system (DSS) identifier is a VHA term that characterizes Ambulatory Care Clinics using a six-character descriptor. The DSS identifier value is transmitted to the National Patient Care Database (NPCD) in Austin. A primary stop code and a secondary stop code compose the DSS identifier. DSS identifiers define outpatient production units or clinical work units. Workload coding credits VA facilities for clinical services provided to patients (Veterans and employees) and determines appropriate funding.

2.3.1. DSS Identifiers

As noted above, a DSS identifier is a VHA term that describes services provided. These codes were established to provide a method of workload identification, performance measurement, and a way to compare costs. The first three numbers of the DSS identifier represent the primary stop code, which identifies the main clinical group responsible for the care. The secondary stop code, or credit stop, serves as a modifier of the work identified by the primary stop code.

Table 2-1 shows a sample of the information available in Reference B on the DSS Web site.

Table 2-1: Employee Health Stop Code

Name	Stop Code	Primary or Secondary	Effective Date	Definition	Category of Change
Employee Health	999	P (Primary)		Records visit of an employee to a designated employee health service. Includes provider and support services.	6 (Change in definition)

2.3.2. Coding for Employee Health Promotion Disease Prevention

Table 2-2: Evaluation and Management (E&M) Codes

Coaching Visits	E&M Code
Nurse Practioner - 15 minutes	99401
Nurse Practioner - 30 minutes	99402
Nurse Practioner - 45 minutes	99403
Registered Nurse	99211
Health promotion and disease prevention (HPDP) (tobacco cessation counseling, MOVEmployee!)	99499

Table 2-3: International Classification of Disease - Ninth Revision (ICD-9) Codes

Classification	ICD-9 Code
Elevated Blood Pressure (BP) Without Diagnosis Of Hypertension	796.2
Other Abnormal Clinical Finding	796.4
Hypertension	401.9
Diabetes Mellitus	250.0
Hypercholesterolemia	272.0

Classification	ICD-9 Code
Overweight and Obesity	278.0
Tobacco Use Disorder	649.01

Table 2-4: ICD-9 V Codes (Used to Describe Occasions Other Than Diagnosis or Injury)

Classification	ICD-9 V Code
Periodic Prevention Visits	V70.5
Healthy Eating Classes (e.g., MOVEmployee!)	V69.1
Dietary Nutrition Counseling	V65.3
Injury Prevention Counseling	V65.43

Table 2-5: CPT Codes

Classification	CPT Code
Patient Educational Materials: Tobacco Cessation Counseling, MOVEmployee!, Diabetes Management (DM) at work	99071
Self-Management Training	98960

2.4. Project Planner

The development portion of an employee health promotion program is a time-limited project. Issues to consider may include limited resources, time constraints, and competing interests. Developers may have a general idea of what the end product should look like, but getting started can be difficult. The use of a project management approach will help manage the process. Defining requirements, scheduling tasks, identifying risks and options, and breaking down the overall task into smaller, more manageable phases is the core of project management. Organization, planning, and control are required in order to obtain commitment from limited resources. See Enclosure 15, Employee Health Promotion Program Charter, for an overview.

By definition, a project consists of a temporary endeavor undertaken to create a unique product, service, or result. The tasks in a project are accomplished by consistent management processes that overlap and interact throughout the various phases of the project. The process groups in a project are: initiating, planning, executing or implementing, evaluating or monitoring, and closing.

For additional resources, please see [Section 2.6, References and Resources](#).

2.5. Performing a Needs Assessment

The most successful wellness programs are those that are individualized for the needs of the population. A needs assessment is crucial to determining what components will have the greatest impact.

A needs assessment can include a health screening with biometric or laboratory results to get a snapshot of the health needs of the population. More often a needs assessment is a questionnaire for the staff to determine their health concerns and desires for the program. This is not to be confused with a health risk appraisal (HRA). While health screening results may indicate one need and the questionnaire a different health concern, it is equally important to address both. For instance, it may be determined that although a high percentage of employees are overweight or obese, their greatest concern on the needs assessment may be stress management and work-life balance. In the example given, it would be imperative to develop a program that addresses *all* of the needs identified.

Needs assessments should be anonymous to protect the employee while ensuring the most honest feedback. Every attempt should be made to reach the broadest cross section of the workforce as possible.

Components and uses of a wellness needs assessment:

1. Analysis of the employees' physical, emotional, and sociological health. Use biometric screening, HRAs, etc.

2. Complete a worksite wellness assessment checklist (e.g., [Enclosure 7, Employee Health and Disease Prevention-FY 2008-Gap Analysis](#)) to determine what wellness components are currently at individual worksites. This includes programs, activities, and/or policies related to physical activity, healthy eating, health screening, tobacco use, and employee safety.

2.6. References and Resources

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2.7. Enclosures

Program Implementation

3.1. Naming the Program

The name of the program identifies the concept and overall vision. Utilizing a short, easy to remember, and appropriate name helps create brand recognition. The use of branded promotional materials with the program name and logo helps promote the program. The VHA Employee Health Promotion Disease Prevention (EHPDP) Program has used Wellness is Now (WIN) as their branded name since 2008.

To effectively notify employees about an employee health promotion program about to be launched, consider a kick-off event. Many people choose to hold a health fair as a method of kicking off a new health promotion program; although, there may be other ways to promote the program, including organizing a group fitness event or offering biometric screenings at designated times. Regardless, it is necessary to create excitement about a kick-off event and market the event well for good attendance. It is easier to market and thus more recognizable to the audience if the program is branded. Co-branding with related programs is encouraged.

Consider having a contest to let employees generate a theme for the kick-off event to generate excitement for the new program. For instance, if *HealthyTogether* is chosen as the theme, use the logo below on promotional material. Emphasis may then be placed on the importance of collaboration and mutual support in attaining health and wellness.

3.2. Planning a Health Fair/Kick-off

There are several things to consider when planning a kick-off event.

Means to an End: Begin planning with the intended objective of the event. This begins with deciding on the purpose or the outcome of the event. These may include any or all of the following:

- Collecting baseline data for the program;

- Informing employees about the program;

- Conducting a needs assessment; and

- Providing preventive health education.

Determine the type of evaluation tools needed before the event. To evaluate the event, the evaluation tool should be used to plan before the kick-off is held. See Chapter 12, Program Evaluation, for an example of an easy tool to help evaluate the initial impact and one-month impact of the event on behavior change.

Location: With the objectives in mind, determine the event location. See Enclosure 18, Sample Logistics Checklist for the Kick-Off Event.

Marketing: Even the best of events can fail if attendance or participation is low. This can be avoided with a marketing plan. See Section 3.3, Marketing for the Population, in this chapter for more information. See Enclosures 19, WIN Pamphlet, and 20, Examples of Announcements in the Daily Briefing.

Appearance: Consider first impressions of the audience. What will they hear (e.g., music, the sound of waves), smell (e.g., aromatherapy, food), and see (e.g., bright colors, theme-related pictures, coordinated signage)? Attention to detail makes a big impact. This will also help determine what work orders are needed.

Interaction: Consider how to facilitate attendee engagement. Demonstrations and hands-on learning are more engaging than a table full of handouts.

Assistance: Volunteers are needed to set up, man booths, act as runners, coordinate activities, and clean up.

Quick-fix tool kit: It helps to have an emergency tool kit of extension cords, table easels and/or literature holders, extra tape, scissors, and even wire to help with booth set-up.

Think ahead: One event is a great time to market upcoming events. The audience is captive and motivated, so use this opportunity to develop interest and momentum in wellness activities. Registrations or sign-up sheets for upcoming services can be available.

Follow up: Evaluate the success of the event by reviewing what went well and what did not. Analyze any evaluations or screenings, being sure to follow-up on any critical screening values quickly. Send thank you messages to all volunteers.

Maintain momentum: Market to keep employees engaged in the new wellness activities. Acknowledging feedback received at the kick-off helps staff feel like a part of the program.

3.3. Marketing for the Population

Successful marketing is built on a foundation of trust. Using marketing tools to create an image that is superficial will not achieve long-lasting goals. Effective marketing is grounded in the customer's perspective. For instance, a weight reduction program should not be marketed as a way to increase energy for maximum productivity.

3.3.1. Basics of Marketing

Marketing is the process by which products are used to meet human or social needs. By acting as the link between vendors and consumers, marketing is a fundamental component in the exchange of goods and services. The basic aspects of marketing are the same whether they meet the need for a commercial product or a health service. The product in this case is the Employee Health Promotion Program, or more fundamentally, improved health behavior.

The end user or the consumer of this product is the employee, and a group of consumers (employees) is the market. Characteristics of the market are considered at every stage in the marketing process, including the initial development of the product.

Marketing mix is a term used to describe the integration of four fundamental marketing elements, which are sometimes called the "four Ps":

- Product: the item, good, or service that is being provided and delivers benefits to those who consume it. This includes quality, packaging, design, and brand name.

- Price: monetary and non-monetary costs to the employee, for example, time to participate in programs or good feelings that come from it.

- Place: channels and locations where the product can be obtained, for example, classroom, Internet, print material.

- Promotion: direct communication, publicity, and advertising.

Each of these four components should be present in a marketing plan. However, it is the science of correctly using these elements in combination that provides the effective marketing mix. To be effective, a product must be tailored to customer needs, priced realistically, distributed through convenient channels, and actively promoted.

One of the fundamental aspects of marketing is exchange. Individuals pay a price (money) for goods or services in the traditional definition of an exchange. In health marketing, the exchange often involves a non-monetary price, such as effort or time.

In both commercial transactions and health marketing, consumers weigh the benefits against the price as they make decisions. For example, a person might agree to buy a cup of coffee for $5 but not for $50. The value of an exchange

varies depending on the target market. In health promotion, an employee might exercise if the fitness facility is convenient and free, but not if he or she has to travel or pay a fee.

Different markets can value the same exchanges differently. Different groups of employees may have varying priorities. As such, they have different views of what constitutes an equal exchange. Understanding the specific market for each product or service is essential to effective marketing.

A critical decision in marketing is choosing the target market for the product. A target market is a specific group of people who have similar needs, preferences, and behaviors. Once a target market is selected, a marketing plan should be developed to match the market characteristics.

There are several important steps in choosing a target market:

1. Define the market.

   Clearly define who the individuals are that make up the market, e.g., persons with diabetes, tobacco users, cancer survivors.

2. Segment the market.

   Segmenting a market is helpful in reaching a specific portion of the population. In traditional marketing, segmenting is often based on demographic and other characteristics. For the purposes of marketing the Employee Health Promotion Program, consider segmenting targeted markets by key needs, e.g., offering a virtual tobacco cessation program for off-station employees.

3. Analyze each segment.

   Once a clear target market has been chosen, research key characteristics and behaviors of the group. Utilize surveys, key informants, and other methods of collecting data as described in Chapter 12, Program Evaluation.

3.3.2. Marketing for Health Promotion

There are many health promotion and health behavior theories such as the Transtheoretical Model described in Chapter 10, Stress Management. These models are useful in crafting and delivering health promotion programs. They are designed to facilitate behavioral change. It can be useful to consider what the Centers for Disease Control and Prevention (CDC) calls health marketing.

Health marketing is defined by the CDC as creating, communicating, and delivering health information and interventions using customer-centered and science-based strategies to protect and promote the health of diverse

populations. Additional information on this topic can be found online at the CDC Web site: http://www.cdc.gov/healthmarketing/whatishm.htm.

The CDC develops a new rapid human immunodeficiency virus (HIV) testing kit that provides results in half the time of current tests. To efficiently market the new product, the testing kits are announced by the national media and medical journals. The CDC sends free samples of the new testing kits to each of the state health departments, who deliver them to local health departments, clinics, and hospitals. Here is how the CDC used the marketing mix:

- *Product: New HIV testing kit released by a credible research agency;*

- *Price: Free for trial use. Free may be a misnomer, as there is always a cost, e.g., there may be a stigma or embarrassment to requesting this kit. In marketing this particular product, it would be essential for the promoters to consider how to overcome this;*

- *Place: Widely and evenly distributed throughout the states using state and local health departments; and*

- *Promotion: National media publicizes to public; journals inform medical community.*

As demonstrated in this example, each of the four elements is present in the marketing process. Tailoring the elements to match the target market and using each component in coordination with one another leads to successful marketing.

Successful marketing may encourage employees to engage in healthy decisions or behaviors for the benefit of someone other than self. The motivation to do something for others may be greater than self-preservation. Appealing to a parent's need to set a healthy example for their children, using a worker's goal to remain healthy for an ill spouse, or an employee's wish to protect a vulnerable relative from an infectious disease by receiving an immunization are examples of situations where indirect health messaging may be effective marketing approaches for desired outcomes.

3.4. References and Resources

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3.5. Enclosures

Enclosure 18   Sample Logistics Checklist for Kick-Off Event

Enclosure 19   WIN Pamphlet

Enclosure 20   Example of Announcements in the Daily Briefing

Equal Access

4.1. Introduction

The purpose of this chapter is to provide guidance on issues involving the provision of health promotion activities to population groups that may not be reached through conventional means.

4.2. What is the Meaning of Accessibility?

Accessibility means that people of all ages and abilities have reasonable access to programs and materials, and have the opportunity to participate. Physical accessibility refers to the design and layout of a facility, and communication accessibility focuses on the way information is delivered through signage, materials, technology, and interpersonal exchanges. Issues of accessibility apply to programs originating within the Veterans Health Administration (VHA) as well as those developed by contractors.

It is an important part of the VHA mandate to establish comprehensive wellness programs that are inclusive of, and accessible to all employees. Programs and opportunities must include and address the needs of a diverse group of employees including those with physical disabilities, varied levels of literacy, those working night and evening shifts, and individuals working in varied locations.

It is important that individuals with different types of disabilities and/or those with special skills assist in helping assure disability access and inclusivity.

4.3. Americans with Disabilities Act

Section 36.201 of the Americans with Disabilities Act prohibits discrimination on the basis of disability in the full and equal enjoyment of goods, services, facilities (including exercise facilities), privileges, advantages, and accommodations of any place of public accommodation.

Full and equal enjoyment means the right to participate and to have an equal opportunity to obtain the same results as others to the extent possible and with such accommodations as may be required by the Americans with Disabilities Act. It does not mean that an individual with a disability must achieve the same level of achievements with persons without a disability. For example, an exercise class cannot exclude a person who uses a wheelchair because he or she cannot do all of the exercises and derive the same result from the class as persons without a disability.

4.4. Night and Evening Workers

Employees working evening and night shifts are frequently unable to attend lunch and learn programs, webinars, audio and video conferences, or other educational opportunities that are presented to day staff. CDs, DVDs, and other recorded methods of providing content to off-tour staff are only partial substitutes; staff

members need to be given the time to take advantage of different materials. Whenever possible, programs should be offered in an equitable manner.

4.5. Remote and Community-Based Clinic Employees

Because of distance, remote or community-based outpatient clinic workers are often not able to attend classes and other wellness opportunities provided to employees at larger medical centers. Video conferencing can provide a link if staffing permits. However, as with night and evening employees, programs should be offered in an equitable manner.

4.6. Physical Accessibility

Physical barriers and distance present potential challenges to an employee's ability to access programs and services. Issues highlighted in this chapter are applicable to the worksite and wherever services or programs are provided to employees (e.g., gyms, health and wellness fairs, clinics, walking paths).

4.7. Communication

Communication barriers limit an employee's access to information and services. This may include health screening surveys, health information pamphlets, direct services (e.g., coaching) and training programs. Important issues to consider include accessibility for those with low vision or blindness, hard of hearing or deaf, low literacy, non-English speaking, and cognitive limitations. Each of these groups may benefit from materials available in formats other than standard print. Print and Web materials should be Section 508 compliant. Additional information for Section 508 compliance is available online at:
http://www.hhs.gov/web/508/index.html.

4.8. Checklists

See Enclosure 21 for checklists to aid in the development and implementation of programs that are accessible to the broadest cross section of VA employees. Because employees within different facilities may have varying needs, it is important to consider program restraints at the outset. Program planning and development should include a wide range of participants in order to assure maximum participation. Further, questions of accessibility should be integrated into discussions on an ongoing basis in order to minimize the likelihood that some groups may be inadvertently excluded. The checklists in Enclosure 21 are intended to guide the discussion and evaluation of inclusiveness.

4.9. References and Resources

Disability and Business Technical Assistance Center Web site:
http://www.adata.org/.

4.10. Enclosure

Enclosure 21   Checklist for Equal or Reasonable Access to Health and Wellness Programs

50

Wellness Coaching

5.1. Introduction

Coaching is a common method used to assist individuals in meeting personal health and wellness goals. Wellness coaching is a cost-effective way to improve and maintain employee health and well being. This may in turn enhance productivity. The Centers for Disease Control and Prevention (CDC) notes that "individual coaching may be the critical component for effective worksite health promotion programs".

5.2. Coaching vs. Counseling

Lawn and Shoo (2009) note, "An important challenge that health professionals face is that patients, as a reflection of us all, generally do not immediately feel the consequences of poor lifestyle choices on their health and well-being. A vast range of psychosocial issues (including poverty, literacy, domestic violence, and community access and resources) can determine how people respond to this challenge. Knowing what to do and feeling empowered to take action are vastly different phenomena."

Health coaching is one of several methods (e.g., motivational interviewing) developed to support behavioral change. The term coaching is not clearly defined. Coaching modalities vary greatly and are often interpreted as a loose collection of psychological techniques. The intent of coaching is for clients to increase self-awareness and learning, improve performance, and maximize their quality of life. Coaching is a results-oriented process designed to guide the individual towards specific goals.

Health coaching has been shown to improve disease management (Schafer et al., 2005; Whittemore et al., 2004; DiLillo, 2003). It is the practice of health education and health promotion within a personalized context. Coaching is used to enhance the well-being of individuals and to facilitate the achievement of health related goals (Palmer, 2003). Coaching has emerged as part of disease management initiatives and has been recommended as an effective method for improving health outcomes and patient adherence to medication regimens (Sacco, 2004). Coaching relies on multiple consultations between the participant and coach to set health improvement goals.

The role of the coach is to help clients build an individualized program to change health-related behaviors. Participants work with their coach in a series of consultations in order to develop, foster, and support individual risk and disease management. While several types of coaching have been defined in medical literature, health coaching is general, practical, and goal-oriented (Alleyne, 2007).

Coaching is perhaps best defined by the types of goals that are set. These may be placed into several categories:

- Helping the client set appropriate goals;

- Encouraging the client to provide realistic feedback to themselves and their health coach; and

- Helping the individual navigate through different stages of change (e.g., see Glanz et al., 1997).

Thus, coaching is best seen as an individual development modality that combines personal health development with best practices in terms of wellness. This process is facilitated by a coach using health promotion theory and practice as a guide. Coaching is not intended as therapy or treatment. The role of the coach is time limited and task related. The purpose is to assist clients in setting and achieving goals. Coaches are skilled professionals but should not act as clinicians while coaching. It is the coaches' role to enable the individuals to set clearly defined and achievable goals. Meeting goals is dependent upon each individual's motivation to succeed. (See Chapter 11, Motivational Interviewing, for details).

Coaching is frequently confused with counseling, psychosocial services, and/or therapy. It is important that the coach recognizes signs and symptoms of depression, suicide, abuse, and other psychosocial problems and refers employees to licensed and trained clinicians if necessary. Every Veterans Health Administration (VHA) facility should have an Employee Assistance Program (EAP). EAP services are free to employees, and staff members are trained to deal with acute and chronic psychosocial problems. Individuals presenting with psychosocial problems should be encouraged to seek assistance with the facility EAP and coaches should assist them in making appointments to assure they receive appropriate and timely care. Individuals with medical conditions should be referred to their primary care provider. See Enclosure 22, What is Coaching?, for more information regarding encountering problems and defining the role as coach.

5.3. Development of Coaching Skills

It is important for coaches to have a strong knowledge base in the principles of coaching and health promotion. Basic elements of coach preparation include:

- Principles of coaching;

- Tobacco cessation;

- Nutrition;

- Physical activity;

- Stress management;

- Chronic disease prevention, screening, and management approaches; and

- Motivational interviewing.

Training is available through the Employee Health Promotion Disease Prevention (EHPDP) Program. It is recommended that employees complete training prior to becoming a coach.

5.4. Coaching Programs

Note: Reference herein to any trademark, proprietary product, or company name is intended for explicit description only and does not constitute or imply endorsement or recommendation by VHA Center for Engineering & Occupational Safety and Health (CEOSH).

An effective coaching strategy builds upon an individual's strengths and interests to formulate and facilitate reaching short and long-term goals. In order to ensure the success of a wellness coaching program, it is important to have a curriculum specifically developed for wellness. It is recommended that coaching use a script to guide individual coaching sessions. This approach helps save time, guarantees consistency, eases implementation, and increases the likelihood of success.

Effective wellness coaching programs include a variety of methods for conducting coaching sessions. These include telephone consultations, secure email, and in-person meetings. There are different coaching techniques. One example of a coaching technique is the Goal, Reality, Options, What's next (GROW) model. This is a framework that is used across the VA for preparing employees to function as coaches in leadership programs and can be adapted for use in wellness programs. See Enclosure 23, GROW Model Template.

5.5. Coaching Curriculum Examples

5.5.1. The First Visit - Getting to Know the Clients

During the first visit the coach should gain an understanding of the employee's intent, motivation, and level of commitment. Knowing the employee's intent will facilitate the developing of goals as well as understanding the barriers faced by the employee in meeting those goals.

The following is an outline of the first coaching visit:

Coach responsibilities:

- Welcome the employee;

- State purpose of the program; and

- Give brief overview of what coaching is.

Employee responsibilities:

- Share what they hope to accomplish;

- Discuss their reasons for entering the program;

- Establish goals;

- Discuss barriers to reaching their goals; and

- Work with the coach to establish a reasonable timeline.

The employee and coach should sign an agreement of understanding which serves to formalize the partnership. The agreement should include the number of agreed-upon sessions, meeting format, session time, and willingness to provide ongoing feedback. An example of a coaching agreement is found in Enclosure 24, Sample Agreement of Understanding.

5.5.2. Subsequent Visits

5.5.2.a. EHPDP VHA Model

The EHPDP VHA coaching protocol consists of five sessions over the course of 1 year. This protocol was developed by the Wellness is Now (WIN) VHA Pilot Program. The sample sessions are found in Enclosure 25, Coaching Sessions.

5.5.2.b. GROW Model

The GROW model coach program focuses on group coaching and consists of 12 sessions over a 12-week period. The general outline format for each session is found in Enclosure 26, GROW Coach Model for Groups.

See also Enclosure 27, GROW Coach Model Handout for Week 2; Enclosure 28, GROW Coach Model Handout for Week 3; and Enclosure 29, GROW Coach Model Handout for Week 8.

5.6. Rewards and Incentives

The use of rewards and incentives should be considered in any wellness program. Research shows that rewards and incentives increase participation, sustain motivation, and help employees reach their goals. Refer to Chapter 13, Incentives, for more information.

5.7. Coaching Different Demographic Groups

Coaches should be aware of the diverse values and beliefs among VHA employees. Understanding differences will facilitate working with a wide range of individuals. Coaches should have a basic understanding of how to work with all employees.

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5.9. Enclosures

Screening Tests and Biometrics

6.1. Introduction

Specific preventive health screenings or examinations may be sponsored at the workplace to detect the presence or risk of disease. There are several common measures that may be used in employee health promotion programs. This section reviews the most common tests that are likely to be used or brought to the attention of those coordinating employee health promotion programs. The list of tests is not necessarily meant to be complete; rather, it is meant to provide basic guidance and to assist in the evaluation of common laboratory tests and physical measurements. A comprehensive list of recommended screenings is available online at: http://www.healthierus.gov/prevention.html#recc.

Department of Veterans Affairs (VA) policy requires a signed Release of Information in order for employees to gain access to their medical records. For employee health promotion programs, labs are drawn specifically for the purpose of either entering into the health risk assessment (HRA), or so that the employee can bring the results to their primary care provider. For that reason, some facilities will not require a Release of Information for lab tests only. It is important to learn and follow local policy.

6.2. Cholesterol

What is cholesterol? Cholesterol is a fat-like substance that provides structure for all the cells in the body. The components of cholesterol are low-density lipoprotein (LDL) or "bad" lipoproteins, high-density lipoprotein (HDL) or "good" lipoproteins, and very low-density lipoprotein (VLDL). Lipoproteins transport cholesterol and other fats in the bloodstream (Erie County Department of Health, n.d.).

- High levels of HDL decrease the chances of heart disease. It is sometimes called the "good" cholesterol; and

- High levels of LDL increase the chances of heart disease. It is sometimes called the "bad" cholesterol.

Why is cholesterol a problem? Cholesterol is produced primarily by the liver, but a person can also get cholesterol from the foods they eat (U.S. Preventive Task Force, 2009). When someone has high cholesterol, they may develop fatty deposits in their blood vessels that make it difficult for blood to flow through. The blockage of blood vessels may lead to heart attacks and strokes (Mayo Clinic, 2008).

When is cholesterol checked? Because people with high cholesterol may not feel unhealthy or have symptoms of heart disease, it is important that they have their cholesterol checked on a regular basis by a healthcare provider (U.S.

Preventive Services Task Force, 2008). A man should have his total cholesterol checked if he is 35 years of age or older, or if he is between the ages of 20 and 35 and is at increased risk of coronary heart disease. A woman should have her total cholesterol checked if she is 45 years of age or older; or if she is between the ages of 20 and 45 and is at increased risk of coronary heart disease. A person is at increased risk of coronary heart disease if he/she has any of the following risk factors: smoker, diabetes, high blood pressure, overweight, or a family history of heart attacks or strokes before the age of 50 in male relatives or before the age of 60 in female relatives (U.S. Preventive Services Task Force, 2008).

How is cholesterol checked? Cholesterol is checked with a blood test. The test works best if blood is drawn after fasting for at least 8 hours (U.S. Preventive Services Task Force, 2008).

What does the test mean? A total cholesterol value is high if it is greater than or equal to 240 milligrams per deciliter (mg/dL), borderline high if it is 200-239, and optimal when it is less than 200 (National Heart Lung and Blood Institute, 2001). If the cholesterol level is normal it should be repeated every 5 years. If a person has high or borderline high total cholesterol they should know that high cholesterol is largely preventable and treatable. A healthy diet, regular exercise, and sometimes medication can go a long way toward reducing high cholesterol (U.S. Preventive Services Task Force, 2008).

As noted above, total cholesterol is made up of LDL or "bad" lipoproteins, HDL or "good" lipoproteins, and VLDL lipoproteins. Lipoproteins transport cholesterol and other fats through the bloodstream (Erie County Department of Health, n.d.). LDL's job is to move the cholesterol to the tissues of the body. If a person has too much LDL cholesterol circulating in the blood, it can slowly build up in the walls of the arteries feeding the heart and brain, making them hard and narrow, which can lead to a heart attack or stroke (American Heart Association, 2009).

Healthcare providers will first look at the total cholesterol level. If an individual has heart disease, any of the heart disease risk factors, or has high total cholesterol, the healthcare provider will then look at the LDL results (U.S. Preventive Services Task Force, 2008). LDL cholesterol is very high when it is 190 or higher, high when it is 160-189, borderline high when it is 130-159, near optimal/above optimal when it is 100-129, and optimal when it is less than 100 (National Heart Lung and Blood Institute, 2001). A person can reduce his/her risk of heart disease by increasing HDL cholesterol levels. Men should aim for an HDL cholesterol in the range of 40 mg/dL to 60 mg/dL, and women between 50 mg/dL and 60 mg/dL. Physical activity and other healthy lifestyle behaviors such as quitting tobacco and losing weight increase HDL cholesterol.

6.3. Blood Pressure
What is blood pressure? Blood pressure is the force of blood against the artery walls. It is usually written as two numbers, the first of which represents when the

heart contracts, otherwise known as systolic blood pressure. The second or bottom number represents the pressure when the heart rests between beats, which is known as the diastolic pressure [Centers for Disease Control and Prevention (CDC), 2007].

Why is high blood pressure a problem? A person can have high blood pressure (hypertension) for years without a single symptom; however, uncontrolled high blood pressure increases the risk of serious health problems, including heart attack, stroke, kidney disease, heart failure, and eye problems (Mayo Clinic, 2008).

When is blood pressure checked? Individuals should begin having their blood pressure screened at age 18 (U.S. Preventive Services Task Force, 2007). An individual should have their blood pressure checked every 2 years unless they have pre-hypertension or hypertension or are 65 years of age or greater, in which case they should have it checked every year (National Institutes of Health, 2009).

How is blood pressure checked? Blood pressure is measured with a device called a sphygmomanometer. Usually an inflatable cuff is wrapped around the arm and is inflated to squeeze the blood vessels in the arm. A healthcare provider uses a stethoscope to listen to the pulse as the pressure is released in order to determine the systolic and diastolic pressure. Blood pressure normally rises and falls throughout a day, but when it consistently stays high for too long an individual has high blood pressure (CDC, 2007).

What do measures of blood pressure mean? Normal blood pressure is a systolic blood pressure of less than 120 millimeters of mercury (mmHg) and a diastolic blood pressure of less than 80 mmHg (CDC, 2009). High blood pressure for adults is defined as a systolic blood pressure of 140 or greater or a diastolic blood pressure of 90 or greater. A person has pre-hypertension when they have systolic blood pressure of 120-139 or a diastolic blood pressure of 80-89. Persons with pre-hypertension are at increased risk of developing hypertension. The risk of high blood pressure increases as a person ages, if they are African American, and/or if they have a family history of hypertension. It is especially important to be screened regularly if a person has any of these risk factors (Mayo Clinic, 2008). High blood pressure is easily detectable and usually can be controlled through lifestyle modifications and/or medications.

6.4. Weight and Body Mass Index (BMI)

What is body weight? A person's body weight is a measure of the mass of their body. A healthy weight is one that is appropriate for the height and build of a person. Overweight and obese are both labels for ranges of weight that are greater than what is generally considered healthy for a given height.

What is the BMI? The BMI provides a simple and reliable indicator of body fat for most people and is used to screen for weight categories that may lead to health problems. The only measurements required to calculate a BMI are a

person's height and weight. This makes it inexpensive and easy to use for healthcare providers and for the general public (CDC, 2009).

Why is a high BMI a problem? Being overweight and obese means a person is at increased risk of many chronic diseases including high blood pressure, Type 2 diabetes, some cancers, stroke, and coronary heart disease.

When is BMI checked? A person's height and weight should be measured when they visit with their healthcare provider for a physical exam, which should be done every 1-5 years if they are less than 65 years of age and annually if they are 65 years of age or more (National Institutes of Health, 2009).

How is BMI checked? The weight is measured using a calibrated scale. Standing heights should be measured to the nearest 1 millimeter (mm) with a wall-mounted stadiometer (McDowell et al., 2009). Afterwards, the healthcare provider calculates a BMI. For the metric system, the formula is [weight (in kilograms)] ÷ [height (in meters)]^2 and, for the pounds and inches system, it is [weight (in pounds)] ÷ [height (in inches)]^2 x 703 (CDC, 2009).

What does the test mean? If a person's BMI is below 18.5 they are underweight, 18.5-24.9 is normal weight, 25-29 is overweight, and 30 or more is obese. Individuals and their healthcare providers should regularly calculate BMI, especially if they are at risk of being overweight or obese (CDC, 2009).

A BMI calculator is available online at: http://www.nhlbisupport.com/bmi/. All an individual needs to provide is their height and weight. If someone finds out that they are overweight or obese, they can change their BMI by making lifestyle changes such as adding more exercise to their routine and/or eating a calorie-reduced, nutritious diet. Even modest weight loss, such as 5 to 10 percent of a person's total body weight, is likely to produce health benefits such as improvements in blood pressure, blood cholesterol, and blood sugar (CDC, 2009).

6.5. Waist Circumference

What is waist circumference? A person's waist circumference is the size of their waist.

Why is waist circumference a problem? An individual's waist circumference is a measure of their abdominal fat, which is a predictor for obesity-related risk factors and diseases such as Type 2 diabetes, high blood cholesterol, high triglycerides, high blood pressure, and coronary artery disease (CDC, 2009).

When is the waist circumference checked? When a person has an elevated BMI and a healthcare provider wants to determine if the excess weight is a health risk, they may measure the waist circumference to determine the individual's abdominal fat (CDC, 2009).

How is waist circumference checked? A healthcare provider can measure waist circumference by placing a tape measure around the bare abdomen just

above an individual's hip bone. The tape should be snug, but not compress the skin, and the tape measure should be parallel to the floor. A person should relax, exhale, and then the waist should be measured (Erie County Department of Health, n.d.).

Healthcare providers need to be trained before measuring waists because it can be difficult to standardize measurements made by the same healthcare provider at different times or between two healthcare providers. It can also be hard to correctly measure waists in patients that are obese or overweight because it is difficult to find their hip bones, making it hard to get an accurate measurement (National Obesity Forum, n.d.). BMI is the measurement of choice because it is inexpensive and easy to use for healthcare providers and the general public.

What does the test mean? A person's waistline will let a healthcare provider know if that individual has a higher risk of developing obesity-related conditions. If a man has a waist circumference more than 40 inches or a non-pregnant woman has a waist circumference that is more than 35 inches, he or she is at risk of obesity-related conditions. If a person finds out that they are at risk of obesity-related conditions, they can make lifestyle changes such as adding more exercise to their routine or eating a calorie-reduced, nutritious diet (CDC, 2009).

6.6. Skin Fold Thickness

What are skin fold measurements? Skin fold is another means of estimating body fat content. A person may have a high BMI, but to determine if excess weight is a health risk, a healthcare provider might want to perform skin fold thickness measurements (CDC, 2009; American Heart Association, 2009). However, the use of skin fold measurements are complex and require repeated measures to be sure they are accurate. In addition, the reliability of skin fold measurements is apt to vary a great deal between different evaluators.

Why are high skin fold measurements a problem? If a person has too much fat they are at higher risk for such health problems as high blood pressure, high blood cholesterol, and diabetes, which increases their risk for heart disease and stroke (National Obesity Forum, n.d.).

When are skin folds measured? When a person has an elevated BMI and a healthcare provider wants to determine if the excess weight is a health risk, they may choose to measure skin fold thickness to determine the individual's percentage of body fat.

How is skin fold measured? Because of the difficulty in obtaining an accurate skin fold measurement, it is not commonly used in clinical practice. Unless the practice can be standardized, it is not recommended for use.

Skin fold measurements should all be taken on the same side of the body at four anatomic sites: the triceps, sub-scapular, suprailiac, and the thigh. A healthcare provider will grasp a skin fold above the site to be measured and then measure

the skin fold with a caliper. All skin fold measurements must be taken to the nearest 0.1 mm (McDowell, 2009; National Health and Nutrition Examination Survey, 2004).

What does the test mean? The sum of skin fold measurements is compared to a table of standardized values that represent the percent body fat of a woman or a man. A woman is overweight if her body fat percentage is 25-31 percent, and a man is overweight if his is 18-25 percent. Women are obese when they have 32 percent or more body fat, and men when they have 25 percent or more body fat (Health Check Systems, n.d.). If a person finds out that they are overweight or obese, they can change their weight and body composition by making lifestyle changes such as adding more exercise to their routine or eating a calorie-reduced, nutritious diet.

6.7. Other Measures of Body Fat

In addition to the measures presented earlier in this chapter, body composition may be measured using bioelectric impedance. According to Houtkooper et al. (1996), "The whole-body bioelectrical impedance analysis (BIA) approach for estimating adiposity and body fat is based on empirical relations established by many investigators. Properly used, this noninvasive body composition assessment approach can quickly, easily, and relatively inexpensively provide accurate and reliable estimates of fat-free mass and total body water in healthy populations". More recent work indicates that the use of BIA may be problematic when used in large studies if comparison values are not available for different ethnic groups (Dehghan and Merchant, 2008). It is likely that, on an individual basis, bioelectric impedance is a reasonable measure of body fat. However, a brief review of this topic indicates that the use of the proper predictive equations provides better information. It is beyond the scope of this guidebook to make a determination of the appropriate equations for use with different ethnic groups (Clearly et al., 2008).

Another method of measuring body fat is using near infrared. A small handheld device is pressed against the skin where it passes infrared light through the body. The light is reflected by muscle and absorbed by the fat, and the results are based on how much light comes back to the sensor. Insufficient information was found with regard to this method of screening for obesity.

Finally, underwater immersion is a highly accurate, but impractical technique that is usually done in research facilities.

6.8. Blood Glucose

What is blood glucose? Blood glucose is a measure of the amount of sugar in the whole blood. Diabetes is a disease in which blood glucose (also known as blood sugar) levels are above normal. Most of the food we eat is turned into glucose, or sugar, for our bodies to use as energy. The pancreas makes a hormone called insulin to help glucose get into the cells of our bodies. When a person has diabetes, the body either doesn't make enough insulin or can't use its

own insulin as well as it should. This causes sugar to build up in the blood (CDC, 2008).

Why is high glucose a problem? Having elevated blood glucose that leads to diabetes can cause serious health complications including heart disease, blindness, kidney failure, and circulatory problems. Diabetes is the sixth leading cause of death in the United States (CDC, 2009).

When is glucose checked? The U.S. Preventive Services Task Force currently recommends screening for Type 2 diabetes in asymptomatic adults with sustained high blood pressure (either treated or untreated) greater than 135/80 mmHg. (U.S. Preventive Services Task Force, 2008).

How is glucose measured? The primary screening test for diabetes is the fasting plasma glucose test.

What does the test mean? A value of 126 or greater indicates the presence of diabetes, a reading of 100 to 125 indicates impaired fasting glucose, and less than 100 is normal. Patients with impaired fasting glucose are now referred to as having pre-diabetes, indicating their relatively high risk for development of diabetes (CDC, 2009). If a person is diagnosed with elevated blood sugar, they should know that healthy eating, physical activity, blood glucose testing, and medications are the basic therapies. If they are diagnosed with pre-diabetes, they can prevent diabetes by eating a calorie-reduced, nutritious diet, becoming more active, and controlling their high blood pressure and/or high blood cholesterol if they have those conditions (CDC, 2008).

Special Note: Three tests have been used to screen for diabetes: fasting plasma glucose, 2-hour post load plasma glucose, and hemoglobin A1C. Each has advantages and disadvantages. The American Diabetes Association has recommended the fasting plasma glucose test for screening because it is easier and faster to perform, more convenient and acceptable to patients, and less expensive than other screening tests. The fasting plasma glucose test has more reproducible results than the 2-hour post load plasma glucose test, has less intraindividual variation, and has similar predictive value for development of microvascular complications of diabetes. The American Diabetes Association defines diabetes as a fasting plasma glucose level of 126 mg/dL or greater and recommends confirmation with a repeated screening test on a separate day, especially for people with borderline results. The accuracy of the test is dependent upon the ability and willingness of the individual to follow directions regarding fasting.

6.9. Breast Cancer Screening

What is breast cancer? All women are at risk for breast cancer. Men can also get breast cancer, but this is rare. Not counting skin cancer, breast cancer is the most common cancer in women of all combined major racial and ethnic groups in the United States. Among Hispanic women, it is the most common cause of

death from cancer, and it is the second most common cause of death from cancer among white, African American, Asian or Pacific Islander, and American Indian or Alaska Native women. In 2005 (the most recent year for which statistics are available), 186,467 women were diagnosed with breast cancer, and 41,116 women died from the disease. Although more white women get breast cancer, mortality rates have been higher for African American women (CDC, 2009).

How is a woman screened for breast cancer? There are three basic ways to evaluate a woman for breast cancer: self-examination, physician examination, and mammography. Self-examination alone is not considered to be an effective screening strategy. The frequency of testing with mammography depends upon a woman's age as well as a variety of risk factors. Testing should be decided in consultation with the primary care provider.

What is a mammogram? A mammogram is an X-ray of the breast. Mammograms are the best method to detect breast cancer early, when it is easier to treat and before it is big enough to feel or cause symptoms. The U.S. Preventive Services Task Force recommends screening every 2 years by mammography for women aged 50 to 74. Screening by mammography in women younger than 50 years of age should involve shared decision making between patient and provider (U.S. Preventive Services Task Force, 2009).

What happens if a mammogram is not normal? Many women need additional tests following an abnormal mammogram, and most are not diagnosed with cancer. An abnormal mammogram does not always mean that a woman has cancer. It does mean that she will need to have some additional X-rays or other tests. Other tests may include an ultrasound (picture taken of the breast using sound waves) or a biopsy (removing tissue samples to be looked at closely under a microscope). Some women may be referred to a breast specialist or a surgeon because these doctors are experts in diagnosing breast problems.

6.10. Colorectal Cancer Screening

What is colorectal cancer? Colorectal cancer is cancer that occurs in the colon or rectum. Sometimes it is called colon cancer. The colon is the large intestine or large bowel. The rectum is the passageway that connects the colon to the anus. Of cancers affecting both men and women, colorectal cancer is the second leading cancer killer in the United States. In 2005, 141,405 people were diagnosed with colorectal cancer, and 53,005 people died from it (CDC, 2010).

Screening can find precancerous polyps (abnormal growths in the colon or rectum) so that they can be removed before turning into cancer. Screening also helps find colorectal cancer at an early stage, when treatment often leads to a cure. If everyone aged 50 or older had regular screening tests, and all precancerous polyps were removed, as many as 90 percent of deaths from colorectal cancer could be prevented (CDC, 2010).

How is someone tested for colorectal cancer? There are a variety of tests for colorectal cancer. The frequency of testing and the type of test that is done should be decided in consultation with the primary care provider. The U.S. Preventive Task Force Services recommends screening using fecal occult blood testing, sigmoidoscopy, or colonoscopy, beginning at age 50 years and continuing until 75 years. The risk and benefits of these screening methods vary (U.S. Preventive Task Force Services, 2008).

- **Stool for occult blood.** One of the tests used to screen for colorectal cancer is occult blood. There are two types of fecal occult blood tests (FOBTs). One uses the chemical guaiac to detect blood. The other, a fecal immunochemical test, uses antibodies to detect blood in the stool. The individual receives a test kit from the healthcare provider. A stick or brush is used to obtain a small amount of stool and the test kit is returned for processing. This type of screening should be done yearly.

- **Flexible Sigmoidoscopy.** For this test, the doctor puts a short, thin, flexible, lighted tube into the rectum. The doctor checks for polyps or cancer inside the rectum and lower third of the colon. This test should be done once every 5 years.

- **Colonoscopy.** This is similar to flexible sigmoidoscopy, except the doctor uses a longer, thin, flexible, lighted tube to check for polyps or cancer inside the rectum and the entire colon. During the test, the doctor can find and remove most polyps and some cancers. Colonoscopy is also used as a follow-up test if anything unusual is found during one of the other screening tests. The general recommendation is that this test be done approximately every 10 years.

6.11. References and Resources

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EmployeeHealthPromotion EHPDP
Disease Prevention

Physical Activity

7.1. Introduction

Between 25 to 35 percent of Americans lead an inactive lifestyle, which is defined by the Centers for Disease Control and Prevention (CDC) as less than 10 minutes total of moderate or vigorous-intensity activity per week. This lack of physical activity increases their risk of developing chronic diseases. Based on the recommendation of the CDC, optimal health benefits can be achieved by participating in at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity aerobic activity per week and muscle strengthening activity 2 or more days per week. If there are concerns about increased activity or exercise, individuals should seek guidance from their primary care provider.

The health benefits of leading a physically active life include:

- Improved weight control;

- Reduced risk of some chronic diseases;

- Increased strength of bones and muscles;

- Improved mental health; and

- Increased longevity.

In addition to the health benefits, physical activity gives people the opportunity to have fun, enjoy friends and family, and maximize their ability to participate in a wide range of activities.

7.2. 2008 Physical Activity Guidelines for Americans

In an effort to encourage more physical activity, The U.S. Department of Health and Human Services (HHS) issued the *Physical Activity Guidelines for Americans* in 2008.

These guidelines offer direction to organizations and individuals on issues related to health and physical activity. The framework for the guidelines divides information into two different categories:

- Baseline activities are light-intensity activities of daily life that include standing, walking slowly, and lifting lightweight objects. For most people, light daily activities such as shopping, cooking, or doing the laundry do not count toward the guidelines, because the body is not working hard enough to get the heart rate up.

- Health-enhancing physical activities are those that, when added to baseline activities, produce health benefits. Health-enhancing activities

include such things as brisk walking, jumping rope, dancing, lifting weights, and practicing yoga.

The first step to increasing physical activity is to identify realistic goals and activities. The four levels of activity are:

- Inactivity - no activity beyond the baseline activities of daily living.

- Low - activity beyond baseline but fewer than 150 minutes of moderate-intensity physical activity per week.

- Medium - 150 minutes to 300 minutes of moderate-intensity physical activity per week.

- High - more than 300 minutes of moderate-intensity physical activity per week.

In order to achieve health benefits, engage in medium or high levels of activity. Only engaging in the baseline activities of daily life, such as standing, walking slowly, and lifting light objects, is considered inactive, and activity level should be increased slowly. When doing moderate-intensity activities feels comfortable, move on to more vigorous ones. The guidelines state that individuals should engage in physical activity that is right for them. Being physically fit means daily tasks are carried out without undue fatigue and with enough energy to enjoy leisure-time activities. This can be achieved by picking activities that are enjoyed and that match one's abilities. Individuals do not have to be world class athletes to be healthy.

7.3. Physical Activity in the Workplace

Lack of time is often cited as a reason for not exercising. Because people spend a large portion of their day at work, workplace health promotion activities that enable them to add physical activity are beneficial.

7.4. Issues of Physical Activity in the VHA

Basic employee health promotion programs have commonly been provided in federal agencies such as Veterans Health Administration (VHA), and include preventive services such as immunizations, physical examinations, and medical screening tests. Many agencies have expanded the traditional scope of services and established more comprehensive programs. Newer programs may emphasize physical fitness, health education, intervention activities, and preventive health screenings. Such programs are now widely established and accepted as a valuable resource for enhancing work force effectiveness.

VHA leadership recognizes that the health and well-being of the federal workforce is essential to providing Veterans the care and benefits that they have earned. Issues related to legality of physical activity programs in the federal workplace are covered in Chapter 1, Program Development.

Citing the 2002 Surgeon General's "Call to Action to Prevent and Decrease Overweight and Obesity" (http://profiles.nlm.nih.gov/NN/Views/Exhibit/narrative/newreports.html), the Office of Personnel Management (OPM) encourages all agencies to establish and administer physical fitness programs as an integral component of their employee health services program (OPM, n.d.). In addition to programs and facilities, agencies can promote active lifestyles through policies and environments. OPM lists the provision of showers, locker rooms, bike racks, running maps, and operation of on-site fitness facilities as examples of services that can be provided. In the case of size or space limitations, agencies can offer fitness activities without special facilities. A step-by-step checklist for planning a physical fitness program is included as Enclosure 30.

7.4.1. Funding Options

Funding for physical fitness programs can be:

- Fully funded by the agency;

- Funded by a combination of employee fees and agency funding; and

- Fully funded by employee contributions or fees.

Table 7-1 describes funding options identified by OPM.

Table 7-1: Funding Options Detailed by OPM

Options	Funding Details
Agency provides full funding	• Agency pays full fees for fitness facility.
Employees fund through contributions or fees	• Agency may pay for start-up costs & space; • Agency collects fees, directly or through third party, to establish and maintain new programs; • Fees collected from employees must be deposited into miscellaneous receipts of U.S. Treasury, unless agency has authority to do otherwise (31 U.S.C. §3302); • Employee organization may manage fitness facility with own staff or through contractor; and • Operating costs covered by membership fees collected through payroll deduction on behalf of employee organization (5 U.S.C. §5525).

Options	Funding Details
Agency and Employees fund	• Third party or employee organization must collect employee fees for reimbursement of health facility or program costs; • Contracts between agency and contractor determine total cost and agency portion; • Contractor collects employee fees to cover remaining cost; • Agencies can request (through appropriations process) authority to collect fees directly from employees to cover costs of fitness center; • Agency pays for use of space and services for fitness facilities located in General Services Administration (GSA) space and can collect fees directly from employees to reimburse agency's appropriated fund [40 U.S.C. §490(k)]. Other costs such as staff and equipment not reimbursable under this authority; • Rate agency charges must be approved by the Administrator of GSA and the Director of Office of Management and Budget (OMB); and • Fees collected in excess must be deposited into miscellaneous receipts of the U.S. Treasury.

Decisions regarding funding depend upon budget, employee needs, and agency mission. Even where employees pay for the fitness facilities through fees, the agencies typically pay for the rent of space and start-up costs. Agencies can collect fees, either directly or through third parties, from employees to establish and maintain new programs and facilities. When fees are collected directly from employees, they must be deposited into miscellaneous receipts of the U.S. Treasury, unless the agency has statutory authority to do otherwise (31 U.S.C. §3302).

Ordinarily, agencies cannot use fees collected from employees to directly reimburse the costs of health facilities or programs. Instead, a third party, such as a contractor, provides the physical fitness programs and collects the employee fees directly or makes arrangements with an employee organization to collect fees from employees. Contracts between the agency and contractor determine the total cost and how much the agency's portion will be. The contractor is responsible for collecting fees from the employees to cover the remaining cost.

Some agencies request special authority through the appropriations process to collect fees directly from employees to cover the costs of their fitness centers. If the fitness facility is located in GSA space, the agency pays for the use of the space and utilities such as electricity. The agency may collect fees directly from employees to reimburse the agency's appropriated fund established for the cost of space and utilities [40 U.S.C. §490(k)]. Other costs typically associated with physical fitness facilities, such as staff and equipment, are not directly reimbursable under this authority.

The rates an agency charges its employees must be approved by the Administrator of GSA and the Director of OMB. Any fees collected in excess of the actual cost for the space and services must be deposited into miscellaneous receipts of the U.S. Treasury.

While charging a fee may increase employee commitment to a physical activity program, it may also limit or prohibit participation for employees at lower income levels. The agency should consider this as well as the total cost of implementing, administering, and maintaining facilities and programs. Employee contributions should be reasonable and appropriate.

Another arrangement is to have the fitness facility managed by employee organizations such as a non-profit employee board or a recreation association. The employee organization can either manage the fitness facility with its own staff or through a contractor. Operating expenses are covered by employee membership fees collected through payroll deduction on behalf of the employee organization (5 U.S.C. §5525).

Take into consideration the impact that a fee would have on participation rates. The cost to the employee should be reasonable for all employees and not limit or prohibit participation of employees at lower income levels.

7.4.2. Excused Absence and Leadership Support

A review of internal guidance on excused absence and applicable collective bargaining agreements is advisable. Regular exercise programs are considered health and fitness activities of long-term duration and cannot ordinarily be accommodated through excused absence. However, there are many other ways that leadership can encourage and support fitness. Examples are provided in Chapter 1, Program Development.

7.4.3. Liability Risks Associated with Physical Fitness Programs

Although the benefits of providing health and fitness activities outweigh the risks, there are liability issues that need to be recognized. Persons sustaining personal injury may bring claims against the U.S. Government under two federal statutes: the Federal Employees' Compensation Act (FECA) and the Federal Tort Claims Act. Additional information about these acts is available in Enclosures 31, Legalities of Employee Health Promotion Activities, and 32, Liability Related to Physical Fitness Activities in the Workplace.

7.4.3.a. The Use of Waivers for Fitness Center Use and Event Participation

It is common for fitness centers to use waivers and informed consent forms for participation in agency-sponsored fitness facilities or events. While this provides information to the participant about risks and limits liability exposure, these forms do not absolve an agency from liability for negligence. Facilities are advised to check with their regional counsel to determine the need for a waiver or other screening forms and to ensure that it conforms to the appropriate state and local laws. An example of a personal fitness certification form is provided in Enclosure 33, Sample Personal Fitness Certification. A checklist for employees beginning exercise is provided in Enclosure 34, Getting Started: An Exercise Quick Check.

7.5. Physical Activity Options

There are many opportunities for physical activity that can be explored. An employee questionnaire can indicate preference and program content. In addition to employee interest, consider available resources such as space. If space is severely limited, a fitness center may not be feasible. Programs should be structured to meet the needs of employees on all shifts, at all fitness levels, and to accommodate people with differing needs.

7.5.1. Fitness Centers
Considerations of On-site Federal Fitness Facilities

On-site fitness facilities for employees can be operated by the agency, an employee organization, or through an interagency agreement. Health industry recommendations on staffing, design, equipment, and safety need to be considered.

7.5.1.a. Staffing and Alignment

The availability of competent staff trained in the use of equipment and safety procedures are required for employee orientation and equipment training. See Enclosure 35, Sample Employee Fitness Center Orientation, for a sample form explaining orientation procedures. In addition, trained group exercise leaders and health education staff are needed if the facility is going to provide on-site classes.

Trained personnel can be hired to staff the fitness programs, or existing agency personnel can be assigned to aid the development, management, and delivery of programs. They may be employed either full-time, part-time, or assigned the duties on a collateral basis. Employee health staff and programs may be aligned

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with one division for more efficient coordination, or representatives from various offices may be involved to integrate services and coordinate and promote programs.

Many agencies rely on volunteer employees to coordinate and communicate health promotion activities. The agency should ensure that volunteers, employees, or contractors have the skill, qualifications, and knowledge to deliver health and wellness activities.

7.5.1.b. Design of On-Site Federal Fitness Facilities

Agencies should consult federal, state, or local regulations when planning a fitness facility. Standards outlined in the American College of Sports Medicine's Health/Fitness Facility Standards and Guidelines, second edition, are available online for review at: www.acsm.org. Design assistance is available through the GSA regional office (available online at: www.gsa.gov), or a fitness facility management company.

When designing the fitness facility space, consider the following:

1. Access control (e.g. key card, proxy card);

2. Sign-in/control desk;

3. Office/testing area/storage;

4. Cardiovascular equipment area;

5. Strength training area;

6. Group exercise class area; and

7. Locker/shower rooms.

Enclosure 36, Fitness Room Design Considerations, lists basic considerations for the design of the facility.

7.5.1.c. Fitness Equipment

The purchase of fitness equipment depends upon space available, cost, and employee preferences. However, employee preference may change over a short period of time and an effort should be made to serve the widest possible range of interests. The categories of equipment include cardiovascular, strength training, balance, and flexibility. Equipment must be designed for commercial and NOT home use. Commercial grade equipment is designed for stability, safety, and heavy use. Because standards and quality change from year to year, consult with other federal facilities or a fitness management company. Consider access for individuals with disabilities when selecting and placing equipment. See Enclosures 37, Equipment to Consider, and 38, Equipment Layout.

GSA pricing provides cost savings and allows for the purchase of used equipment from other facilities listed on government surplus lists. Equipment leasing can also result in cost savings.

Proper equipment maintenance and routine cleaning reduces repair costs and extends the life of the equipment. Equipment maintenance can be provided contractually or in-house by the Bio-Medical Instrumentation Service if this department maintains other equipment of a similar category.

7.5.1.d. Safety Considerations

Many injuries can be prevented through adequate supervision, staff training, appropriate screening procedures, and proper facility and equipment upkeep. A comprehensive safety and emergency plan developed, documented, and posted visibly in the fitness facility is required. To address accidents or other safety issues, there must be an appropriate and timely response, evaluation, and follow-up. Access to automatic external defibrillators (AEDs) within or near facilities is recommended.

See [Section 7.8, References and Resources](#), for information about managing and caring for fitness centers.

7.5.1.e. Procurement, Installation, and Construction Issues

When planning for building or renovating fitness centers, walking paths, or stairwells for exercising, it is important to start planning early because the contracting and procurement process can be lengthy. The planning process should involve leadership, engineering, safety, fiscal, and contracting. Procurement of contractors can take 90 days or more and wellness projects will be competing with other projects for completion. A sample scope of work (SOW) can be found in [Enclosure 39, Scope of Work to Design and Install Turn-key Fitness Centers for VA Facilities](#).

Additional information on developing, operating, and maintaining an on-site fitness center is contained in [Enclosures 40, Fitness Center Environment of Care Checklist](#), and [41, Generic Project Guide](#).

7.5.1.f. Off-Site Fitness Facility Considerations

Under 5 U.S.C. §7901, agencies are authorized to provide health and fitness activities at a private facility. Further guidance comes from the Comptroller General's Decision, B-240371, January 18, 1991, available online at: www.opm.gov/employment_and_benefits/worklife/officialdocuments/handbooksguides/employeehandbook/chapter2/index.asp.

This decision states that the prohibition in 5 U.S.C. §5946 against the use of appropriated funds to pay membership dues of federal employees does not prohibit a federal agency from using appropriated funds to purchase access for its employees to a private fitness center's exercise facilities.

Further information concerning off-site fitness facilities is found in [Enclosure 42, Utilizing an Off-Site Facility.](#) This includes information on purchasing memberships, decision criteria for selecting off-site facilities, and a list of criteria that need to be considered prior to making a decision to move forward with an off-site location.

7.5.2. Exercise Programs

There are numerous types of programs for incorporating exercise into the worksite. These include:

- Desk exercises and stretches;

- Walking ([Enclosure 43](#)):

    o Walking paths; and

    o Walking programs (e.g. teams).

- Group activities:

    o Instructor-led programs;

    o Aerobic fitness;

    o Muscular fitness;

    o Stretching and range of motion; and

    o Balance training.

- Team sports; and

- Cycling and Biking ([Enclosure 44](#)).

[Section 7.8, References and Resources](#), provides more information about building walking trails and paths.

7.6. Additional Considerations

7.6.1. Fitness Assessments

Assessing and recording baseline fitness scores can provide benchmarks against which to measure progress towards fitness goals. Assessment of aerobic and muscular fitness, flexibility, and body composition may consist of:

- Pulse rate before and after a one-mile walk;

- How long it takes to walk one mile;

- How many push-ups can be done at one time;

- Aerobic three minute step test;

- Reach and stretch measurements;

- Waist circumference; and

- Body mass index.

Examples of smart fitness goals are available online at:
http://www.buildingbodies.ca/Motivation/fitness-goals.shtml and
http://exercise.about.com/cs/exbeginners/a/beggoals.htm.

7.6.2. Fitness Challenges

Fitness challenges offer a creative outlet for employees. A friendly, competitive, and team-like atmosphere serves to heighten the fun and provides employees with the incentive to achieve their goals. Literature indicates that people can achieve positive results when they have the opportunity to develop and implement a fitness plan in collaboration with a friend, family member, or coworker. This supportive atmosphere increases the probability of successfully incorporating fitness into a daily routine.

People enjoy seeing the results of their daily efforts and find that a fitness plan is easier to commit to when accountability is built in. Including a process for self-reporting is also crucial and can be accomplished by using a personal journal or an online database. An interactive online system designed to measure results and acknowledge the participants with a short message (i.e., keep up the good work!) is preferred. An example is available at:
http://www.healthierfeds.opm.gov/healthierfeds_initiative/challenge/index.asp.

Facilities as well as Veterans Integrated Service Networks (VISNs) can set up a fitness challenge. One example of this is a virtual walk that includes a destination (i.e., New Orleans) or goal that will enhance participation. If the event is VISN-wide, it is important to give facility representatives access to the data. This enables the sites to have ownership in addition to accountability for the program. The Virtual Walk Web page is available at:
http://vha02webdev/empwell/index.cfm. *Note: Click on the Cancel button if the user name and password window appears.*

The Administrative page is available at:
http://vha02webdev/empwell/whositesum.cfm. *Note: Click on Cancel button if the user name and password window appears.*

Incentives can be offered as rewards for participation and completion of the challenge. Random drawings work well to keep the momentum going, and time-off awards are an effective way to recognize employees' efforts once the goal is reached. A word of caution, awarding a time-off award to the employee who loses the most weight or walks the farthest may be construed as inequitable, especially for those employees who have limitations. One option is to include all participants into a drawing for a time-off award. Winners should be recognized

publicly; some leaders prefer to do this at employee forums or during staff meetings. For more information on incentives, see <u>Chapter 13, Incentives</u>.

7.6.3. Safe Active Environments

An organization can help employees incorporate walking through a variety of support structures including marked walking trails, organizational backing for walking groups, stairwell projects, inspirational posters, and assistance with communication and organization.

Organizations can set the tone and encourage physical activity by incorporating lessons learned from the community. Community public health programs have focused on creating opportunities for and removing barriers to physical activity by designing and altering the environment to encourage physical activity. Active community environments are environments with characteristics that promote physical activity, such as public access to facilities, streets with sidewalks, and increased housing density. This is done by:

- Implementing building codes that would make stair locations visible and create an appealing alternative to elevator or escalator use;

- Writing policies requiring developers to plan areas with more available parks and exercise facilities;

- Creating attractive and safe pedestrian and bicycle paths and trails; and

- Designing pedestrian-friendly neighborhoods.

It is easy to see how these ideas can be borrowed on a facility level.

7.6.4. Stairwell Projects

Employees can make a choice between taking the stairs and taking an elevator or escalator. If they choose the stairs, they have selected an easy, inexpensive method of adding physical activity to their workday. Stair walking requires no special clothing, equipment, or training.

Research shows that when employees do not use the stairs it is because they perceive them as unattractive and/or unsafe. CDC's Division of Nutrition, Physical Activity, and Obesity conducted a study beginning in 1998 to see if making physical changes to a stairwell in the Atlanta-based Koger Center Rhodes Building, combined with music and motivational signs, would motivate employees to use the stairs. A four-stage passive intervention was implemented over 3.5 years that included painting and carpeting, framed artwork, motivational signs, and music. Infrared beams were used to track the number of stair users.

"StairWELL to Better Health" was a low-cost intervention (less than $16,000), and the data suggests that physical improvements, motivational signs, and music can increase stairwell use among building occupants. More information for creating a

"StairWELL to Better Health" is available online at:
http://www.cdc.gov/nccdphp/dnpao/hwi/toolkits/stairwell/.

In addition to improving the physical appearance of the stairwell, "point-of-decision prompts" can encourage the use of stairs. Point-of-decision prompts are motivational signs placed on or near stairwells or at the base of elevators and escalators (the point at which the individual decides to use stairs or elevator) to encourage stair use. These signs provide information about the benefits of taking the stairs and/or remind people who may be considering becoming more active about the opportunity presented by the stairs. The Task Force on Community Preventive Services recommends point-of-decision prompts as effective in moderately increasing levels of physical activity, on the basis of strong evidence that they are effective in increasing the percentage of people choosing to take the stairs rather than an elevator or escalator. Tailoring the prompts to appeal to specific populations may increase the intervention's effectiveness.

Finally, it is important to ensure that stairwell improvements conform to all existing fire and safety codes.

7.7. Security, Safety, and Hygiene Issues

In developing a physical activity program, it is important to identify and address security, safety, and hygiene issues, and to incorporate these measures into the overall design plan. Whether creating walking paths or setting up fitness areas, the organization should include representation from Safety, Infection Control, Facility Engineering, Environmental Management, and Security to ensure that regulations are followed and appropriate procedures are in place. For any renovations and/or construction projects, early involvement of Facility Engineering Service is crucial. This proactive approach will alleviate potential barriers and provide a sustainable and effective physical activity program.

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7.9. Enclosures

Enclosure 30 Checklist for Planning a Physical Fitness Program

Enclosure 31 Legalities of Employee Health Promotion Activities

Enclosure 32 Liability Related to Physical Fitness Activities in the Workplace

Enclosure 33 Sample Personal Fitness Certification

Enclosure 34 Getting Started: An Exercise Quick Check

Enclosure 35 Sample Employee Fitness Center Orientation

Enclosure 36 Fitness Room Design Considerations

Enclosure 37 Equipment to Consider

Enclosure 38 Equipment Layout

Enclosure 39 Scope of Work to Design and Install Turn-Key Fitness Centers for VA Facilities

Enclosure 40 Fitness Center Environment of Care Checklist

Tobacco Cessation

Tobacco cessation is an integral component of health promotion and disease prevention programs. An estimated 46 million people, or 21 percent of all adults aged 18 years and older in the United States currently smoke cigarettes [Centers for Disease Control and Prevention (CDC), 2009]. Cigarette smoking is more common among men (23 percent) than women (18 percent) (CDC, 2009). Current trends show that globally, tobacco use will cause more than 8 million deaths annually by 2030 (World Health Organization, 2008). On average, smokers die 13 to 14 years earlier than nonsmokers (CDC, 2002).

The U.S. Office of Personnel Management (OPM) supports and encourages agency-authorized programs aimed at employee health promotion and disease prevention, including smoking cessation programs. In 2003, OPM initiated "HealthierFeds" (www.opm.gov/healthierfeds/) as part of the broader Presidential initiative, "HealthierUS". One of the chief aims of the initiative is to encourage federal employees to make healthier lifestyle choices, including the cessation of tobacco use.

According to reports issued by the Surgeon General, smoking is the chief avoidable cause of death in our society. Programs designed to help employees stop using tobacco are in the best health interests of federal employees who are tobacco users. Data from the CDC indicate that tobacco cessation may also contribute to improved organizational performance and productivity.

8.1. Types of Tobacco

Tobacco can be consumed in various forms such as a cigar or cigarette, bidis, in a smoking pipe, or in a water pipe or a hookah. A cigarette is a small paper-wrapped cylinder of cured and shredded or cut tobacco leaves processed with hundreds of chemicals. Cigarettes are the predominant form of tobacco used worldwide. The smoke from a cigarette contains more than 4,000 chemicals that have various toxic, mutagenic, and carcinogenic effects. The content and concentration of chemical ingredients varies widely from one brand or type of cigarette to the next.

Another form of tobacco is smokeless. There are two types of smokeless tobacco: snuff and chewing. Smokeless tobacco is chewed, "dipped" (placed between the cheek and gum), and consumed; snuff is finely powdered tobacco that is sniffed into the nose.

8.2. Overview of Health-Related Impacts of Tobacco

Cigarette smoking is the leading cause of preventable death in the United States (CDC, 2002), accounting for approximately 443,000 deaths or 1 of every 5 deaths in the United States each year, despite the availability of effective and readily-available interventions. Tobacco dependence is a chronic disease that often requires repeated intervention and multiple attempts to quit. Although 70 percent

of smokers report trying to quit, only 40 percent report quitting smoking (CDC, 2000-2004; CDC, 2008).

Cancer: Cancer is the second leading cause of death and was among the first diseases causally linked to smoking. Smoking causes about 90 percent of lung cancer deaths in men and almost 80 percent of lung cancer deaths in women. The risk of dying from lung cancer is more than 23 times higher among men who smoke cigarettes, and about 13 times higher among women who smoke cigarettes compared with never smokers (Novotny, 1998). Smoking causes cancers of the bladder, oral cavity, pharynx, larynx (voice box), esophagus, cervix, kidney, lung, pancreas, and stomach, and causes acute myeloid leukemia.

Cardiovascular disease: Smoking causes coronary heart disease, the leading cause of death in the United States. Cigarette smokers are 2-4 times more likely to develop coronary heart disease than nonsmokers. Cigarette smoking approximately doubles a person's risk for stroke. Cigarette smoking causes reduced circulation by narrowing the blood vessels (arteries). Smokers are more than ten times as likely as nonsmokers to develop peripheral vascular disease. Smoking causes abdominal aortic aneurysm.

Respiratory disease: Cigarette smoking is associated with a tenfold increase in the risk of dying from chronic obstructive lung disease. About 90 percent of all deaths from chronic obstructive lung diseases are attributable to cigarette smoking.

Other effects: Cigarette smoking has many adverse reproductive and early childhood effects, including an increased risk for infertility, preterm delivery, stillbirth, low birth weight, and sudden infant death syndrome (SIDS). Postmenopausal women who smoke have lower bone density than women who never smoked. Women who smoke have an increased risk for hip fracture than never smokers.

Diseases from other forms of tobacco: Although most people who use tobacco smoke cigarettes, other forms of tobacco are not safe alternatives to smoking cigarettes. Use of smokeless tobacco, cigars, and bidis are known to cause a number of serious health problems. Smokeless tobacco contains 28 cancer-causing agents (carcinogens). It is a known cause of human cancer as it increases the risk of developing cancer of the oral cavity. Other oral health problems strongly associated with smokeless tobacco use are leukoplakia (a lesion of the soft tissue that consists of a white patch or plaque that cannot be scraped off) and recession of the gums.

The addictive effects of tobacco: Tobacco becomes addictive mainly as a result of nicotine, which alters brain function. Most smokers continue to smoke in order to avoid withdrawal symptoms. Addiction to tobacco (nicotine) is not immediate. It may take weeks or months to develop. For those who smoke more than 15 cigarettes per day, there is a high level of nicotine in the blood. This makes

quitting difficult. Stopping can produce unpleasant withdrawal symptoms including depression, insomnia, irritability, difficulty concentrating, restlessness, anxiety, decreased heart rate, increased appetite, weight gain, and craving for nicotine. Symptoms peak from 24 to 48 hours after stopping and can last from 3 days up to 4 weeks, although the craving for a cigarette can last for months.

8.3. Dealing with Secondhand Smoke

Secondhand smoke is also known as environmental tobacco smoke (ETS) or passive smoke. It is a mixture of two forms of smoke that come from burning tobacco: side stream smoke (smoke that comes from the end of a lighted cigarette, pipe, or cigar) and mainstream smoke (smoke that is exhaled by a smoker).

When non-smokers are exposed to secondhand smoke, it is called involuntary smoking or passive smoking. Non-smokers who breathe in secondhand smoke inhale nicotine and other toxic chemicals just like smokers do. As secondhand smoke exposure increases, the level of harmful chemicals in an individual's body increases. This is associated with an increase in the rate of diseases that are ordinarily associated with smokers, such as cancer.

Secondhand smoke is classified as a "known human carcinogen" by the U.S. Environmental Protection Agency (EPA), the U.S. National Toxicology Program, and the International Agency for Research on Cancer (IARC), a branch of the World Health Organization.

In the United States, each year secondhand smoke is responsible for an estimated 46,000 deaths from heart disease and about 3,400 lung cancer deaths in non-smokers who live with smokers. Other breathing problems in non-smokers include coughing, mucus, chest discomfort, reduced lung function, lung infections (such as pneumonia and bronchitis) in children younger than 18 months, which result in hospitalizations, increased risk of SIDS, acute respiratory infections, ear problems, and more severe asthma. In addition, pregnant women exposed to secondhand smoke are also at increased risk of having low birth-weight infants.

There is no safe level of exposure to secondhand smoke. Many millions of Americans, both children and adults, are still exposed to secondhand smoke in their homes and workplaces despite a great deal of progress in tobacco control. The only way to fully protect non-smokers from exposure to secondhand smoke inside buildings is to prevent all smoking indoors.

Secondhand smoke in the workplace has been linked to an increased risk of heart disease and lung cancer among adult non-smokers. The Surgeon General has said that smoke-free workplace policies are the only way to do away with secondhand smoke exposure at work. Separating smokers from non-smokers, cleaning the air, and ventilating buildings limits, but does not prevent, nonsmokers from being exposed to secondhand smoke. Nonsmoking policies both protect workers and encourage smokers to quit.

Making a home smoke-free may be one of the most important things one can do for the health of their family. Any family member can develop health problems related to secondhand smoke. Currently, VA Medical Centers and health care facilities are still required by federal law to provide areas for employees to smoke and to provide "reasonable access to smoking areas" for employees under collective bargaining agreements. However, a number of facilities have been successful in working with their stakeholders to get support to reduce the areas for smoking to one outdoor area for employees and one for Veterans.

8.4. Assessment of Tobacco Use, Nicotine Dependence, Abstinence Attempts, and Reasons for Quitting

8.4.1. Counseling

An approach that utilizes motivational interviewing is recommended and has been found effective in achieving behavioral change. Details on this methodology can be found in Chapter 11, Motivational Interviewing.

In motivating the employee towards quitting the use of tobacco, it is important to lead them to identify forces promoting change such as saving money, better health, better self image; and forces resisting change such as fear of failure, irritability, disturbed relationships, boredom, stress, depression, weight gain, and verification of addiction. To keep employees engaged, it is important to minimize reading level and requirements for abstract thought and to focus interventions on beliefs about tobacco use, personal efficacy (beliefs about self), efficacy of stop-smoking efforts, and life without tobacco. In addition, individual interventions should be limited to no longer than a maximum of 15 minutes, focus on tangible gains from not smoking, and involve employees in activities where competition is used to motivate learning.

The following serves as a guideline for the evaluation of tobacco use, tobacco addiction, and smoking cessation counseling.

Briefly assess smoking history and current consumption.

1. Become familiar with the employee's smoking history and cigarette consumption by asking the following questions:

   - "For how many years have you smoked cigarettes on a daily or near daily basis?"

   - "How many cigarettes per day do you smoke in a typical day?"

   - "How soon after you wake up do you smoke your first cigarette?"

2. Explain that this information will be useful in planning medication and counseling treatments.

Assess previous abstinence attempts.

1. Ask about experiences and outcomes of previous smoking quit attempts.

    - "Have you ever tried to stop smoking before?"

    - "What was the longest period of time that you ever quit smoking?"

2. If employee has ever stopped smoking for at least 24 hours as a result of a deliberate quit attempt, ask the following questions in reference to their single most successful (longest) quit attempt:

    - "What was it like for you to quit?"

    - "Did you notice any benefits during the time you stopped smoking (e.g., more energy, improved breathing, and better sense of smell or taste)?"

    - "What did you do that helped you stop smoking?"

    - "What triggered your smoking relapse?"

3. Encourage employees with a positive quit history.

    - Examples: Mention that prior abstinence demonstrates the employee's ability to do without smoking; summarize benefits experienced by employee during the period of not smoking.

4. Reframe past quit attempts as learning opportunities rather than failures.

    - Examples: "What did you learn from your past quit attempt(s) that will help you succeed now?" "It is normal for successful ex-smokers to make several quit attempts before stopping for good, as they learn valuable lessons each time."

5. Summarize methods that the employee found helpful in past quit attempts and suggest using these methods during the current quit attempt.

6. Summarize factors contributing to past relapses. Explain that treatment will help the employee anticipate and prepare for relapse triggers that previously led to their return to smoking.

Assess reasons for quitting smoking.

1. Ask the employee to state his or her personal reasons for wanting to quit smoking.

    If the employee obviously neglected to name personally relevant benefits of quitting, suggest additional reasons for quitting smoking. For example: stopping smoking lowers risk of serious medical complications for people with diabetes or stopping smoking reduces the incidence of asthma in children and grandchildren.

2. Ask the employee to record these reasons on a worksheet. Assist the employee in completing this task by paraphrasing reasons for quitting as necessary, in order to ensure that they are clearly and concisely stated.

3. Ask employee to record up to three of his or her most important reasons for quitting smoking on a 3 x 5 index card at home after the session. Advise the employee to carry this card with him or her and read it on at least three separate occasions each day, right before lighting up a cigarette. Suggest carrying the card in a conspicuous place, such as inserting it into the pack of cigarettes or wallet.

8.4.2. Treatment Options

Seventy percent of smokers report wanting to quit, but the majority of smokers who attempt to quit do not use recommended cessation methods. Consequently, most relapse within the first 8 days after quitting. Studies show that only 4-7 percent of untreated smokers are likely to be successful (Fiore, 2008). However, with optimal treatment, this can exceed 30 percent at 1 year. Effective strategies include counseling *and* pharmacologic therapy. Pharmacologic therapy for tobacco cessation includes:

- Nicotine Replacement Therapy (NRT);

- Buproprion; and

- Varenicline.

8.4.2.a. NRT

NRT provides nicotine to a smoker without using tobacco. The use of NRT has been found to increase chances of quitting by 50-70 percent. NRT is relatively safe and non-carcinogenic. Use of NRT avoids exposure to carbon monoxide from cigarette smoking, which decreases oxygen delivery to the tissues. NRT use also decreases exposure to oxidant gases, which are atherogenic, and to tars, which are carcinogenic. All commercially available forms of NRT are effective. In addition, NRT has been found to work with or without counseling, though quit rates are increased with counseling. NRT is available in prescription and non-prescription forms including:

1. Non-Prescription:

   - Patch;

   - Lozenge; and

   - Gum.

2. Prescription:

   - Nasal Spray; and

- Oral Inhaler.

There are differences in delivery of the different types because of their pharmacokinetics (See Figure 8-1 below).
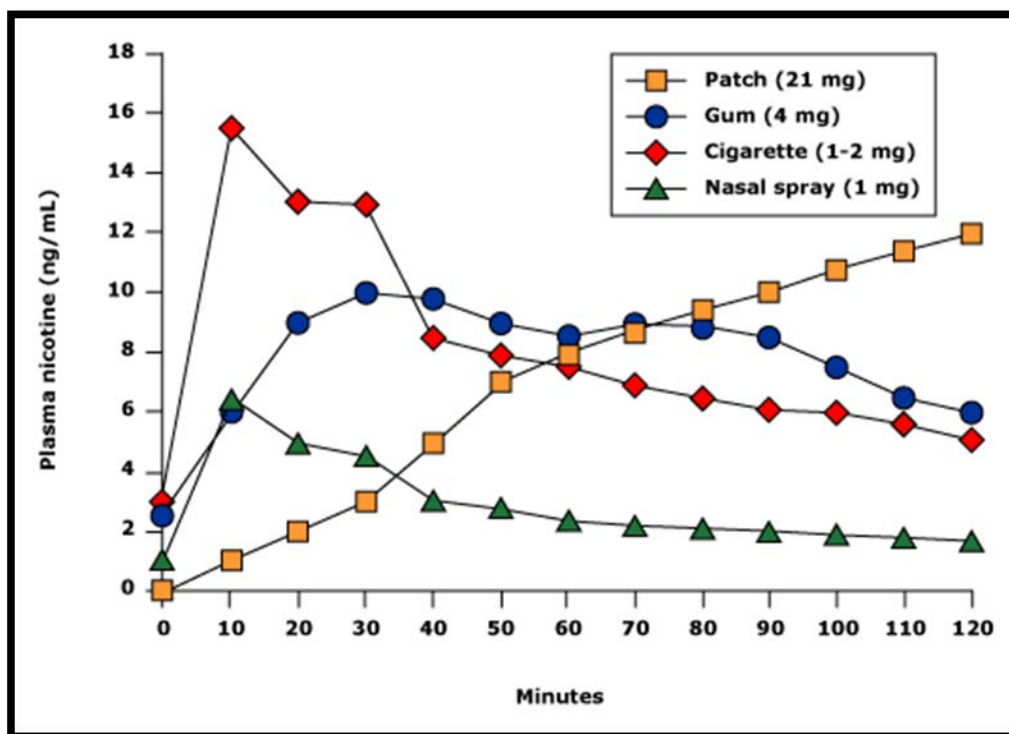
Figure 8-1: Plasma Nicotine Levels After a Smoker Has Smoked a Cigarette, Received Nicotine Nasal Spray, Begun Chewing Nicotine Gum, or Applied a Nicotine Patch

The amount of nicotine in each product is given in parentheses. The pattern produced by the use of the nicotine inhaler (not shown) is similar to that for nicotine gum (Rigotti, 2002).

Promoting tobacco cessation as a health promotion and disease prevention initiative is consistent with Veterans Health Administration's (VHA's) central health care mission and goal of being an employer of choice. Providing NRT makes additional assistance available to employees trying to quit tobacco use. See Enclosure 45, VHA Directive 2010-041, Smoking Cessation Benefit for VHA Employees: No-Cost Provision of Nicotine Replacement Therapy, which provides policy for the provision of free NRT over-the-counter (OTC) medications to employees in VHA who seek assistance with quitting smoking as part of VHA's core preventive health mission. This enclosure also provides guidelines for the delivery/effects of different therapies.

Pharmacokinetics:

The nasal and oral forms of NRT (spray, gum, and lozenge) have a rapid onset of action and are short-acting. The NRT patch on the other hand is long-acting, has

a relatively slow onset, and consequently takes several hours to reach peak plasma levels. In addition, the NRT patch provides relatively constant withdrawal relief over 24 hours. As seen in Figure 8-1 above, the nasal spray most closely resembles the pharmacokinetics of plasma nicotine clearance of cigarette smoking.

Patch Plus regimen:

This is the regimen recommended for use. This regimen uses the nicotine patch as the primary NRT product and provides add-on of short acting forms of NRT (spray, gum, and lozenge) to control cravings and withdrawal symptoms during the day.

Nicotine patches double the success of quit attempts. Use of the nicotine patch should start on quit day, and be applied to clean and hairless skin. The patch should be removed and replaced every morning on a new site. Insomnia and vivid dreams may be managed by removing the patch at bedtime. Nicotine dosing should be tapered in a step-wise manner. There are several dosing protocols described in the literature and in use. The VHA recommended regimen can be found in [Enclosure 45, VHA Directive 2010-041, Smoking Cessation Benefit for VHA Employees: No-Cost Provision of Nicotine Replacement Therapy](#).

Employees should be instructed to chew nicotine gum slowly, using the "chew and park" technique. This means chewing the gum only until it feels slightly tingly or peppery. The employee should then "park" the gum between their cheek and gum to allow the nicotine to enter their bloodstream through the cheek lining. If the gum is chewed beyond the peppery/tingly feeling, the nicotine will be swallowed instead of absorbed, preventing relief of the craving for tobacco. Consider giving smokers with a history of smoking 20 or more cigarettes daily a 4 milligram (mg) gum or lozenge. Others can receive a 2mg gum or lozenge (See [Enclosure 46, Sample Nicotine Replacement Therapy (NRT) Facility Policy](#), for details). Conditioned association with environmental triggers like a morning coffee, alcohol, or the end of a meal can be dealt with using short-acting NRT.

The nicotine inhaler consists of a mouthpiece and a plastic nicotine-containing cartridge. It releases nicotine vapor (not smoke) into the mouth. As such, it addresses the physical dependence on cigarette smoking as well as the behavioral and sensory aspects of smoking. The dose is 1-2 sprays per hour, not to exceed more than 5 doses per hour (10 sprays) and 40 doses per day (80 sprays). The dose should be reduced over the next 6-12 weeks.

NRT has been found to be safe to use in outpatients even with known cardiovascular disease. In addition, smoking reduction with patch use has been shown to improve treadmill exercise duration and reduce the incidence of exercise-induced myocardial ischemia.

Employees needing other forms of NRT (prescription NRT) or other pharmacological agents should receive subsequent therapy through their primary care provider. It is important to recognize barriers to quitting and address them appropriately. For example, the presence of concurrent depression, insomnia, irritability, or anxiety warrants referral to the employee's primary care provider.

8.4.2.b. Other Pharmacological Agents

Other pharmacological agents are described below to provide the employee wellness provider with a comprehensive overview of pharmacologic therapy for tobacco cessation. Employees referred to their primary care providers after initial NRT treatment may benefit from the adjunct therapies. These adjunct medications are not recommended as part of VHA's Employee Smoking Cessation Program at this time as they are often provided by the Federal Employees Health Benefit (FEHB) carriers. In addition, these medications have a possible association with suicidal events, and it is advised that providers take a careful psychiatric history prior to prescription. This may be outside the scope of the employee health promotion providers.

Bupropion:

Bupropion enhances the central nervous system release of noradrenergic and dopaminergic neurotransmitters. The sustained release form is utilized for smoking cessation. In a meta-analysis of randomized trials, bupropion use was found to double the likelihood of smoking cessation compared to placebo use.

Common side effects of bupropion include insomnia, agitation, dry mouth, and headache. Bupropion is associated with a decrease in seizure threshold and is contra-indicated in individuals with seizure disorders or a predisposition to seizures. The recommended dose for Bupropion is 150mg twice a day.

Varenicline:

Varenicline acts as a partial agonist at the nicotine acetylcholine receptor. This is the receptor that produces the reinforcing effects of nicotine and consequently produces nicotine dependence. Varenicline has been found to be superior to bupropion in smoking cessation, with a quit rate of 33 percent at the 6 month follow up. The evidence is not definitely supportive that Varenicline is superior to NRT at this time.

Side effects of Varenicline include nausea, abnormal dreams, suicidal thoughts, aggressive erratic behavior, visual disturbances, syncope, and moderately severe skin reactions. It is recommended that providers take a careful psychiatric history and avoid its use in smokers with history of suicidal ideation and a history of major depression. Smokers on Varenicline should be advised to stop the drug and contact their provider if the individual or family notices unusual behavior or mood symptoms.

8.5. Other Issues

8.5.1. Pharmacotherapy as a Part of a Tobacco Cessation Program

VHA Directive 2010-041, Smoking Cessation Benefit for VHA Employees: No-Cost Provision of Nicotine Replacement Therapy (Enclosure 45), states that it is VHA policy to provide free OTC formulations of NRT in appropriate combinations of the nicotine patch, gum, and lozenge to employees who are seeking assistance with quitting smoking as part of preventive health initiatives for employees. Each facility must develop and implement a policy providing free OTC NRT as part of a smoking cessation program for employees. See Enclosure 46 for a sample policy. Employees may obtain this free benefit by requesting prescription orders for OTC NRT from the Employee Health Office.

Agencies that provide their employees with NRT as part of an agency's smoking cessation program should acquire those items in accordance with the regulatory and statutory provisions contained in the Federal Acquisition Regulation and all internal agency guidelines for the expenditure of appropriated funds. Agencies may also wish to contract with tobacco cessation program providers which include NRT as part of their program.

8.5.2. Relationship to Health Insurance Reimbursements

The following information is provided for the benefit of employees who elect to participate in tobacco cessation programs other than on-site agency-sponsored programs. While agencies would not pay for the cost of registration for such programs, employees should be aware that they can seek insurance plan reimbursement up to the amount covered in their health benefits plan.

Under the FEHB Programs, insurance plans cover some costs associated with smoking cessation. Federal employees need to refer to their plan brochure for specific coverage information by reviewing the plan's coverage at www.opm.gov/insure/health/index.asp and then clicking on "current plan brochures".

FEHB carriers are encouraged to provide benefits for smoking cessation that follow Public Health Service treatment guidelines. Consistent with these guidelines, primary care visits for tobacco cessation should be covered with the standard office visit co-payment. Individual or group counseling for tobacco cessation should be covered with no co-payment. Prescriptions for all Food and Drug Administration (FDA)-approved medications for treatment of tobacco use should be covered with the usual pharmacy co-payments.

Benefits vary by carrier. Following the Patient Affordable Care Act of 2010, all FEHB Program Plans will cover comprehensive smoking cessation benefits. This includes coverage for counseling, medications, multiple quit attempts with no annual or lifetime limitations, and no enrollee cost sharing.

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8.7. Enclosures

Enclosure 45 VHA Directive 2010-041, Smoking Cessation Benefit for VHA Employees: No-Cost Provision of Nicotine Replacement Therapy

Enclosure 46 Sample Nicotine Replacement Therapy (NRT) Facility Policy

EmployeeHealthPromotion EHPDP
Disease Prevention

Healthy Eating

9.1. Overview

Healthy eating consists of a nutritious diet and healthy food behaviors. Healthy eating is not about strict diet plans, staying unrealistically thin, or food deprivation. Rather, it is about having positive thoughts associated with food, having more energy, and keeping healthy. Adopting a healthy diet and positive behaviors associated with food will help create healthy lifestyle habits that last a lifetime.

Over the past few years it has become clear that weight is an important health issue. Many of the health problems today are a result of unhealthy eating habits. Research has shown that overweight and obesity* increase the risks for the following conditions [National Institutes of Health (NIH), 1999]:

- Coronary heart disease;

- Type 2 diabetes;

- Cancers (endometrial, breast, and colon);

- Hypertension (high blood pressure);

- Dyslipidemia (high total cholesterol or high levels of triglycerides);

- Stroke;

- Liver and gallbladder disease;

- Sleep apnea and respiratory problems;

- Osteoarthritis (a degeneration of cartilage and its underlying bone within a joint); and

- Gynecological problems (abnormal menses, infertility).

*Overweight is defined as a body mass index (BMI) of 25 or higher; obesity is defined as a BMI of 30 or higher.

The rapidly rising rate of obesity is a growing concern in America. Approximately 72 million Americans were considered obese in 2005-2006. Obesity and the health conditions associated with it are responsible for much of the increase in health care spending by employers (NIH, n.d.). Obesity affects more than health care costs; it also has a significant impact on worker productivity because the more chronic medical conditions an employee has, the higher the probability of absenteeism or presenteeism (U.S. Department of Health and Human Services, 2009). See Enclosure 47, Weight Management.

Based on research by MetLife, the Centers for Disease Control and Prevention (CDC), and the American College of Cardiology, three key conditions linked to obesity - diabetes, arthritis, and heart disease - cost employers more than $220 billion annually in medical care and are associated with 39 million lost work days.

Employers have an important role in ensuring a healthy work environment and lessening the financial burden to the workplace resulting from the rise in obesity. While employees must take self-responsibility for addressing their own health and lifestyle concerns, it is in the best interest of employers to help employees take the first step in managing the problem.

By offering healthful food choices in the workplace and foods that are labeled with nutrition content/information, employees are encouraged to make mindful decisions to support healthy eating. The workplace is an important setting in which people can increase their intake of healthy foods to benefit their health and protect against illness. A healthy, balanced diet helps people to have a strong immune system as well as recover more quickly from illness.

A healthy diet with good eating habits is an essential component of wellness. Always having healthy choices, whether in vending machines, in cafeterias, at meetings/conferences, at parties/events, or in break rooms, will encourage and support employees to eat healthy throughout the day.

Before any nutritious lifestyle plan can be initiated, healthy food behaviors need to be adopted and practiced. The food we eat and what we drink not only have a physical impact on the body, but can also contribute to mental and emotional health resulting in improved levels of concentration, mental alertness, ability to cope with everyday stresses, and higher self-esteem and self-confidence.

9.2. Dietary Guidelines

The *Dietary Guidelines for Americans* provides science-based advice to promote health and to reduce risk for major chronic diseases through diet and physical activity. Poor diet and physical inactivity result in an energy imbalance (more calories consumed than expended), which contributes to the increase in overweight and obesity in this country. Combined with daily physical activity, following a diet that is nutrient rich and does not provide excess calories should enhance the health of most individuals [U.S. Department of Agriculture (USDA), 2010].

Foods provide an array of nutrients and other compounds that may have beneficial effects on health. In certain cases, fortified foods and dietary supplements may be useful sources of one or more nutrients that otherwise might be consumed in less than recommended amounts. However, dietary supplements, while recommended in some cases, cannot replace a healthful diet.

Two examples of eating patterns that exemplify the Dietary Guidelines are the USDA Food Guide (http://www.choosemyplate.gov) and the Dietary Approaches

to Stop Hypertension (DASH) Eating Plan (NIH, 1999). Throughout most of this publication, examples use a 2,000-calorie level as a reference for consistency with the nutrition facts panel that is found on food labels. Although this level is used as a reference, recommended calorie intake will differ for individuals based on age, gender, and activity level. At each calorie level, individuals who eat nutrient-dense foods may be able to meet their recommended nutrient intake without consuming a specific calorie plan. The remaining calories-*the discretionary calorie allowance*, allow individuals flexibility to consume some foods and beverages that may contain added fats, added sugars, and alcohol.

The recommendations in the Dietary Guidelines are for Americans over 2 years of age. It is important to incorporate the food preferences of different racial/ethnic groups, vegetarians, and other groups when planning diets and developing educational programs and materials. The USDA Food Guide and the DASH Eating Plan are flexible enough to accommodate a range of food preferences and cuisines.

Please see the USDA Web site (http://fnic.nal.usda.gov) for the current Dietary Guidelines, and a resource guide for key recommendations.

9.3. MyPlate

The original 1992 food pyramid showing foods you should avoid or eat sparingly at the top and those in abundance at the bottom, has been replaced with MyPlate.

MyPlate is a graphic representation of the larger communications initiative based on 2010 Dietary Guidelines for Americans to help consumers make better food choices. It is designed to remind Americans to eat healthfully; it is not intended to change consumer behavior alone.

It illustrates the five food groups using a familiar mealtime visual, a place setting. My Plate is a simple circle divided into quadrants that contain fruits, vegetables, protein, and grains, making it look like a pie with a serving of dairy on the side.

MyPlate is depicted in Figure 9-1 (more information and individualized guidance is available online at: www.ChooseMyPlate.gov).
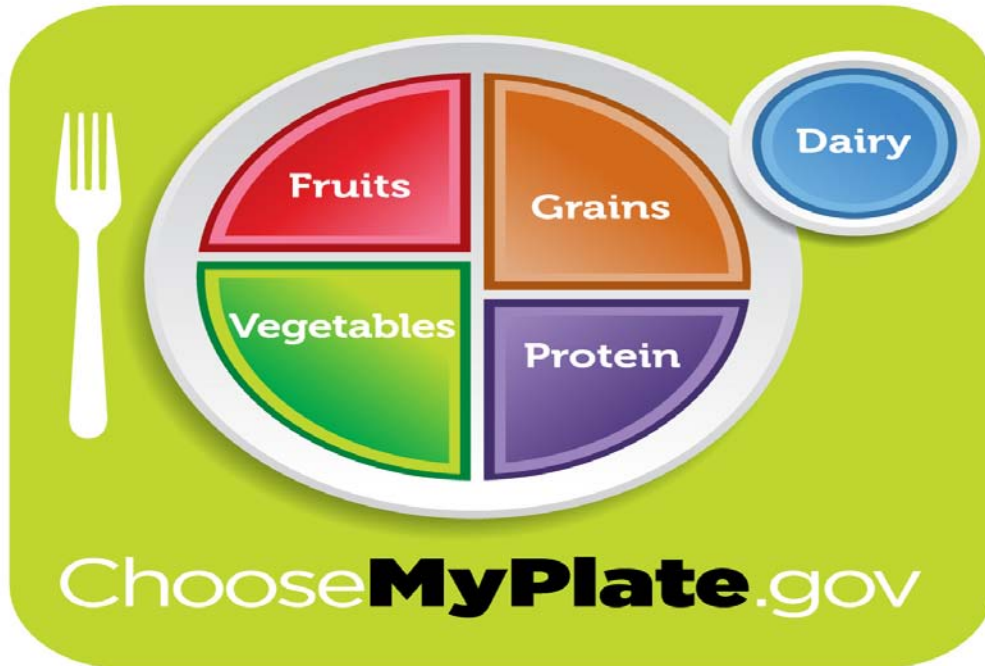
Figure 9-1: MyPlate

9.4. Inside MyPlate

The following information is an excerpt from the USDA MyPlate website. More information is available online at: www.ChooseMyPlate.gov.

9.4.1. Grains Group

Figure 9-2: Grains

Any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain is a grain product. Bread, pasta, oatmeal, breakfast cereals, tortillas, and grits are examples of grain products. Grains are divided into two subgroups: whole grains and refined grains.

Whole grains contain the entire grain kernel (the bran, germ, and endosperm). Examples include:

- Whole-wheat flour;

- Bulgur (cracked wheat);

- Oatmeal;

- Whole cornmeal; and

- Brown rice.

Refined grains have been milled, a process that removes the bran and germ. This is done to give grains a finer texture and improve their shelf life, but it also removes dietary fiber, iron, and many B vitamins. Some examples of refined grain products are:

- White flour;

- Degermed cornmeal;

- White bread; and

- White rice.

Most refined grains are enriched. This means certain B vitamins (thiamin, riboflavin, niacin, folic acid) and iron are added back after processing. Fiber is not added back to enriched grains. Check the ingredient list on refined grain products to make sure that the word "enriched" is included in the grain name. Some food products are made from mixtures of whole grains and refined grains.

In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or ½ cup of cooked rice, cooked pasta, or cooked cereal can be considered as 1 ounce equivalent from the grains group.

The amount of grains you need to eat depends on your age, sex, and level of physical activity. Recommended daily amounts are listed in the chart. Most Americans consume enough grains, but few are whole grains. At least half of all the grains eaten should be whole grains.

Table 9-1: Recommended Daily Amounts for Grains

	Age	Daily Recommendation	Daily minimum amount of whole grains
Children	2-3 years old	3 ounce equivalents	1.5 ounce equivalents
	4-8 years old	5 ounce equivalents	2.5 ounce equivalents
Girls	9-13 years old	5 ounce equivalents	3 ounce equivalents
	14-18 years old	6 ounce equivalents	3 ounce equivalents
Boys	9-13 years old	6 ounce equivalents	3 ounce equivalents
	14-18 years old	8 ounce equivalents	4 ounce equivalents
Women	19-30 years old	6 ounce equivalents	3 ounce equivalents
	31-50 years old	6 ounce equivalents	3 ounce equivalents
	51+ years old	5 ounce equivalents	3 ounce equivalents
Men	19-30 years old	8 ounce equivalents	4 ounce equivalents
	31-50 years old	7 ounce equivalents	3.5 ounce equivalents
	51+ years old	6 ounce equivalents	3 ounce equivalents

Note: The amounts in Table 9-1 are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

Key Consumer Message: Make at least half your grains whole grains.

9.4.2. Vegetables Group

Figure 9-3: Vegetables

Any vegetable or 100 percent vegetable juice counts as a member of the vegetable group. Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; and may be whole, cut-up, or mashed.

Vegetables are organized into five subgroups, based on their nutrient content. Some commonly eaten vegetables in each subgroup are as follows:

Dark green vegetables

Bok choy
Broccoli
Collard greens
Dark green leafy lettuce
Kale
Mesclun
Mustard greens
Romaine lettuce
Spinach
Turnip greens
Watercress

Red & orange vegetables

Acorn squash
Butternut squash
Carrots
Hubbard squash
Pumpkin
Red peppers
Sweet potatoes
Tomatoes
Tomato juice

Beans and peas*

Black beans
Black-eyed peas (mature, dry)
Garbanzo beans (chickpeas)
Kidney beans
Lentils
Navy beans
Pinto beans
Soy beans
Split peas
White beans

Starchy vegetables

Cassava
Corn
Fresh cowpeas (not dry)
Fresh field peas (not dry)
Fresh black-eyed peas (not dry)
Green bananas
Green peas
Green lima beans
Plantains
Potatoes
Taro
Water chestnuts

Other vegetables

Artichokes
Asparagus
Avocado
Bean sprouts
Beets
Brussels sprouts
Cabbage
Cauliflower
Celery
Cucumbers
Eggplant
Green beans
Green peppers
Iceberg (head) lettuce
Mushrooms
Okra
Onions
Parsnips
Turnips
Wax beans
Zucchini

In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the Vegetable Group.

Vegetable choices should be selected from among the vegetable subgroups. It is not necessary to eat vegetables from each subgroup daily. However, over a week, try to consume the amounts listed from each subgroup as a way to reach your daily intake recommendation.

The amount of vegetables you need to eat depends on your age, sex, and level of physical activity. Recommended total daily amounts are shown in Table 9-2. Recommended weekly amounts from each vegetable subgroup are shown in Table 9-3.

Table 9-2: Recommended Daily Amounts for Vegetables

	Age	**Daily Recommendation**
Children	2-3 years old	1 cup
	4-8 years old	1.5 cups
Girls	9-13 years old	2 cups
	14-18 years old	2.5 cups
Boys	9-13 years old	2.5 cups
	14-18 years old	3 cups
Women	19-30 years old	2.5 cups
	31-50 years old	2.5 cups
	51+ years old	2 cups
Men	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	2.5 cups

Note: The amounts in Table 9-2 are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

Vegetable subgroup recommendations are given as amounts to eat WEEKLY. It is not necessary to eat vegetables from each subgroup daily. However, over a week, try to consume the amounts listed from each subgroup as a way to reach your daily intake recommendation.

Table 9-3: Recommended Weekly Amounts for Vegetable Subgroups

	Age	Dark Green Vegetables	Red and Orange Vegetables	Beans and Peas	Starchy Vegetables	Other Vegetables
Children	2-3 years	.5 cup equivalents	2.5 cups	.5 cup	2 cups	1.5 cups
	4-8 years	1 cup	3 cups	.5 cup	3.5 cups	2.5 cups
Girls	9-13 years	1.5 cups	4 cups	1 cup	4 cups	3.5 cups
	14-18 years	1.5 cups	5.5 cups	1.5 cups	5 cups	4 cups
Boys	9-13 years	1.5 cups	5.5 cups	1.5 cups	5 cups	4 cups
	14-18 years	2 cups	6 cups	2 cups	6 cups	5 cups
Women	19-30 years	1.5 cups	5.5 cups	1.5 cups	5 cups	4 cups
	31-50 years	1.5 cups	5.5 cups	1.5 cups	5 cups	4 cups
	51+ years	1.5 cups	4 cups	1 cup	4 cups	3.5 cups
Men	19-30 years	2 cups	6 cups	2 cups	6 cups	5 cups
	31-50 years	2 cups	6 cups	2 cups	6 cups	5 cups
	51+ years	1.5 cups	5.5 cups	1.5 cups	5 cups	4 cups

Key Consumer Message: Make half your plate fruits and vegetables.

9.4.3. Fruits Group

Figure 9-4: Fruits

Any fruit or 100 percent fruit juice counts as part of the fruit group. Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed.

In general, 1 cup of fruit or 100 percent fruit juice, or 0.5 cup of dried fruit can be considered as 1 cup from the Fruit Group.

The amount of fruit you need to eat depends on age, sex, and level of physical activity.

Recommended amounts are shown in Table 9-4 below.

Table9-4: Recommended Daily Amounts For Fruits

	Age	Daily Recommendation
Children	2-3 years old	1 cup
	4-8 years old	1 to 1.5 cups
Girls	9-13 years old	1.5 cups
	14-18 years old	1.5 cups
Boys	9-13 years old	1.5 cups
	14-18 years old	2 cups
Women	19-30 years old	2 cups
	31-50 years old	1.5 cups
	51+ years old	1.5 cups
Men	19-30 years old	2 cups
	31-50 years old	2 cups
	51+ years old	2 cups

Note: The amounts in Table 9-4 are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

Key Consumer Message: Make half your plate fruits and vegetables.

9.4.4. Dairy Group

Figure 9-5: Dairy

All fluid milk products and many foods made from milk are considered part of this food group. Most Dairy Group choices should be fat-free or low-fat. Foods made from milk that retain their calcium content are part of the group. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not. Calcium-fortified soymilk (soy beverage) is also part of the Dairy Group.

In general, 1 cup of milk, yogurt, or soymilk (soy beverage), 1.5 ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the Dairy Group.

The amount of food from the Dairy Group you need to eat depends on age. Recommended daily amounts are shown in Table 9-5 below.

Table 9-5: Recommended Daily Amounts for Dairy

	Age	Daily Recommendation
Children	2-3 years old	2 cups
	4-8 years old	2.5 cups
Girls	9-13 years old	3 cups
	14-18 years old	3 cups
Boys	9-13 years old	3 cups
	14-18 years old	3 cups
Women	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	3 cups
Men	19-30 years old	3 cups
	31-50 years old	3 cups
	51+ years old	3 cups

Key Consumer Message: Switch to fat-free or low-fat (1%) milk.

9.4.5. Protein Group

Figure 9-6: Protein

All foods made from meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds are considered part of the protein foods group. Beans and peas are also part of the vegetable group.

Select a variety of protein foods to improve nutrient intake and health benefits, including at least 8 ounces of cooked seafood per week. Young children need less, depending on their age and calories needs. The advice to consume seafood does not apply to vegetarians. Vegetarian options in the protein foods group include beans and peas, processed soy products, and nuts and seeds. Meat and poultry choices should be lean or low-fat.

In general, 1 ounce of meat, poultry or fish, 0.25 cup cooked beans, 1 egg, 1 tablespoon of peanut butter, or 0.5 ounce of nuts or seeds can be considered as 1 ounce equivalent from the protein foods group.

The amount of food from the protein foods group you need to eat depends on age, sex, and level of physical activity. Most Americans eat enough food from this group, but need to make leaner and more varied selections of these foods. Recommended daily amounts are shown in the chart.

Table 9-6: Recommended Daily Amounts for Protein

	Age	Daily Recommendation
Children	2-3 years old	2 ounce equivalents
	4-8 years old	4 ounce equivalents
Girls	9-13 years old	5 ounce equivalents
	14-18 years old	5 ounce equivalents
Boys	9-13 years old	5 ounce equivalents
	14-18 years old	6.5 ounce equivalents
Women	19-30 years old	5.5 ounce equivalents
	31-50 years old	5 ounce equivalents
	51+ years old	5 ounce equivalents
Men	19-30 years old	6.5 ounce equivalents
	31-50 years old	6 ounce equivalents
	51+ years old	5.5 ounce equivalents

Note: The amounts in Table 9-6 are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

9.4.6. What are Oils?

Figure 9-7: Oils

Oils are fats that are liquid at room temperature, like the vegetable oils used in cooking. Oils come from many different plants and from fish. Oils are NOT a food group, but they provide essential nutrients. Therefore, oils are included in USDA food patterns.

Some common oils are:

- Canola oil;

- Corn oil;

- Cottonseed oil;

- Olive oil;

- Safflower oil;

- Soybean oil; and

- Sunflower oil.

Some oils are used mainly as flavorings, such as walnut oil and sesame oil. A number of foods are naturally high in oils, like:

- Nuts;

- Olives;

- Some fish; and

- Avocados.

Foods that are mainly oil include mayonnaise, certain salad dressings, and soft (tub or squeeze) margarine with no trans fats. Check the Nutrition Facts Label to find margarines with 0 grams of trans fat. Amounts of trans fat are required to be listed on labels.

Most oils are high in monounsaturated or polyunsaturated fats, and low in saturated fats. Oils from plant sources (vegetable and nut oils) do not contain any cholesterol. In fact, no plant foods contain cholesterol.

A few plant oils, however, including coconut oil, palm oil, and palm kernel oil, are high in saturated fats and for nutritional purposes should be considered to be solid fat.

Solid fats are fats that are solid at room temperature, like butter and shortening. Solid fats come from many animal foods and can be made from vegetable oils through a process called hydrogenation. Some common solid fats are:

- Butter;

- Milk fat;

- Beef fat (tallow, suet);

- Chicken fat;

- Pork fat (lard);

- Stick margarine;

- Shortening; and

- Partially hydrogenated oil.

Some Americans consume enough oil in the foods they eat, such as:

- Nuts;

- Fish;

- Cooking oil; and

- Salad dressings.

Others could easily consume the recommended allowance by substituting oils for some solid fats they eat. A person's allowance for oils depends on age, sex, and level of physical activity. Daily allowances are shown in Table 9-7.

Table 9-7: Recommended Daily Amount for Oils

	Age	Daily Allowance
Children	2-3 years old	3 teaspoons
	4-8 years old	4 teaspoons
Girls	9-13 years old	5 teaspoons
	14-18 years old	5 teaspoons
Boys	9-13 years old	5 teaspoons
	14-18 years old	6 teaspoons
Women	19-30 years old	6 teaspoons
	31-50 years old	5 teaspoons
	51+ years old	5 teaspoons
Men	19-30 years old	7 teaspoons
	31-50 years old	6 teaspoons
	51+ years old	6 teaspoons

Note: The amounts in Table 9-7 are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs.

9.5. Healthy Food Behaviors

Being intuitive means being aware of your feelings. Intuitive eating is about recognizing what the body is feeling and listening to its natural hunger signals. Individuals should be encouraged to set reasonable goals for healthy food behaviors that lead to a healthy weight and feeling good (Wendt, 2009).

9.5.1. Physical and Emotional Hunger

According to the University of Texas Counseling and Mental Health Center Web site, there are several differences between physical and emotional hunger.

1. Emotional hunger comes on suddenly; physical hunger occurs gradually.

2. When an individual is eating to fill a void that is not related to an empty stomach, they crave a specific food such as pizza or ice cream, and only that food will meet their emotional need.

3. Emotional hunger feels like it needs to be satisfied instantly with the food craved; physical hunger can wait.

4. Even when full, if eating to satisfy an emotional need, an individual is more likely to keep eating. When eating because of hunger, one is more likely to stop when full.

5. Emotional eating can leave behind feelings of guilt; eating when physically hungry does not.

As an effective way to distinguish between physical and emotional hunger, a hunger scale may be useful (see Enclosure 48, Hunger Scale).

When hungry even after recently eating, check to see if the feeling is really a craving brought on by something psychological.

9.5.2. Am I Full?

Continue to listen to the body as an indicator to regulate eating. Hunger and satiety are the body signals that indicate how much to eat. Learning to recognize these signals can help get to a healthy weight and stay there. It takes about 20 minutes for the stomach to signal the brain that one has eaten enough. Eat slowly, chew slowly and well, putting down eating utensils between each bite.

Pay attention to each bite taken noting the feeling. Drink plenty of water, both before and during a meal. Take a break from eating by conversing with others at the meal. Check satiety halfway through a meal; slowing the rate of eating can allow fullness signals to develop. Eating lots of vegetables helps one feel more full. Another trick is to use smaller plates so that moderate portions do not appear meager.

9.5.3. Unconscious Eating

Be aware of unconscious eating. Anything that takes the focus off food makes one more likely to overeat. Turn off the TV, put aside reading and working to concentrate on the sheer pleasure of eating. Try controlling portions by placing addictive snack items (popcorn, chips, crackers) into single servings to control unconsciously eating directly from the container. Be aware of foods that are eaten while preparing meals and nibbles taken off of the kids' plates. Mindful eating and being consciously aware of food choices are keys to a healthier lifestyle.

Develop a healthy attitude toward foods by becoming intuitive. Recognize body signals and set SMART goals for weight loss and maintaining a healthy weight.

9.5.3.a. Setting SMART Goals

Defining appropriate goals for lifestyle changes are an important first step in any weight management regime. Unfortunately, most post people trying to lose weight focus on just that one goal: weight loss. However, the most productive areas for a lifestyle change are diet and exercise. Taking time to create SMART goals is beneficial for any desired change.

- S - Specific. State the goal, being as specific as possible. Being specific should answer the questions "what? when? and how?" Example: "I want to lose 25 pounds (what) in 16 weeks (when) by increasing my exercise and reducing sugar intake (how)".

- M - Measurable. Provide evidence for the goal. A scale is the most obvious tool for measuring weight loss.

- A - Attainable. The goal should be meaningful and reasonable. Are there enough time and resources to meet the set goal? Is this a goal set by the individual and not one given by the provider or spouse?

- R - Realistic. Choose a goal that can be reached, but is challenging.

- T - Timely. This is the "how" part of specific. Goals have to have a time frame.

9.6. Developing a Nutrition Program

Any comprehensive wellness program needs to have a nutrition component and should be developed in collaboration with a registered dietitian or registered dietetic technician. As with any program development, begin by assessing the needs of the population. If specific nutrition needs or requests to help guide the programs are unable to be determined, offer a more broad approach to healthy eating education. It is also important to remember that successful group education programs address each of the following components:

- Awareness - Refers to educating participants on the basic concepts and the personal impact to them. For instance, one of the most popular awareness campaigns is the American Heart Association Red Dress campaign. The campaign centers on raising awareness that heart disease is the number one killer of women. As a nutritional approach, the program may include educating staff on Wear Red Day about the components of a heart-healthy diet to make them aware of the impact of heart health and what they can do to prevent being at risk.

- Motivation - Takes the education a step further; encouraging an individual's desire to adopt healthy habits. For instance, the awareness campaign for Wear Red Day may be paired with a lipid screening. Having an individual cholesterol profile may encourage an employee with rising low-density lipoprotein (LDL) to adopt the heart-healthy diet components.

- Skill - Implements the health habits once employees are aware of health concerns and are motivated to take action. The employees must be given the skills that will help them implement the health habits. For instance, offering a class on label reading helps the participant learn the skill that will aid them in choosing heart-healthy items in the grocery store.

- Opportunity - Allows employees to put their knowledge to the test. Giving participants an opportunity to practice is a real way of assuring the education has been translated into learning. To assess the retention of the heart-healthy diet concepts, a mock grocery store with real food items may be set up and people can be made to "shop" for the items that would fit into a heart-healthy diet. This degree of hands-on learning improves retention and effectiveness in the program.

The format of nutrition programs can vary greatly. The program should be implemented based on the needs of the staff and the objective of the event. Below are several suggested formats and sample topics.

9.6.1. Lunch and Learns

Many people have found that educational programs offered during the lunch break are an effective time to draw employees. Assess the population to determine if this is true. Consider whether the program will be 30 minutes or 1 hour in length when determining the topic that will be presented in this time frame. Below are some topics to consider:

- Supplement Safety - Vitamins, Minerals, and More! (see Enclosure 49, Nutritious Diet);

- Secrets to Successful Dieting;

- Food Safety and Sanitation (see Enclosure 50, Food Safety);

- Quick and Flavorful Cooking;

- Eating Well on a Budget;

- Healthy Meals Your Family Will Really Eat;

- Mealtime Help for Overweight Kids, Teens, and Spouses;

- Training Nutrition for Your Next 5K, 10K or Marathon;

- 10 Simple, Healthy Meals in 30 Minutes or Less;

- Be Supermarket Savvy;

- Stop Buying the Same 50 Items in the Supermarket Every Week!;

- The Truth Behind Detox Diets;

- 5 Meals, $5, 500 calories;

- Biggest Loser Baloney! What's the Sensible Way to Manage Weight?;

- Emotional Eating;

- 800 calories a day? 1000? 1750? What's Right for Me?;

- Exploring New Vegetables, Fruits and Grains;

- The Real Swim Suit Diet Fully Exposed and Revealed!;

- Healthy Snacks and Sweets; and

- Successful Strategies for Dining Out (See Enclosure 51, Eating Out).

9.6.2. Healthy Cooking Demonstrations

Held alone or in conjunction with an educational presentation, everyone loves to sample food. Being able to physically see the preparation of and sample the end product increases the odds that participants will try the recipe presented.

For a cooking demonstration to appear seamless, spend time in preparation. Consider the audience and the objective for the program. Factoring in the audience and intended outcome during planning will help set the foundation for a successful cooking demonstration.

- Gather the supplies needed to prepare the selected recipe;

- Consider all cooking utensils, serving utensils, cleaning supplies, and educational materials;

- Mentally walk through the preparation, making note of items needed;

- Provide employees with a copy of the recipe;

- Decide on main talking points to emphasize the overall message that is being delivered;

- Check with safety office representatives regarding the cooking equipment/methods and any safety measures:

    o Does the room/space have sprinklers;

    o Is there a fire extinguisher nearby;

    o Is there good ventilation if using oil or cooking something that might produce a bit of smoke; and

    o Use caution not to use knives in high traffic areas.

- Follow good sanitation practices; and

- Plan for safe sampling and taste-testing.

Another option to consider is organizing a supermarket tour to demonstrate how to shop for healthy foods and read food labels while shopping.

9.6.3. Campaigns

A campaign usually addresses an individual health behavior or topic. Examples include:

- Healthy vending choices - using a stoplight concept to highlight which foods are better choices than others;

- Healthy lunch choices - encouraging people to pack a "better brown bag";

- Healthy snack choices - keeping calories low while energy is high;

- Healthy meeting options - choosing items that can be served in place of pastries and sheet cake (see Enclosure 52, Healthy Meeting, for details); and

- Encouraging adequate fruit and vegetables.

The key to a coordinated campaign is that it is uniform, recognizable, the message is clear and concise, and it continues over a period of time.

9.6.4. Mobile Education: Taking the Education to the Employee

Often employees have difficulty attending educational programs because of a lack of time. Education can be delivered in a variety of ways. Examples include:

- Education roving cart;

- Online training;

- Video-conferencing;

- Web-based;

- Email; and

- Newsletters.

9.6.5. Facility Programs

Facility-wide nutrition-based programs intended to provide long-lasting change include the following:

- Farmers Market*;

- Smart Choices - the healthy meal and vending program offered by Veterans Canteen Service (VCS) (see Enclosure 53, Smart Choices, for details);

- Grocery Delivery Services*; and

- Healthy Lifestyle Education (lunch and learns, cooking demonstrations, nutrition classes, weight management clinics, and support groups) (see Enclosure 47, Weight Management).

*Coordination with facility leadership and VCS are needed for implementation.

As with any other program or service, consider how the impact of the programs will be evaluated, and adjust future planning accordingly.

9.7. References and Resources

Karanja, N.M. et al. (1999). NIH Publication No. 03-4082, Facts about the DASH Eating Plan, United States Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute, *Journal of the American Dietetic Association (JADA),* 8:S19-27. Available at: http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/.

National Institutes of Health, National Heart Lung and Blood Institute Obesity Education Initiative. Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Available at: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf.

U.S. Department of Agriculture (2010). Dietary Guidelines for Americans. Available at: http://www.cnpp.usda.gov/dietaryguidelines.htm.

U.S. Department of Health and Human Services. Prevention Makes Common Cents. Available at: http://aspe.hhs.gov/health/prevention/#N_43.

Wendt, C. (2009). Healthy Eating: Recognizing your Hunger Signals. Available at: http://www.webmd.com/food-recipes/healthy-eating-recognizing-your-hunger-signals.

Resource List for Nutrition

American Cancer Society
800-227-2345
http://www.cancer.org/.

American Diabetes Association
800/342-2383
http://www.diabetes.org.

American Dietetic Association (ADA) Resources
http://www.eatright.org/.

American Heart Association
800-242-8721
http://americanheart.org.

American Institute for Cancer Research
800-843-8114
http://aicr.org.

Consumer Diet and Lifestyle Book Reviews:
Reviews of popular diet books by ADA spokespeople.
http://www.eatright.org.

Consumer Reports on Health
800-234-2188
http://www.consumerreports.org.

The Dietary Approaches to Stop Hypertension (DASH) Eating Plan:
This Web site contains the DASH Eating Plan and includes information on the research findings that demonstrate its health benefits. The Web site describes the eating plan and provides sample 7-day menus and several recipes. It also gives helpful tips on how to get started, how to use the DASH Eating Plan if trying to lose weight, how to reduce sodium intake and how to read and interpret the nutrition facts panel. Available at:
http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/.

Dietary Guidelines for Americans 2010:
The Dietary Guidelines for Americans are published jointly every 5 years and provide authoritative advice for people 2 years and older about how good dietary habits can promote health and reduce risk for major chronic diseases. Available at: http://www.cnpp.usda.gov/dietaryguidelines.htm.

Environmental Nutrition
800-829-5384
http://www.environmentalnutrition.com/.

Facts About the DASH Eating Plan:
This full color glossy brochure provides information on hypertension, the Dietary Approaches to Stop Hypertension, and an eating plan and strategies to reduce sodium intake. It also offers a number of recipes. Available at:
http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf.

Farmers Market:

- http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5079490&acct=wdmgeninfo;

- http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELDEV3022129&acct=wdmgeninfo; and

- http://www.ams.usda.gov/AMSv1.0/FMPP (Click on Farmers Markets and Local Food Marketing on the left sidebar.)

Finding Your Way to a Healthier You:
Short booklet that provides nutrition facts based on new Dietary Guidelines for Americans 2005. Available at:
http://www.health.gov/dietaryguidelines/dga2005/document/pdf/brochure.pdf.

5 A Day for Better Health:
A site aimed at promoting the healthy consumption of fruits and vegetables among adults, 5 A Day has resources catered to both men and women, including quizzes, scientific evidence, information on serving sizes, and recipes as well as resources catered to African Americans. The 5 A Day Web site includes a link to The Color Guide, an informative section on the nutrients associated with fruits and vegetables arranged by color. Available at:
http://www.5aday.gov/.

Food Allergy Network
800-929-4040
http://foodallergy.org.

Food and Drug Administration Consumer
888-463-6332
http://www.fda.gov.

Food and Nutrition Information Center Interactive Toolbox:
The Interactive Toolbox contains links to Web sites that allow consumers and professionals to input information and receive individual feedback to help with dietary assessment and planning, checking personal health risks, testing knowledge, and evaluating needs. Available at:
http://fnic.nal.usda.gov/nal_display/index.php?info_center=4&tax_level=2&tax_subject=256&topic_id=1459&placement_default=0.

How to Understand and Use the Nutrition Facts Label
A useful site that offers easy-to-understand information on nutrition facts labels. Available at:
http://www.fda.gov/Food/LabelingNutrition/ConsumerInformation/ucm078889.htm.

Interactive Menu Planner:
This site provides an online tool that calculates the servings and calories of selections from a list of available foods and beverages to make up a meal of specified calories. It also has a link to a body mass index (BMI) calculator and an explanation of Portion Distortion. Available at:
http://hp2010.nhlbihin.net/menuplanner/menu.cgi.

Keep the Beat Heart Healthy Recipes:
145 page collection of recipes, including information on planning a nutritious day, reducing heart disease risks, and reading food labels. Available at:
http://www.nhlbi.nih.gov/health/public/heart/other/ktb_recipebk/ktb_recipebk.pdf.

Mayo Clinic Health Letter
800/291-1128
www.mayoclinic.org.

MOVEmployee! Weight Management Program
http://www.move.va.gov/.

MyPlate:
This Web site provides an interactive component to allow users to look up a food, learn about food groups, get a personal plan, learn healthy eating tips, get weight loss information, plan a healthy menu, analyze personal diets, and ask questions. Available at: http://choosemyplate.gov.

National Diabetes Education Program. Available at: http://www.ndep.nih.gov.

Nutrition for Everyone:
This Web site helps everyone in developing healthier eating habits. Key areas of focus in which good nutrition can help promote better health include: healthy weight, fruits and vegetables, bone health, and iron deficiency. There is also a section of quick tips, resources for health professionals, and several other nutrition-related topics. Available at:
http://www.cdc.gov/nutrition/everyone/index.html.

Nutrition.gov:
Nutrition.gov is a great resource for up-to-date food and nutrition information. In addition to serving as a gateway to reliable information on nutrition, healthy eating, and food safety for consumers, educators, and health professionals, the site offers current food and nutrition news and publications, information on weight management, information on food assistance programs, and grocery shopping tips. Available at:
http://www.nutrition.gov/nal_display/index.php?info_center=11&tax_level=1.

The following government Web sites provide information on food and nutrition for consumers:

- http://www.nutrition.gov/nal_display/index.php?info_center=11&tax_level=1

- http://healthfinder.gov/

- http://foodsafety.gov/

- http://www.nlm.nih.gov/medlineplus/

Resource List for Nutrition and Physical Activity

Better Health and You: Healthy Eating and Physical Activity Across Your Lifespan: Tips for Adults:
26 page brochure on healthy eating and physical activity, featuring an activity log

and food diary examples for readers. Available at: http://win.niddk.nih.gov/publications/PDFs/tipsforadults804bw.pdf.

Energize Yourself and Your Family:
20 page brochure created for African American women and their families that provides information on the benefits of exercise and integrating it into their lives. Includes nutrition guidance on keeping track of serving sizes and reading nutrition facts panels. Also offers information on free healthy cookbooks. Available at: http://win.niddk.nih.gov/publications/PDFs/EnergizeYourself2004.pdf.

A Healthier You:
This book brings together nutrition information from the federal government that may reduce the risk of chronic diseases such as heart disease, diabetes, osteoporosis, and certain cancers, and increase the chances for a longer life. This one-stop, easy-to-use resource will help individuals make wise food and physical activity choices to manage weight with: healthy eating patterns with a 7-day menu from the DASH Eating Plan; ways to use the Nutrition Facts label to make healthy product choices; tips for eating out and when on-the-go; nearly 100 easy, healthy, and tested recipes along with helpful Web sites; reproducible worksheets to track progress; steps for incorporating physical activity into one's life; and the complete Dietary Guidelines for Americans. Available at: http://www.health.gov/dietaryguidelines/dga2005/healthieryou/contents.htm.

HealthierUS.gov:
HealthierUS.gov is a Web site supporting the President's HealthierUS initiative focusing on physical fitness, prevention, nutrition, and making healthy choices. It serves as a source of credible, accurate information to help Americans choose to live healthier lives. Available at: http://www.healthierus.gov/.

Physical Activity and Good Nutrition: Essential Elements to Preventing Chronic Disease and Obesity:
This site provides evidence for and information on how physical activity and good nutrition can help to prevent chronic disease and obesity. Available at: http://www.cdc.gov/chronicdisease/resources/publications/AAG/obesity.htm.

SmallStep.gov:
SmallStep.gov aims to prevent obesity by encouraging small dietary and physical activity changes in the form of 120 steps, such as Step 5 - "Drink water before a meal", Step 35 - "Sit up straight at work", and Step 106 - "When eating out, ask your server to put half your entrée in a to-go-bag". The site includes the list of steps as well as success stories and tips. Web site visitors can create an activity tracker to monitor their progress and sign up for a newsletter with tips and recipes. Available at: http://www.smallstep.gov/.

Resources for Visually Impaired and Blind Individuals: The following organizations offer special-format nutrition materials such as Braille, large-print, and audio books.

National Federation of the Blind
410-659-9314
http://nfb.org.

National Institutes of Health (NIH) Office of Dietary Supplements
http://dietary-supplements.info.nih.gov.

National Library Service for the Blind and Physically Handicapped
800-424-8567
http://www.loc.gov/nls.

RD411
Nutrition Web site for healthcare professionals with a centralized resource that provides evidence-based practice tools to optimize nutrition and health services information on the latest products based on the current scientific information available. Available at: http://RD411.com.

Tufts University Health & Nutrition Letter
800/274-7581
www.healthletter.tufts.edu.

University of California at Berkeley Wellness Letter
800/829-9170
http://berkeleywellness.com.

Other Resources

Centers for Disease Control and Prevention Workplace Health Promotion - Nutrition:
http://www.cdc.gov/workplacehealthpromotion/implementation/topics/nutrition.html

Health and Sustainability Guidelines for Federal Concessions and Vending Operations:
These guidelines propose specific food, nutrition, and sustainability standards that apply to food service operations and vending machines managed by Health and Human Services (HHS) and General Services Administration (GSA). They were developed cooperatively by HHS and GSA. The guidelines aim to: (1) increase the healthy options available at cafeterias and vending machines, (2) align food available at HHS and GSA facilities with the *2010 Dietary Guidelines for Americans*, (3) inform customers about what they are eating and which choices are healthier and more sustainable, and (4) increase sustainability of HHS and GSA operations and support sustainable agricultural practices. Available at: http://www.gsa.gov/portal/content/104429.

Healthfinder.gov®:
Healthfinder® is a free guide to reliable consumer health information. This site links to carefully selected information and Web sites from over 1,700 health-related government agencies and nonprofit organizations. It includes many online checkups and offers daily health news in English and Spanish. Available at: http://www.healthfinder.gov/.

Management of Overweight and Obesity (OBE):
VA/DoD Clinical Practice Guidelines:
http://www.healthquality.va.gov/Obesity_Clinical_Practice_Guideline.asp.

MEDLINEPlus:
MedlinePlus has extensive information on over 700 diseases and conditions as well as prescription and nonprescription drugs. There are lists of hospitals and physicians, a medical encyclopedia, a medical dictionary, health information from the media, and links to thousands of clinical trials. Available at: http://medlineplus.gov/.

MEDLINEPlus - En Español (Spanish version of MEDLINEPlus)
http://medlineplus.gov/spanish/.

My HealtheVet (MHV):
My HealtheVet (MHV) is the gateway to Veteran health benefits and services. It provides access to trusted health information, links to federal and VA benefits and resources, the Personal Health Journal (click on Track Health to access journals for blood pressure, blood sugar, cholesterol, weight, food intake, activity, etc.), and online VA prescription refill. MHV is a powerful tool to help better understand and manage health. Available at: http://www.myhealth.va.gov.

Steps to a HealthierUS:
Forty communities have received grant funding from the U.S. Department of Health and Human Services to address poor nutrition, physical inactivity, and tobacco use in an effort to reduce obesity, diabetes, and asthma. Available at: http://www.cdc.gov/healthycommunitiesprogram/.

U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM):
The USACHPPM team is a linchpin of medical support to combat forces and of the military managed-care system. It provides worldwide scientific expertise and services in clinical and field preventive medicine, environmental and occupational health, health promotion and wellness, epidemiology and disease surveillance, toxicology, and related laboratory sciences. It supports readiness by keeping soldiers fit to fight, while also promoting wellness among their families and the federal civilian workforce. Available at: http://phc.amedd.army.mil/Pages/default.aspx.

VA National Center for Health Promotion and Disease Prevention (NCP):
The VA NCP, a field-based office of the Office of Patient Care Services, provides input to VHA leadership on evidence-based health promotion and disease

prevention policy. NCP provides programs, education, and coordination for the field consistent with prevention policy to enhance the health, well-being, and quality of life of Veterans. Available at: http://www.prevention.va.gov.

WIN with MOVEmployee! Resource Manual:
Available on the NCP Web site at: http://www.prevention.va.gov/. Also available in the CD-ROM version of this guidebook.

9.8. Enclosures

Enclosure 47 Weight Management

Enclosure 48 Hunger Scale

Enclosure 49 Nutritious Diet

Enclosure 50 Food Safety

Enclosure 51 Eating Out

Enclosure 52 Healthy Meeting

Enclosure 53 Smart Choices

EmployeeHealthPromotion
EHPDP
Disease Prevention

Stress Management

Many Americans have difficulty maintaining a healthy work/life balance. One-third are living with extreme stress and nearly half have experienced its negative impact according to the American Psychological Association. "Stress in America continues to escalate and is affecting every aspect of people's lives, from work to personal relationships, sleep patterns and eating habits, as well as their health" (Newman, 2007).

The American work culture has unrealistic work expectations, information overload, and sophisticated technology. People are finding it a challenge to separate work responsibilities from their personal life. The challenge is twofold; identifying causes and managing stress.

10.1. Personal Stress

Stress sets off an alarm in the brain, which responds by preparing the body for defensive action. The nervous system is aroused and hormones are released to sharpen the senses, quicken the pulse, deepen respiration, and tense the muscles. This response, called fight or flight, is important because it helps defend the body against threatening situations.

Stress occurs when demands placed on an individual cannot be met. When stressful situations go unresolved, the body is in a constant state of activation, increasing wear and tear on biological systems. Examples of problems resulting from ongoing stress include:

- Upset stomach;

- Headache;

- Sleep disturbances;

- Dysfunctional relationships between family and friends;

- Fatigue;

- Inability to concentrate; and

- Irritability.

Unlike stress, challenge provides a feeling of psychological and physical energy and the motivation to learn new skills. When a challenge is met, heart rate, muscle tension, and blood pressure return to normal. This results in relaxation and satisfaction. What is stressful for one individual may not be for another. Stress is interaction between a stressor and an individual's reaction to that stressor (Folkman & Lazarus, 1988). Once stress is experienced, it is important to identify the cause. Stressors can be categorized as accidental hassles, major

life changes, and ongoing problems (The Patient Education Institute, Inc., 2007). Examples include:

- Accidental hassles:
    - Missing a flight;
    - Running late to an important meeting; and
    - Losing the keys to the car.
- Major life changes:
    - Marriage;
    - Death in the family;
    - Child off to college; and
    - Losing a job.
- Ongoing problems:
    - Dysfunctional relationship;
    - Dissatisfaction with a job; and
    - Chronic family illness.

10.2. Job Stress

Seventy-five percent of Americans report that money and work are major causes of stress. Job stress is defined as, "the harmful physical and emotional responses that occur when the requirements of the job do not match capabilities, resources, or needs of the worker" [National Institute for Occupational Safety and Health (NIOSH), 1999]. Research findings indicate that stressful working conditions can result in absenteeism, presenteeism, tardiness, and high turnover [Office of Personnel Management (OPM), 2009].

Working conditions that can lead to stress include:

- Poor ergonomic design;
- Unrealistic work expectations;
- Infrequent rest breaks, long work hours, shift work;
- Low control over the conditions of work;
- Poor communication within the organization;
- Lack of family-friendly policies;

- Lack of support from coworkers and supervisors;

- Job insecurity; and

- Lack of opportunity for advancement.

A healthy organization supports its employees, recognizes good work performance, offers opportunities for career development, and values the individual worker. These organizations employ managers whose actions are consistent with the corporation's values. In an effort to manage stress, 50 percent of large companies in the United States offer stress management training. Employee Assistance Programs (EAP) offer individual counseling for work and personal issues. Many EAPs also offer support to family members (OPM, 2009).

10.3. Workplace Violence

A study by the American Association of Occupational Health Nurses (AAOHN) and the Federal Bureau of Investigation (FBI) defined workplace violence as, "any action that may threaten the safety of an employee, impact the employee's physical or psychological well-being, or cause damage to company property" (Washington State Nurses Association, 2008). The reasons for workplace violence include, but are not limited to: management, policies, staffing, and personal issues. Lateral violence and bullying, two types of workplace violence, can ultimately impact patient care.

Leadership support is important, and organizations should ensure that appropriate measures such as employee education programs, policies, and safety guidelines are in place in order to reduce risk (Washington State Nurses Association, 2008). Workplace violence incidents should be reported and employees referred for follow-up support as appropriate.

10.4. Stress Management

Sometimes stress can be reduced or alleviated by changing, modifying, or avoiding stressors. Because many stressors are unavoidable, stress management interventions often target response to stressors rather than the stressors.

10.4.1. Mindfulness and Acceptance Strategies

Research suggests that efforts to resist or struggle against unwanted, uncomfortable thoughts and feelings that are often experienced in reaction to stressors can actually increase subjective levels of distress and discomfort (Kabat-Zinn, 1994). The process of trying to avoid, escape, eliminate, or otherwise control internal experiences has been defined as experiential avoidance. This may result in a variety of negative consequences such as physical pain, disability, anxiety, depression, substance abuse, and even job performance (Hayes et al., 1996). Engaging in practices that cultivate acceptance of internal states can promote improved functioning and well-being.

Research suggests that the often recommended practice of repeating affirmations or positive self-statements may actually backfire on the very people it is most intended to help, those with low self-esteem. Participants in the study who had low self-esteem actually felt worse after repeating positive self-statements such as "I am a lovable person" (Wood et al., 2009).

Practicing mindfulness is a way to cultivate acceptance and openness. Mindfulness refers to a process of observing one's here and now experience with openness and without judgment. The benefits of mindfulness practice are increasingly being recognized. There are several evidenced-based psychotherapy models, including Acceptance and Commitment Therapy, Dialectical Behavior Therapy, Mindfulness-Based Cognitive Therapy, and Integrative Behavioral Couples Therapy that incorporate mindfulness practice. Mindfulness practice requires "a willingness to look deeply at one's present moments, no matter what they hold, in a spirit of generosity, kindness toward oneself, and openness toward what might be possible" (Kabat-Zinn, 1994). Kabat-Zinn developed Mindfulness-Based Stress Reduction (MBSR), which is a program to teach mindfulness-based practices to assist with the stress of chronic medical problems, pain, emotional distress, and other stress-related problems. See Enclosure 54 for Mindfulness Exercises.

10.5. Humor in the Workplace

Humor is an effective strategy for creating a healthy work atmosphere. In addition to decreasing stress and lowering blood pressure, humor can reduce negativity and tension. Managers can promote humor by sharing personal stories and introducing humor on a regular basis. Teams that use humor have a positive perspective and tend to be more cohesive. Organizations should ensure that humor is appropriate, not offensive. An environment that embraces humor will engender creativity, self-worth, and optimal productivity from employees (Froeber, 2009).

10.6. Stress Management Programs

Ideally, stress management should be conducted at an organizational as well as individual level. The National Center for Organizational Development (NCOD), with the All Employee Survey, addresses work organization issues nationally for Veterans Health Administration (VHA). Two such programs include Civility, Respect, and Engagement in the Workplace (CREW) and Prevention and Management of Destructive Behavior (PMDB). Additional information about these programs is available in Enclosure 55, Civility, Respect, and Engagement in the Workplace. Stress management at an individual level can involve the use of a stress assessment tool, either as part of a health risk appraisal or stand-alone. Many facilities have developed local initiatives including meditation rooms, group yoga sessions, and mindfulness-based stress reduction classes.

According to the Agency for Healthcare Research and Quality (AHRQ), generic stress management programs are only partially effective because they are not

focused on the individual's readiness to change behaviors. A known common health problem with an identified link to illness, there continues to be limited success in management of stress. Most stress management programs target group, rather than individual, readiness to change. A computerized, self-directed stress management intervention that provides interactive assessments and tailored feedback on the use of behavior change strategies could be considered (Evers, 2009).

10.7. Assessment

A stress management program can be based on theory such as the transtheoretical model, a framework for behavioral change. This model is comprised of six stages of change:

- Precontemplation is when the person is not intending or considering change within the near future;

- Contemplation is when they are intending to change in the near future;

- Preparation is when the person intends to take action in the immediate future;

- Action is when a person has taken or is taking specific actions in changing their lifestyles;

- Maintenance is the period of time after the change has been made and the person is attempting to not relapse into old lifestyle habits; and

- Termination is when the person feels no further temptation to return to old lifestyle habits and that the change is permanent.

The premise for this model is that "Appropriate and successful intervention can only be implemented when it is determined which stage an individual is in" (Prochaska & DiClemente, n.d.).

10.8. Intervention

After completion of a self-assessment tool, feedback and suggested interventions can be accomplished via the online assessment tool or from a coach. Individuals should be reassessed on a regular basis in order to determine success.

10.9. Training and Education

The use of tools to keep the momentum going is recommended. Educational materials and workbooks can serve this purpose. Ongoing contact from a coach will strengthen the resolve of the employee and help sustain the goal.

10.10. Stress Prevention

Many things can be done to prevent stress.

- Avoid stressful situations (that can be avoided);

- Accept what cannot be controlled;

- Plan major lifestyle changes;

- Realize limitations;

- Prioritize;

- Improve communication;

- Share thoughts;

- Engage in activities that provide meaning and purpose;

- Learn to say no;

- Reward yourself;

- Exercise;

- Eat healthy; and

- Sleep well.

10.11. References and Resources

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10.12. Enclosures

Enclosure 54   Mindfulness Exercises

Enclosure 55   Civility, Respect, and Engagement in the Workplace

Enclosure 56   CREW Brochure

EmployeeHealthPromotion EHPDP
Disease Prevention

Motivational Interviewing (MI)

11.1. Overview

The purpose of this chapter is to provide a brief introduction to and overview of MI. Also, six interventions will be presented: five to increase a client's motivation for change and one to develop and enhance the client's commitment to making a plan for change.

Like learning any other therapeutic technique, developing MI skills requires a commitment of time and energy on the part of the clinician learning MI, the consultant facilitating the MI training, and the organization in which the services are to be offered. Typically, training starts with a 2-day training seminar during which participants are introduced to the definition and spirit of MI, the MI goals and principles, and the basic strategies associated with MI, including facilitating engagement with a client and managing resistance. These training seminars are very active and involved; participants observe then practice these skills and interventions. Miller and his colleagues (Miller et al., 2004) have demonstrated that ongoing feedback and consultation is required for the practitioner to actually start using and integrating MI into his or her clinical practice. This consultation can be done face-to-face or by telephone, as a group or individually, and typically involves the clinician receiving specific and detailed feedback about the extent to which he or she is using MI strategies (e.g., using more reflections than questions), allowing and encouraging the client to verbalize the benefits to changing (an essential aspect of MI that facilitates change and will be discussed later in this chapter), and demonstrating the spirit of MI.

This chapter will provide a definition of MI; present a brief overview of the use of MI in primary care settings; describe the goals, spirit, and principles of MI; offer ways to manage a client's resistance to change; and present and describe the basic MI techniques (micro-skills). Of most importance, time will be spent reviewing the concept of change talk (i.e., having the client verbalize the reasons for changing), which appears to be a critical aspect of MI and the phenomenon that increases the chances of a client actually making changes. Finally, a number of MI-related clinical interventions will be described, complete with relevant handouts in Section 11.13, Enclosures. It is critical to remember that the implementation of these techniques is only as good as the MI spirit in which they are attempted; otherwise, these techniques may be perceived by the client as superficial, controlling, or insincere. Specifically regarding the meaning of MI spirit, these techniques need to be done in ways that support the client's sense of autonomy, should be performed with a high level of collaboration with the client, and should evoke from the client the reasons for and potential benefits associated with making healthy changes. This chapter ends with a discussion and tips on eliciting a change plan from a client.

11.2. MI Defined

MI is an approach in which ambivalence is seen as a natural part of the change process, and a client's motivation to change is a function of the interaction between the coach and client. That is, the coach's statements and actions have an impact on the client's level of ambivalence and motivation which, as a result, impact the client's decision making and, consequently, the client's decision about making a change (Amrhein et al., 2003; Apodace and Longabaugh, 2009; Moyers and Martin, 2006; Moyers et al., 2007; Moyers et al., 2009; Moyers et al., 2005). Of course, the nature of the client's problems and his or her temperament and personality style also influence his or her willingness to consider making changes. By engaging in MI-adherent and avoiding MI-nonadherent responses and actions (both verbal and behavioral), the coach is able to enhance the client's motivation by developing a strong therapeutic alliance and establishing the conditions that allow the client to talk about the benefits of changing (e.g., change talk) and to start developing and committing to a change plan. These processes allow the client to discuss both sides of his or her ambivalence and, as he or she is encouraged to verbalize more of the change side of the ambivalence, move towards a specific, client-centered goal. Consequently, MI is not a way to make a client change; rather, the goal is to allow the client to become more aware of or sensitive to his or her ambivalence, particularly the problems related to his or her behavior and the potential benefits to making a change. One important aspect of MI is to meet the client where he or she is at in terms of goals and change, and for the coach to be willing to negotiate goals and support less-than-optimal client goals. Finally, MI is often thought of as occurring in two phases: the first to build motivation to change, and the second to increase commitment to change. For an overview of what MI is and, just as importantly, what MI is not, please review the article by Miller and Rollnick (2009) listed in Section 11.12, References and Resources.

11.3. Brief Review of Research and Applications of MI to Health

MI has been used to address a number of health-related issues. Rollnick, Miller, and Butler (2008) have provided a number of research articles that have demonstrated some positive trials of the application of MI to the following areas: asthma and Chronic Obstructive Pulmonary Disease (COPD), hypertension and other cardiovascular concerns, diabetes, diet, exercise and fitness, Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), and tobacco use (see also: Burke et al., 2003; Rubak et al., 2005). Overall, the authors state that, when compared with usual treatment, clients who receive MI are more likely to start and complete services, are more engaged, and are more likely to participate in aftercare. They also list a number of particular, disease-specific outcomes such as greater adherence to glucose monitoring, reduced sodium intake, and increased fruit and vegetable intake. An updated listing of these types of studies can be found online at: www.motivationalinterview.org. Some of these sources are listed at the end of this chapter in Section 11.12, References and Resources. Naturally, not all studies have found positive results.

As in most outcome research, there are mixed results in some areas; however, there is clear support for considering the use of MI as part of a larger plan to address health-related concerns.

11.4. MI Goals

There are two essential goals in MI:

- Build a strong therapeutic alliance (i.e., working relationship) between the coach and the client. The outcome research literature (Horvath and Bedi, 2002) shows over and over again that treatment outcome is improved when the therapeutic alliance consists of a nonjudgmental, accepting, genuine, and open relationship between the coach and client. The features of an MI therapeutic relationship will be highlighted in Section 11.5, Spirit and Principles.

- Create an atmosphere that elicits and allows the client to engage in change talk. Change talk (e.g., the client rather than the coach verbalizes the benefits to making a specific change) and committing to change (e.g., "I am going to…") is critical in that the MI research literature is showing a direct connection between the intensity of change talk and verbal commitments that occur during an MI session and outcome. That is, the more intense the client's change talk and verbal commitments to change, the more likely the client will make changes.

11.5. MI Spirit and Principles

The spirit of MI refers to the coach's attitude or mind-set when doing MI; MI spirit consists of two foundational ideas:

- People are ambivalent about their unhealthy behavior; and

- People have a natural tendency to strive for healthy behavior.

Normally a client has mixed feelings (e.g., he or she is ambivalent) about his or her unhealthy behavior; that is, he or she is able to verbalize both the pluses and minuses for changing and not changing. When given the opportunity to verbalize the benefits to changing (e.g., strive to be healthy), the client is more likely to act on those verbalizations and make a change. Given these ideas, there are three components to the interpersonal interaction that highlight the coach's style when doing MI. These components are:

- Collaboration: The coach avoids an authoritarian stance, sees the therapeutic relationship as a cooperative interaction, accepts differences between the optimal treatment goal or plan and what the client is willing to do, acknowledges that ambivalence is normal and natural, and is open to negotiating with the client around these goals.

- Evocation: Using the client's ambivalence, the coach draws out from the client his or her own desire and reasons for changing (i.e., the change side

of the ambivalence); it is assumed the reasons for making healthy changes are "in there" as part of the ambivalence and it is the coach's task to draw the reasons out and have the client verbalize them (e.g., change talk).

- Autonomy: The coach emphasizes that it is up to the client as to how and when change will occur and what the goals may be; this means accepting that the client may choose not to change. The client's freedom of choice is emphasized.

While the MI coach maintains an interpersonal style that highlights collaboration, evocation, and autonomy, there are specific principles that are followed to guide the therapeutic interaction. These principles include:

- Express Empathy: This demonstrates to the client that he or she is acceptable "as is". By the client experiencing this sense of acceptance and empathy, he or she is allowed to discuss his or her ambivalence and the possibilities for making changes, whereas the message that a client is "not okay" will likely result in immobility as the client attempts to defend and justify his or her current (unhealthy) actions and behaviors. This kind of acceptance helps to facilitate change, communicates to the client that ambivalence is normal and expected, and requires a high skill level of reflective listening on the part of the coach.

- Develop Discrepancy: This involves summarizing back to the client any observed gaps between his or her current (unhealthy) behaviors (e.g., smoking or not exercising) and the client's goals, values, or priorities (being active with his or her children). It is assumed that this discrepancy between present behavior and important personal goals or values will result in cognitive distress and dissonance, which will motivate the client to consider making changes (e.g., because of his or her smoking, the client is not able to be as active with his or her children as he or she would like). The idea is that the client will experience a reduction in stress and internal conflict by making behavioral changes and thereby acting in ways that are more consistent with personal values and beliefs (e.g., by stopping smoking, the client can be more active with his or her children and thereby feel better about fulfilling an important personal priority).

- Roll with Resistance: The emphasis of this principle is to avoid arguing for change with the client; doing so encourages the client to argue for the no change side of the ambivalence, which is counter to change talk and essentially establishes the conditions that are inconsistent with the client making changes. MI views readiness to change as a fluctuating product of this clinical interpersonal interaction, and by engaging in MI-adherent behaviors and, just as importantly, avoid engaging in MI-nonadherent behaviors, the coach can increase motivation.

- Support Self-Efficacy: This final principle focuses on supporting a client's belief in the possibility of change, which can be an important motivator for the client; the counselor's own belief in the person's ability to change can become a self-fulfilling prophecy for the client.

Another way to think about MI principles is to use the acronym "RULE" (Rollnick et al., 2008):

R - Resist the Righting Reflex: That is, don't jump in to save, rescue, fix, or right the client; this sends many wrong messages to the client (e.g., he or she is incapable, too lazy, or a "bad person".) Most importantly, doing so may elicit defensiveness from the client as he or she feels persuaded or pressured to change, and he or she may not be ready. In MI, instead of persuading the client to change, the goal is to have the client verbalize the reasons or benefits of changing to the coach.

U - Understand the client's motivations: MI coaches need to focus on and have the client verbalize his or her own reasons for changing, which could be quite different from why the coach would want them to change. Again, the goal is to have the client verbalize the reasons and benefit of changing.

L - Listen to the client: This involves being empathetic to the client and communicating that empathy in order to establish and maintain the working alliance and to allow for change talk.

E - Empower the client: This is similar to the idea of increasing self-efficacy and includes helping the client feel hopeful about making changes.

11.6. MI Basic Skills

The basic skills in MI are the actual techniques the coach uses to engage the client (e.g., develop and maintain the therapeutic alliance), explore the client's ambivalence, and elicit change talk and commitment to making a change. These skills include reflective listening, affirming, summarizing, and asking open-ended questions. Although these may be seen as basic counseling skills, they are used in MI strategically to build the alliance and encourage change talk and commitment. That is, the MI coach does not reflect, affirm, or summarize anything or everything the client says; the coach does not simply follow the client. Rather, and this is how MI is directive, the MI coach uses these basic techniques to intentionally and purposefully encourage and direct the client to verbalize change talk (i.e., the change side of the ambivalence), which moves the client towards making changes.

Although all clinicians know the definitions of these basic skills, they will be briefly discussed below with an emphasis on how they relate to the spirit and philosophy of MI.

- Reflective Listening: Along with a strong therapeutic relationship, one of the common factors for successful counseling is for the coach to communicate empathy (Bohart et al., 2002). This technique is used to express empathy to a client by reflecting the content behind the client's statement, particularly the client's ambivalence about changing. It is not just parroting or repeating that which the client verbalizes, but by reflecting the deeper meaning or emotional aspect of the client's statements, the coach communicates empathy and a nonjudgmental acceptance, which allows the client to drop his or her defenses. (Empathic responses give the client the message that he or she is okay, while a more confrontational or critical approach causes the client to become more defensive.) By dropping his or her defenses and feeling safe, the client is able to discuss his or her ambivalence about making changes, which results in change talk.

- Affirming: One of the MI principles is to support client self-efficacy; for some clients their difficulty in making changes may not so much be a lack of motivation as it is a lack of self-confidence or self-efficacy (e.g., the client does not feel capable to have an impact on the outcome). By affirming the client, especially by having the client verbalize past successes, the coach helps build the client's self-confidence, which makes it more likely that the client will actually make an attempt at change.

- Summarizing: There are two major functions to summarizing. First, the coach "collects" change talk statements then summarizes them back to the client, thereby highlighting the change talk for the client. Second, summarizing is the process used to create discrepancies as discussed above; that is, summarizing is used to link the client's discrepant behavior with his or her values or priorities (e.g., "You don't want your kids to smoke and you want to be a good model for them, yet you're still on the fence about taking the smoking cessation classes").

- Open-ended questions: MI stresses the use of open-ended over closed-ended questions because the former allow the client to explore and discuss his or her ambivalence (which results in change talk), while closed-ended questions typically result in yes or no responses or short, clipped answers.

11.7. Managing Resistance

From an MI perspective, resistance is not seen as a personality feature or deficit, but rather the no-change side of the ambivalence that can be influenced by the nature of the interaction between the coach and client. Currently, discussions within MI are attempting to de-emphasize the use of the term "resistance". Just as an MI therapist discusses change talk as a client verbalizing ambivalence, interest, or intent to change, terms such as "counter-change talk" or "sustain talk" are used to describe the no-change side of the client's ambivalence as

demonstrated by a client's verbalizations of reluctance to engage in change. Previously in this chapter, the concept of therapeutic alliance was introduced, and within the context of an MI session, the better the therapeutic alliance, the less the resistance. Also, when a coach is using the basic MI skills (reflective listening, affirming, summarizing, and asking open-ended questions) in a way that is evocative and that establishes the collaborative relationship that reinforces the client's autonomy, there really is not much for the client to resist. However, there are times when the client's ambivalence and resistance increases, but MI has some excellent ways to reduce this resistance. By using these techniques, the MI goals of building an alliance and creating the type of atmosphere that will encourage change talk can occur.

- Simple Reflections: The most basic way to respond to resistance is with a simple reflection. It may be that a client may be resistant because he or she does not believe he or she is being heard or his or her feelings or ambivalence are not being recognized or acknowledged. A simple acknowledgment in the form of a reflection of the client's ambivalence, emotions, or perceptions can let the client know that he or she has been heard and that the concerns are recognized, which can then allow the client's defenses to decrease, facilitate the development of an alliance, and permit the client to engage in change talk.

- Double-Sided Reflection: This response communicates to the client the coach's understanding and acknowledgement of the client's ambivalence about considering a change. The coach reflects the not-change side of the ambivalence followed by the change side of change: "You really don't like the side-effects of the medication, but you feel better when you take it consistently." These kinds of responses not only communicate to the client the coach's understanding and acknowledgement of the ambivalence, but it also communicates that it is okay to have and discuss these mixed feelings about the change.

- Amplified Reflections: With this response (sometimes called overshooting or undershooting), the coach uses reflections to add some intensity or amplification to the resistance. The goal is to make a reflection that is so extreme that the client will respond with a more middle-ground comment and by doing so, acknowledge some ambivalence or concern about the change (e.g., change talk). A word of caution: this technique can be a bit paradoxical in nature and the risk is that the client can agree with the amplified reflection and thereby reinforce the no-change attitude. Therefore, this technique needs to be used carefully and intentionally. A successful example of this type of reflection would be:

  > Client: "There is no reason for me to consider enrolling in this program."

> Coach: "You are doing quite well and there is absolutely nothing for you to work on or try to improve." (Amplified reflection.)
>
> Client: "Well, I wouldn't go that far…I do have some concerns about my weight."

- Agreement with a Twist: Here the coach responds with an initial agreement to the client's comment (a reflection), but follows that agreement with a slight twist, change of direction, or a reframe. The reflection engages the client and maintains the working alliance, while the reframe allows the therapist to direct the session and encourage the client to engage in change talk. For example: "You're angry about your spouse/partner making you come here…but he or she is worried about you and wants you to feel better."

- Asking the Client What He or She Wants: As stated above, a client may be resistant because he or she does not feel like he or she is being listened to or his or her concerns or ambivalence are being acknowledged. Therefore asking the client what he or she wants or what would be helpful for them to discuss can reduce resistance by recognizing his or her concerns or priorities and by allowing the client to discuss his or her ambivalence. It is common for the client's goals and strategies to differ from the coach's, and it is important for the client to discuss issues that are important to him or her.

- Emphasizing Personal Choice and Control: It is common for people to value and strive for independence, self-control, and freedom of choice. When they perceive their freedom of choice as being threatened, they tend to respond by engaging in comments or behaviors that reassert their independence, which may look like resistance to others (this process of acting in a potentially contrary manner is referred to as reactance) (Miller and Rollnick, 2002). For example, if a person is told to do or not do something, and they comply, they may feel like they are sacrificing their self-determination; consequently, they may do something different or entirely opposite (and at some level realize it may not be in his or her best interest to behave in such a way) as a way to reassert their independence. One of the best ways to reduce this kind of reaction in a client is to assure him or her that nobody will or can make him or her change and whether, when, and how the person changes is up to him or her.

- Coming Alongside: Here, the coach verbalizes that now may not be the best time to consider making the change or that circumstances are such that it would be better to wait to make a change. For example: "Perhaps now isn't the best time, and it would be better to wait."

- Shifting Focus: The coach shifts the client's focus away from a hot topic and shelves it for a period of time. This process is a way to roll with the

resistance and temporarily detour the topic as a way to temporarily defuse resistance. Of course, there will be the opportunity to eventually return to that topic, if needed, in the future.

11.8. Change Talk: The Essence and Goal of MI

The following section will discuss important aspects of change talk and its role in MI and facilitating a client's commitment to change.

- **Why change talk?** The outcome research literature demonstrates how MI can improve outcomes and treatment engagement; however, in spite of these positive findings, it has not been clear as to the mechanism of this impact. That is, what is it about MI that produces these benefits? Current research (e.g., Miller and Rose, 2009; see also Moyers and colleagues) has found that the more intensely a client engages in change talk and makes verbal commitments to change during an MI session, the more positive the outcome. The idea is to tap the change side of the client's ambivalence and elicit from him or her the benefits of changing and the negative consequences of not changing.

- **What is change talk and how is it recognized?** There are a number of ways to describe change talk. One example is "DARN" talk, where the client talks about the **D**esire to change ("I want to…"), the **A**bility to change ("I can…"), the **R**easons for changing ("The benefits to me changing are…"), or the **N**eed to change ("I can't go on this way…"). Other ways to recognize change talk is when the client verbalizes recognition or awareness of a problem ("I never realized this was such an issue…"), concern about their behavior ("This really bothers me…"), or the negative consequences of not changing ("If I don't change, I'll end up right back here…"). The eventual goal is for the client to verbalize statements of commitment to making a change ("I will…" or "I am going to…").

- **How is change talk elicited?** There are two ways to elicit change talk. First, by using the basic MI techniques (reflective listening, affirming, summarizing, and asking open-ended questions) the stage is set that allows clients to engage in change talk: instead of defending him or herself against a barrage of reasons to change verbalized by the coach, the client is free to discuss his or her ambivalence and during that time he or she will verbalize the benefits of changing. However, because change talk appears to facilitate actual change, it is important to elicit as much change talk as possible; therefore, the following techniques can be used to elicit even more change talk:

  1. Ask Evocative Questions: Ask open-ended questions, in which the answer the client gives is change talk:

     - Why would you want to make this change? (Desire);

- How might you go about it in order to succeed? (Ability);

- What are the three best reasons for you to do it? (Reasons);

- How important is it for you to make this change? (Need); and

- What do you think you'll do? (Commitment).

2. Ask for Elaboration: When a change talk theme emerges, ask for more detail: "In what ways?" (This will be discussed further during the "Branching" process.)

3. Ask for Examples: When a change talk theme emerges, ask for specific examples: "Give me an example", "When was the last time that happened?", or "What else?".

4. Backward Looking: Ask about a time before the current concern emerged: "How were things better or different?" or " What did you notice when you were eating a healthy diet 2 years ago?".

5. Forward Looking: Ask what may happen if things continue as they are (status quo): "If you were 100 percent successful in making the changes you want, what would be different?", or "How would you like your life to be 5 years from now?".

6. Query Extremes: "What are the worst things that might happen if you don't make this change?" or "What are the best things that might happen if you do make this change?".

7. Use Change Rulers: Ask, "On a scale from zero to ten, how important is it to you to [target change] where zero is not at all important, and ten is extremely important?" Follow up: "And why are you at ___ and not zero? What might happen that could move you from ____ to [higher score]?". This technique will be reviewed more closely later in this chapter.

8. Explore Goals and Values (Create Discrepancies): Ask what the person's guiding values are: "What do you want in life?". If there is a problem behavior, ask how that behavior fits in with the person's goals or values. Does it help realize a goal or value, interfere with it, or is it irrelevant?

9. Come Alongside: Explicitly side with the negative (status quo) side of ambivalence: "Perhaps _____ is so important to you that you won't give it up, no matter what the cost."

- **How do coaches respond to change talk?** Just as it is important to elicit change talk, it is just as important to respond to it. By responding to change talk it is essentially being reinforced and highlighted, which makes

it more likely that the client will continue to make such kinds of statements. Also, by responding to change talk, coaches are reinforcing the change side of the client's ambivalence. One way to remember how to respond to change talk is to use the acronym "EARS":

> E - Elaborate. Ask the client for more details:
> "If you were to exercise more…what would that look like?".

> A - Affirm. Make supportive comments that recognize the client's efforts and accomplishments:
> "That's great; your actions say a lot about your motivation."

> R - Reflect. Use reflective listening to acknowledge the benefits the client has experienced as a result of the change and/or the increased self-confidence:
> "You're feeling good about taking these first steps."

> S - Summarize. Collect and repeat back to the client the benefits from making the change:
> "This is something you've been thinking about doing for a long time, you've been concerned about whether you have the time or ability, but you're to the point where now is the time to take action."

11.9. Examples of Strategies to Elicit Change Talk and Enhance Commitment to Change

11.9.1. The Bubble Sheet

Although the Bubble Sheet is not exclusively a strategy to elicit change talk, it can be used to establish the kind of collaborative atmosphere that allows the client to engage in change talk because it prompts the client to set the agenda and to discuss the issues that are of most importance to him or her. This client-centered approach is at the heart of MI in that if the client is able to discuss an issue that is uppermost on his or her mind, then that reduces any resistance that may occur if the coach were to establish a different agenda. That is, this process allows the client to discuss his or her ambivalence and engage in change talk instead of defending his or her agenda to the coach.

The Bubble Sheet can be made up to consist of any number of possible themes or categories. The idea is to prime the client's thinking with suggestions, but then allow for the client to provide his or her own ideas (the "???" on the sheet). The Bubble Sheet is simply placed in front of the client, and each of the potential areas of discussion are pointed out to him or her, including the "???" bubbles that encourage the client to include his or her issues that are not listed on the sheet. A variation is to have the client prioritize by numbering all, or, for example, the top three issues that he or she would like to discuss during the session. See Enclosure 57, Sample Bubble Sheet, for an example.

11.9.2. Readiness Ruler

The readiness ruler is a very quick and useful strategy to encourage the client to start talking about the benefits to making changes; however, the goal is not to convince the client to make the change, but rather to encourage him or her to engage in change talk and thereby verbalize the benefits to changing and the costs of not changing. Also, using the Readiness Ruler allows the coach and client to differentiate between motivation to change and the client's confidence, or lack thereof, to actually making the change. This is an important distinction because a lack of confidence will require a different kind of intervention (e.g., learning or reinforcing specific skills) than a situation where the client lacks motivation.

Enclosure 58, Sample Readiness Ruler, is a sample worksheet that could be used with a client; the coach can either use the sheet to take notes or hand it to the client to mark on. The first step is for the coach to ask the client: "How important is it for you to make this change, on a scale from zero to ten, where zero is not at all important, and ten is extremely important?". If the client is using the sheet, have him or her actually mark the number.

Then follow-up with the question: "And why are you at a [*insert the number the client is at*] rather than at a [*the next lowest number*]?".

This type of question should elicit statements about concern or recognition of a problem, that is, change talk. This line of questioning can then be pursued with further reflective listening, elaborative questioning, or other techniques that are described below.

The second follow-up question is: "And what would it take to move to a [*insert the number just above the number the client selected*]?". This line of questioning can identify steps that could facilitate the client's progress towards the change or barriers impeding it, which could again be pursued with further reflective listening, elaborative questioning, or other techniques that are described below.

This process is then repeated for the concept of self confidence.

"How confident are you that you can make this change, on a scale from zero to ten, where zero is not at all confident, and ten is extremely confident?" If the client is using the sheet, have him or her actually mark the number.

Then follow-up with the question: "And why are you at a [*insert the number the client is at*] rather than at a [*the next lowest number*]?".

This type of question should elicit statements about his or her confidence to make the changes and help reinforce whatever levels of confidence the client already has. This line of questioning can again be pursued with further reflective listening, elaborative questioning, or other techniques that are described below.

The second follow-up question is: "And what would it take to move to a [*insert the number just above the number the client selected*]?". This question can elicit the client's gaps in confidence and stimulate ideas as to how to enhance his/her confidence.

The grid shown on the second half of <u>Enclosure 58</u> can be used by the clinician to note the client's responses to the questions, by the client to document his or her thoughts within the session, and/or used as part of a homework task.

11.9.3. Branching

Branching is a way to elicit change talk and is a structured form of elaboration. As the term implies, the client is asked for a benefit to making the change he or she is considering, then he or she is asked to describe a benefit to that benefit, then a benefit to that benefit, and so on, until the client develops a series of "branches" or a flow chart of benefits emanating from the initial change. <u>Enclosure 59, Sample Branching Exercise</u>, displays a blank "branching sheet" that can be used with clients. This sheet can be completed by the coach and given to the client as a reminder of all the benefits that may result from the change, or the client could complete the form him or herself. It also includes an example of the branching process for the initial behavior change of taking medications. As the table shows, as a result of taking medications, the client would feel less depressed, which means the client would have more energy, and consequently be able to do more with his or her family and spouse. At each "branch" there could be additional benefits so that in addition to feeling less depressed, one other benefit could be that the client would be less inclined to need hospitalization. In addition to having more energy, an additional benefit to feeling less depressed could be having better concentration, which could result in improved work performance and being able to engage in favorite hobbies. The number and types of benefits are potentially endless. By encouraging the client to engage in this process, the client is generating reasons to change (e.g., change talk).

11.9.4. Decision Matrix

The Decision Matrix is a good way to both engage with the client and to have him or her discuss the benefits to changing and the costs of not changing (e.g., change talk). Although initially within the practice of MI all four quadrants were completed with the client, current MI research indicates that it is critical for the client to verbalize the benefits to changing and the costs of not changing. The other two (shaded) areas, benefits to not changing and the costs of making the change, are typically not completed because they represent counter-change talk or sustain talk, which is inconsistent with making changes. However, there may be instances, such as when a client is particularly resistant, that it may help the therapeutic alliance by acknowledging and talking about the sustain side of the decision; however, such a discussion should be brief and occur early in the intervention.

The document in [Enclosure 60, Sample Decision Matrix](#), can be used as a coach's note sheet and/or as a worksheet for the client to complete, then review with the coach.

11.9.5. Objective and Personal Feedback

A final way to elicit change talk is to provide a client with objective and personal information that is compared with a standard or a norm of some type. As with the readiness ruler, the idea is not to use the information or feedback to convince the person to change, but rather to identify his or her ambivalence and encourage him or her to verbalize concerns or awareness of issues related to the feedback. For example, giving clients who may be misusing alcohol feedback about their liver enzymes may elicit concern from the client. Liver enzymes are objective (they cannot be faked) and each enzyme has a normal range (that is the standard). Although there may be nonalcoholic-related medical reasons for such elevations (that is why a qualified medical provider would need to be involved in such a process), this information can be used to elicit from the client concerns about the health risks of using alcohol. Carbon monoxide readings for smokers, cholesterol levels, glucose levels, weight or body mass index (BMI) measures, and any objective and personal measure than can be compared to a standard and that demonstrates that the client is or has the potential for causing harm is one way to potentially move a client towards making a change. An example of target blood glucose levels is taken from the National Diabetes Information Clearinghouse (a service of the National Institute of Diabetes and Digestive and Kidney Disease, which is a branch of the National Institute of Health) and is included as [Enclosure 61, Sample Glucose Level Tracking Sheet](#). It is also available online at: http://diabetes.niddk.nih.gov/dm/pubs/complications_control/#numbers. It provides an example of how standard information (i.e., normal glucose levels) can be used to compare a client's glucose levels. Again, the goal is to provide objective and personal feedback to the client in order to elicit concerns and awareness from the client about, in this case, blood sugar levels as a way to increase motivation to make changes.

11.10. The Change Plan - Enhancing Commitment to Change

As the client continues to engage in change talk, eventually a plan to make a change will start to surface. It is critical for the coach to facilitate that kind of discussion and help the client further develop that plan. [Enclosure 62, Sample Change Plan](#), has a listing of questions that the coach can use to facilitate the change process; however, while doing so, it is important to be sensitive to resistance and ambivalence and to maintain the MI spirit and continue to use the MI principles. An important aspect of developing the change plan is that the process is consistent with the MI principles, particularly the sense that the plan is done in a collaborative manner. That is, the process will likely involve some negotiation, and the coach needs to be prepared to settle for some intermediate goals. It is critical to maintain the therapeutic alliance; therefore, confronting the client over less-than-optimal goals is not worth the potential loss of a strong working alliance. Overall, the goal is to encourage the client to choose his or her

goal and not spend valuable therapeutic time having the client defend or justify his or her goals. In addition, the plan should be fluid and structured to be modified as the client attempts to change his or her behavior.

11.11. Summary and Conclusions

There is strong empirical evidence demonstrating that MI can facilitate and enhance client outcomes in a number of health-related areas. Although MI was initially developed for and applied to individuals with substance use disorders, MI has been used to facilitate behavioral changes to address a number of other health-related problems.

The clinical practice of MI involves two important issues. The first is maintaining the MI spirit: encouraging a client's autonomy, evoking reasons to change from the client, and maintaining a collaborative relationship. And the second is the utilization of the MI principles: expression of empathy, development of discrepancies, rolling with resistance, and supporting the client's self-efficacy. In addition, through the use of reflective listening, affirming, summarizing, and open-ended questions, the coach can establish and preserve a strong therapeutic alliance, manage resistance, evoke change talk, and reinforce a client's commitment to a change plan.

There are, however, two caveats. Quoting Miller and Rollnick (2009): "MI is simple but not easy. It involves the conscious and disciplined use of specific communication principles and strategies to evoke the person's own motivation for change" (p. 135). MI is a sophisticated and intentional interaction between coach and client that is orchestrated by the coach to use the client's ambivalence in order to evoke from the client the reasons for making a change. Becoming competent at MI requires a great deal of training and consultation from a qualified MI trainer. In addition, the organization in which these services are to be developed and offered needs to make the commitment of time and resources to support this kind of training; that is, staff needs to be supported in attending training and receiving ongoing consultation.

The second caveat, also quoting Miller and Rollnick (2009), is: "MI is not a panacea" (p. 136). Like most interventions, MI appears to be useful to address many issues, but not others, and it certainly has not been tested on every possible malady. Also, when clients are or become ready, willing, and able to make changes, they do not need MI. Consequently, MI should be used intentionally and specifically for helping move a client towards making a healthy decision; it should not be used because nothing else seems to work.

In summary, it is clear that the effort and resources needed to learn MI pay off, and that the greater the degree to which a coach proficiently implements MI, the greater the chances of the client making healthy life-style decisions.

11.12. References and Resources

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11.13. Enclosures

Enclosure 57 Sample Bubble Sheet

Enclosure 58 Sample Readiness Ruler

Enclosure 59 Sample Branching Exercise

Enclosure 60 Sample Decision Matrix

Enclosure 61 Sample Glucose Level Tracking Sheet

Enclosure 62 Sample Change Plan

Program Evaluation

12.1. Overview

Evaluation is "the systematic examination and assessment of features of an initiative and its effects, in order to produce information that can be used by those who have an interest in its improvement or effectiveness" (WHO, 1998). According to the Centers for Disease Control and Prevention (CDC), "Program evaluation differs from basic research in that its primary aim is not to add to a body of knowledge but to learn how to improve a program" (CDC, 2002).

Evaluations are, in a broad sense, concerned with the effectiveness of programs. While common sense evaluation has a very long history, evaluation research that relies on scientific methods is a young discipline that has grown massively in recent years (Spiel, 2001). Evaluation is a systematic process to understand what a program does and how well the program does it. Evaluation results can be used to maintain or improve program quality and to ensure that future planning can be more evidence-based. Evaluation constitutes part of an ongoing cycle of program planning, implementation, and improvement (Patton, 1987).

Evaluation is a complex process. It does not happen just because a few questions are asked. Evaluation should be considered at every stage of the program. Evaluation goals should be based on a realistic assessment of needs, available resources, and constraints on data collection. Resources to consider include such things as the availability of statistical support, or the ability to program and maintain a database.

There are several things to consider.

- What are the program goals?

- Have the goals been discussed with others including colleagues and clientele?

- What goals can be measured?

- Are the required resources available?

- What type of evaluation is appropriate?

- How will findings be analyzed?

- How will findings be communicated and to whom?

- Who wants to know what?

Evaluation falls into one of two broad categories: qualitative and quantitative. Qualitative evaluations are conducted during program development and

implementation and are useful in defining goals or improving programs. Quantative evaluations should be completed in order to describe: (1) the baseline status of a population; (2) the extent to which a program is achieving its goals; or (3) program outcomes.

This chapter describes three methods of qualitative evaluation: process measures, key informant interviews, and focus groups. The chapter goes on to describe quantitative evaluation including: (1) uses of health risk appraisal (HRA) data; (2) a description of Leading Employees to Activity and Nutrition (LEAN) Works! – a method of computing the costs associated with obesity; (3) how to develop an evaluation survey using standardized questions from the Behavioral Risk Factor Surveillance System (BRFSS), a national health survey; (4) sources of and methods for incorporating institutional data into evaluation; and finally, (5) a description of several instruments available to measure presenteeism in the workplace. Lastly, the chapter describes a number of available evaluation tools that combine qualitative and quantitative measures.

12.2. Qualitative Measures

12.2.1. General Overview of Process Measures

There are many ways in which qualitative data may be obtained. These include interviews, videos, focus groups, and, in some instances, semi-quantitative data on program management. Examples of the latter include records of program completion or evaluation of a training session.

Although qualitative data are primarily descriptive, the compilation of qualitative data should take place with considerable thought given to the method of collection as well as the analysis of the final data. Some methods of qualitative data compilation are subject to the Institutional Review Board (IRB) regulations that apply to survey data. If there are questions about the need to have IRB review the data collection, it is best to seek this input prior to starting. Focus groups are always subject to IRB approval.

Because qualitative data are largely descriptive and quantitative data are based on "real" numbers, it is often thought that quantitative data are better. However, qualitative data provide important insights into program development, implementation, and the subsequent evaluation of why a program has, or has not worked. As with any research and evaluation, it is important to avoid focusing outcomes on a single opinion or view and to take a wide perspective of information that has been compiled. This allows the evaluator to make the best possible generalizations with regard to the data that has been compiled.

12.2.2. Process Evaluation

An important component of qualitative data collection is known as process evaluation. Process evaluation typically examines both the overall program and the actual programs (i.e., what was and was not done) (Patton, 1980). Evaluation of the program will help assess how well programs were carried out, what types of

problems were encountered, who participated, and if the expected outcomes were achieved. It may also include an assessment of who responded to surveys, and who decided to participate in programs.

Process evaluation may be broken into several basic areas (Bureau of Justice, 1997):

- Description of the program environment;

- Documentation of methods used to design and implement the program operations, including any changes in the program; and

- Identification and description of events that may have affected program implementation and maintenance.

For example, in the case of the pilot program of Wellness is Now at the VA (WIN VA), information collected for the process evaluation was used for interim project reports to Veterans Health Administration (VHA) leadership and others. The provision of periodic updates helped assure the ongoing integrity of the WIN Program as well as developed the commitment of leadership. Process data also assisted with understanding the most successful elements of the program.

In addition, process measures help assure the fidelity of ongoing work. Fidelity refers to the demonstration that a program is conducted as planned. Intervention programs can be said to satisfy fidelity standards if each of the components are delivered in a comparable manner to all participants. Assuring fidelity means that programs are being implemented as designed and recommended (Dumas et al., 2001). Direct and frequent assessment of an intervention for fidelity is considered to be best practice.

A sample process evaluation is summarized in Table 12-1. Program staff may wish to create and complete a checklist of items pertaining to the implementation of different elements of their program. Process measures are best if they are completed on an ongoing basis. Examples may include:

- Did staff complete the requisite training? Was this done in a timely fashion? Was training relevant to the types of problems encountered?

- Were there elements of training that were absent? How can gaps be filled?

- Were there problems implementing specific aspects of the program such as different elements of a Web site or training modules?

- Were programs implemented as recommended?

Table 12-1 depicts the types of questions that the process evaluation will address. In addition, the table describes the method for collecting information to answer each question.

Table 12-1: Study Process Evaluation Summary

Describing the program environment	
Process Evaluation Question	**Data Collection Method**
Advisory Group • Was the advisory group formed on a timely basis? • Did advisory members participate on an ongoing basis?	Records of recruitment and participation.
Was a gap analysis conducted? A gap analysis, also called a needs assessment, is a technique used for determining the steps to be taken in moving from a current state to a desired future state. Gaps in programming and personnel are identified so that plans can be made to address those needs. Was the gap analysis completed in a timely fashion?	Results of the gap analysis.
Was the program manager able to work with the advisory group in order to meet existing needs?	Program records. Meeting notes and minutes.
Design and implement the program operations	
Process Evaluation Question	**Data Collection Method**
Were the necessary resources available to: • Carry out the project? • Set up advisory group? • Enroll and support participants? • Train EHPDP staff?	EHPDP Coordinator records. Advisory group charter and notes.
What were the participation barriers: • For advisors? • For EHPDP staff? • For Department of Veterans Affairs (VA) staff?	EHPDP Coordinator records. Interviews.

Description of events that may have affected program implementation	
Process Evaluation Question	**Data Collection Method**
What factors influenced implementation of the program? How many employees did not complete all of the coaching sessions?	EHPDP coordinator and EHPDP staff will keep record of factors that facilitated or obstructed implementation. Discussion with intervention group EHPDP staff.
Did EHPDP staff attend the training session? What were EHPDP staff perceptions of the training sessions? What were the barriers to coaches attending training sessions?	EHPDP coordinator records. Personal interviews with EHPDP staff conducted by the program office. Program evaluation forms from Employee Education System (EES).
What activities were used to promote programs? • Kickoff. • Lunch and learn. • Presentations. • Web and email.	Project records. Records of Web use. Copies of promotional e-mails, posters, etc.
Cultural context*.	Interviews with key informants.

*Cultural context refers to meeting the needs of different groups of employees. This may include ethnic groups, persons with disabilities, special needs, or varying levels of education.

12.2.3. Key Informant Interviews

Key informant interviews are a means of obtaining information about some aspect of the community or program from an individual who may be in a position to understand the questions and problems being posed. Typically, a key informant is in a better position to understand a question than his or her peers; however, the use of key informants runs the risk that other equally knowledgeable but less visible individuals are overlooked. The final group of informants should reflect the overall community being served. In order to optimize the interview outcomes, several steps are required:

- Available information should be obtained and studied. This will help determine what new information is needed.

- A group should be formed in conjunction with union partners to determine who should be selected for key informant interviews. Diversity is an important part of this process.

- A set of questions should be developed and carefully reviewed.

  o Begin with a brief overview of the problem and need. Explain why the interviewee was selected, how the information will be used, and thank the interviewee for assisting. Inform the interviewee that interviews are confidential and his or her name will not be used.

  o Develop a list of five to ten important questions. It is important to have probing questions to help an interviewee develop a more in-depth response or more clearly understand a question.

  o Develop a closing question that allows the interviewee to provide any additional information that is felt to be important.

  o When time permits, a brief summary of the interview should be provided. Interviewees should be asked if the summary accurately reflects what has been said.

- An interviewer and venue for interviews need to be selected.

- A method for documentation should be decided upon. In most instances this should include recording interviews to assure that important information is not lost.

- A time and place should be selected that is convenient for the participants. The venue should be quiet, and interviews should take place in an atmosphere that does not seem hurried.

Table 12-2 shows sample questions that might be considered when addressing specific problems. A range of questions was selected in order to demonstrate the need to select the specific issues that need to be addressed. It should be noted that questions are general and are seeking the view of the participant on how to address an issue or problem.

Table 12-2: Sample Key Interview Questions

Problem to be Addressed	Possible Question(s)
Background of the participant.	Tell me about your work in [area] at the VA. For example, what types of activities have you been involved in?
Challenges in reaching a group of employees.	What do you feel are the challenges in trying to reach [group] in the VA? What suggestions do you have for overcoming those barriers?

Problem to be Addressed	Possible Question(s)
Obstacles to overcoming tobacco cessation participation.	What do you feel gets in the way of [group] participating in tobacco cessation programs? Can you suggest possible ways to overcome those barriers?
Program development.	How might each of the following programs appeal to you and your coworkers: walking paths, yoga class, farmers market, smoke-free VA?

Are there other programs you think might be of interest? Please describe those programs. |

Once an interview is completed, the interviewer should review her or his notes, and add any important recollections. Audiotapes should be transcribed and reviewed. The initial review should be to complete gaps in the interviewer's notes. Next, a set of key ideas or concepts should be developed from each interviewee. These may then be compiled together to develop a general understanding of the questions that have been posed.

12.2.4. Focus Groups

It is strongly recommended that training be obtained PRIOR to developing and conducting focus groups. In general, conducting a focus group requires a high level of resources. Staff conducting focus groups must know facilitation techniques, how to write appropriate questions, and how to analyze qualitative data. For detailed information on focus groups, please see Enclosure 63, Focus Groups.

12.3. Quantitative Measures

12.3.1. Making Use of HRA Reports

HRAs are a key component of comprehensive worksite health promotion programs. They may be utilized for a number of reasons, but often provide baseline data around which an employee health promotion program can be designed. HRAs increase employee awareness of personal health risk factors to aid lifestyle changes and identify individuals for disease management services. HRAs are also used to screen employees prior to their exercising at an on-site fitness facility. Following program implementation, HRAs are often repeated at selected intervals to measure program progress (CDC, 2009).

It is important to consider what types of data are collected with an HRA and how the data will be used. Typical HRAs collect the following information: (1) demographic characteristics such as age, gender, and race; (2) personal behaviors such as diet, exercise, smoking, and alcohol consumption; (3) personal medical history; and (4) family medical history.

The Genetic Information Nondiscrimination Act (GINA) 2009 Title II protects U.S. citizens against discrimination in health coverage and in employment based on their genetic information. This means that employers may not collect family health history through an HRA unless a qualified exception applies (GINA, n.d.). GINA permits employers to implement wellness programs that collect family medical history with an HRA provided all of the following:

- Participation is not required and employees are not penalized in any way for not participating (e.g., no incentive is provided for completing an HRA);

- Employees provide written consent;

- Individually identifiable genetic information may only be provided to the individual from whom it was obtained and the licensed health care professional involved in providing such services; and

- Any individually identifiable genetic information is only available for purposes of such wellness services and is not disclosed to the employer except in aggregate terms that do not disclose the identity of specific individuals.

Some HRAs also allow the input of biometric tests and measurements, including blood pressure, blood tests such as fasting glucose and cholesterol levels, waist circumference, and body composition. Taken together, HRA data provide a risk profile for the employee population.

Requirements at a given facility may preclude access to individual data. In this instance only aggregate level data would be available for review. This is not necessarily a limitation. The program may not be tailored to the risks of specific individuals within the organization; however, aggregate level (or population level) data is valuable.

Two important aggregate level metrics that can easily be derived or readily obtained from HRA report data are a measure of the average risks in a population and the wellness score. These measures help portray the overall level of health risks in a particular population and can be assessed over time to measure the program's progress.

Prior research has shown that the level of health risks in the population are related to medical claims costs. As a group, high-risk individuals are more expensive than the low-risk population (Health Management Research Center, 2008). The health risks linked to increased costs include: smoking, physical inactivity (e.g., not exercising regularly), wearing a seat belt less than 90 percent of the time, high alcohol use (more than 14 drinks per week), use of relaxation/sleep medications, life and/or job dissatisfaction, poor perception of physical health, high stress, high blood pressure, high total cholesterol, low high-density lipoprotein (HDL) cholesterol, having a body mass index (BMI) greater

than or equal to 27, taking six or more sick days per year, and having a chronic health problem (e.g., heart disease, cancer, stroke, diabetes, asthma, arthritis).

The relationship between health risk factors and medical costs has been demonstrated in every population examined by researchers at the University of Michigan's Health Management Research Center (HMRC) for over 25 years. Experts at the HMRC conclude that the operating strategy of any comprehensive employee health promotion program should be to control costs by controlling risk factors. Because the majority of individuals in any population have few health risk factors, they suggest that putting resources into maintaining low-risk status may be a better investment than reducing high-risk behaviors (Health Management Research Center, 2008).

12.3.2. Measure of Average Risks

The measure of average risks in a population represents the mean number of health risks per employee in the population. Calculating a measure of average risks utilizing HRA data is relatively straightforward. Computation requires knowing the number of program participants with one, two, three, four, five, or six or more health risks. Table 12-3 is an example of the calculation taken from the Veterans Integrated Service Network (VISN) 23 WIN VA Program.

Table 12-3: Example of Calculation of Measure of Average Risks

Risk Factors for High Medical Claims	Total Participants	Risk Multiplier	Participants x Risk Multiplier	Average Risk
Zero risks	235	0	-	
One risk	284	1	284	
Two to three risks	516	2.5	1,290	
Four to five risks	272	4.5	1,224	
Six or more risks	129	6	774	
Total	**1,436**		**3,572**	**2.49**

To determine the average risk in the population do the following:

- Multiply the amount in the "Total Participants" column in each category by the corresponding amount in the "Risk Multiplier" column (e.g., for 2 to 3 risks take 516 x 2.5 = 1,290).

- Add all amounts in the "Participants x Risk Multiplier" column and write the total in the "Total" row.

- Divide the total amount in the "Participants x Risk Multiplier" column by the total in the "Total Participants" column (e.g., 3,572÷1,436 = 2.49). That answer will be the average risk.

In this example, the number of people with two to three risks and four to five risks were combined into one cell. For this reason, the mid-point of the range was used as the risk multiplier (i.e., risk multiplier = 2.5 and 4.5, respectively). Calculating a measure of average risk at various time points can assist in measuring progress towards program goals. This will determine if the average risk level is going down in that particular population over time. *Note: a measure of the average risks in a population may also be available directly from reports received depending on the HRA selected.*

12.3.3. Wellness Score

In general, HRAs provide some type of total wellness score for participants and are useful to evaluate on a population level. The score usually represents a combination of the following information: (1) use of preventive services; (2) counting the total number of risk factors (e.g., high blood pressure, high cholesterol, tobacco use); and (3) the interaction of the risk factors that leads to disease (Health Management Research Center, 2008). A relationship between HRA wellness scores and medical claims costs has been demonstrated. Higher wellness scores accurately predict lower medical costs. Because many worksite programs do not have access to medical claims records, monitoring the mean and median wellness score in the population, in addition to the measure of average risks described above, serve as credible outcome measures (Health Management Research Center, 2008).

If not available directly from HRA reports, mean and median values may be calculated for the wellness score of program participants. Scores must be collected directly from individual program participants. If access to individual-level data is not permitted, wellness scores may be collected without individual identifying information. With this information it is possible to calculate a mean (e.g., sum of all scores ÷ total number of participants) and median (e.g., the middle value) wellness score at various time points to measure progress towards program goals. This will determine if the mean (and median) wellness score is going up over time.

12.3.4. Conclusions

There are many commercially available HRAs as well as some that are free. Each is slightly different in the questions asked and the reports provided. Besides enabling the calculation of average risks and the mean and median wellness scores in an employee population, HRA reports provide a wealth of information that help evaluate employee health promotion programs. It is a wise investment in time and resources to thoroughly research the products that are available and to choose the instrument that most closely matches program needs and evaluation goals.

12.4. LEAN Works! Obesity Cost Calculator

Workplace obesity prevention and weight management programs are a key component of comprehensive worksite health promotion. Healthy People (HP) 2020 includes a new goal to address the provision of weight management programs in the workplace. The new goal states, "Increase the proportion of worksites that offer nutrition or weight management classes or counseling."

Because weight management programs are an integral part of worksite health promotion, it is important to be able to analyze the costs and benefits of such programs. CDC's LEAN Works! Program provides an analysis tool. LEAN Works! is a free Web-based resource available online at: www.cdc.gov/leanworks. It offers interactive tools and evidence-based resources

to help design and evaluate workplace obesity prevention and weight management programs (CDC, 2009).

The CDC has developed the Obesity Cost Calculator to calculate an estimated return on investment (ROI) for programs. The cost calculator provides organization-level estimates for the following:

- Costs attributable to a high BMI;

- Annual medical costs attributable to a high BMI;

- Annual work loss costs attributable to a high BMI;

- Number of employees with a high BMI;

- Average attributable cost per high BMI employee;

- Expected costs of interventions to reduce obesity;

- Potential reductions in medical costs and work loss resulting from interventions; and

- The number of years before a break-even period is reached.

LEAN Works! provides a worksheet that facilitates data collection that is required to generate cost estimates (see Enclosure 64, Obesity Cost Calculator Worksheet). The calculator estimates costs separately for four groups based on BMI:

- Overweight (BMI = 25-29.9);

- Obese 1 (BMI = 30-34.9);

- Obese 2 (BMI = 35-39.9); and

- Obese 3 (BMI ≥ 40) (CDC, 2009).

In the event that access to detailed BMI data is not available, data from a baseline HRA on the percentage of employees who are overweight and obese may be utilized. The Obesity Cost Calculator may be used in two ways without the detailed data. First, input just the categories for which data are available. The calculator provides cost estimates solely for these groups. Alternatively, the calculator can provide default values for missing categories. Missing data are obtained from nationally representative data sets; however, cost estimates will be more accurate and organization-specific if most of the data are provided rather than relying on default values.

12.5. Developing an Evaluation Questionnaire
If budget or other factors preclude the use of an HRA within a worksite health promotion program or if there are additional evaluation needs, the development of

a questionnaire should be considered; however, the development of a good questionnaire is complex. The use of tested questions for which there are standardized data is recommended.

A good place to start is the Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a state-based system of health surveys that collects information in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. Data are collected on health risk behaviors, preventive health practices, and health care access. Creating questionnaires based on questions from the BRFSS surveys will help establish baseline rates of health behaviors and the prevalence of chronic health conditions in the employee population. It will also provide a readily accessible comparison population at both national and state levels.

Using the BRFSS historical questions archive, questions may be found on the following topics:

- Exercise and physical activity;

- Nutrition, diet, and fruit and vegetable consumption;

- Tobacco use, smoking cessation, and exposure to secondhand smoke;

- Alcohol consumption;

- Cholesterol awareness; and

- Access to health care coverage.

Questions may be found on numerous chronic health conditions such as arthritis, high blood pressure, diabetes, asthma, anxiety and depression, and many other topics (BRFSS, 2009).

Once a questionnaire has been developed and administered, results may be compared with prevalence and trends data published on the BRFSS Web site. Comparisons may be made at a national or state level as well as over a period of time. In order to assure data that are comparable to BRFSS data, questions must be used and administered without revisions (BFRSS, 2009).

The WIN VA Program within VISN 23 used questions from the BRFSS to evaluate the effectiveness of the program's coaching component as well as various interventions. The questionnaires were used in addition to using an HRA. Depending on the licensing requirements of the HRA, its administration may be limited to annual use.

It may be necessary to evaluate some interventions after the program has been in place for 3 or 6 months. Developing questionnaires as discussed above and using them both pre-intervention and post-intervention will allow the appropriate evaluation of programs.

12.6. Incorporating Institutional Data

Institutional data are available for planning and evaluating employee health promotion programs. Available data include such things as employee demographics, sick leave usage, injury rates, and workers' compensation (WC) costs.

Consider incorporating measures of institutional data into program evaluation after the program is well established. While these measures are not likely to change in the short-term, lower absenteeism and injury rates and decreased workers' compensation costs (continuation of pay and chargeback costs) over the long-term are important outcomes of employee health promotion programs and provide compelling data to support wellness initiatives.

Some measures of institutional data are readily available through the VHA Support Service Center (VSSC). The VSSC Web site on the Intranet includes a point-and-click interface that enables users to obtain reports according to their specifications using a variety of VA corporate data sources maintained at the VA Austin Automation Center. It also includes data from the Financial Clinical Data Mart (FCDM). FCDM is an interactive information management system that uses Structured Query Language (SQL) and Online Analytical Processing (OLAP) cube technology to build large, customized national databases. This cube technology allows VHA to integrate clinical and financial data designed for rapid queries and reporting. For institutional measures relevant to evaluating employee health promotion programs, two particular cubes will be of interest, namely the Paid Accounting Integrated Data (PAID) cube and the Automated Safety Incident Surveillance and Tracking System (ASISTS) cube (VSSC, 2009).

The PAID cube contains an extract of employee payroll data from each pay period beginning fiscal year 2004. It includes summarized earning and leave statement data. Employee sick leave usage data may be found using data from this cube. In addition to the usage data, the demographic dimensions of the cube allow the evaluation of sick leave data by time and leave unit, occupation, pay plan, gender, and other variables.

The ASISTS cube contains information on occupational injuries and illnesses for VHA staff. As a national database, the ASISTS cube provides support for occupational injury or disease reporting, surveillance, and intervention. The demographic dimensions of the cube allow the stratification of injury data by occupation, age group, education, and body part affected.

Since the data contained in these cubes is retrospective, data may be obtained for the time period that preceded the implementation of the employee health promotion program and compared to data after the program has been in place. The goal is to show decreases in various measures over time. It is important to be conservative in the conclusions drawn from institutional data.

WC costs can be obtained from the VA WC and Occupational Safety and Health Management Information System (WC/OSH-MIS) database. Information from this database can only be viewed and downloaded by employees with WC case management and safety responsibilities at VA facilities. The information contained in WC/OSH-MIS is used to manage WC claims, produce statistical management reports, monitor the case management performance of each VA employing facility, and produce statistical reports on the source and type of injuries occurring at each facility (Federal Register, n.d.). It is necessary to work with staff with the appropriate authority to incorporate this type of data into worksite health promotion program evaluation.

12.7. Presenteeism Measures

Presenteeism may be evaluated in addition to incorporating institutional data such as employee sick leave and injury rates into the worksite health promotion evaluation. Presenteeism was introduced as a measure of productivity in the late 1990's and is defined as employees being at work but functioning at a fraction of their capacity due to physical and/or emotional problems and concerns linked to health risks. Productivity losses due to presenteeism result in significant indirect costs for employers. One employer estimated that presenteeism comprised approximately 60 percent of the total direct and indirect costs of poor employee health versus 40 percent from medical, pharmacy, absenteeism, and disability costs combined (Burton et al., 2005).

A number of validated instruments have been developed to measure presenteeism. These instruments, some of which are discussed in the sections below, can be incorporated into an HRA or other employee surveys used for evaluation purposes.

12.7.1. Health and Performance Questionnaire (HPQ)

The HPQ is a short instrument that:

- Screens for the presence of commonly occurring health problems and their treatment;

- Assesses three domains of workplace performance (absenteeism, presenteeism, and critical incidents); and

- Obtains basic demographic and occupational information.

The HPQ uses a single global rating of work performance to measure presenteeism (vs. reporting on a number of separate domains of work functioning). A portable document format (PDF) version of the instrument is available online at: http://www.hcp.med.harvard.edu/hpq.

12.7.2. Work Productivity and Activity Impairment (WPAI) Questionnaire

The WPAI is a short instrument that was created as a patient-reported quantitative assessment of the amount of absenteeism, presenteeism, and daily

activity impairment attributable to general health or a specific health problem. There are separate versions depending on whether there is interest in general health status or a specified health problem, disease, or condition.

The WPAI uses a single global rating of work performance to measure presenteeism vs. reporting on a number of separate domains of work functioning. The instrument is available online at http://www.reillyassociates.net/WPAI_GH.html.

12.7.3. Work Limitations Questionnaire (WLQ)

The WLQ measures the degree to which employed individuals are experiencing limitations on the job due to their health problems and the associated health-related productivity loss.

The WLQ items ask respondents to rate their level of difficulty or ability to perform specific job demands. The job demands, which are contained in the WLQ, have four defining features:

- They occur among a variety of jobs;

- Many different physical and emotional health problems may interfere with their performance;

- They are considered important to the job from the worker's perspective; and

- Problems performing them are frequently related to productivity.

The WLQ is available in a 25-item version which is generally used for research and evaluation, and an 8-item version that is suitable for inclusion in health assessment tools. The WLQ is proprietary and requires a license to use. More information may be found online at: http://160.109.101.132/icrhps/resprog/thi/wlq.asp.

12.8. Mixed Qualitative and Quantitative Measures

12.8.1. PIPE Impact Metric

An approach to evaluating the population impact of employee health promotion programs is the PIPE Impact Metric. This metric is designed to monitor program impact in relationship to its stated objectives and processes (Pronk, 2003). The metric has four elements: penetration, implementation, participation, and effectiveness. The metric is calculated by multiplying the four elements together to derive the population health impact. The definition of each element is as follows:

P - Penetration: The proportion of the target population that is reached with invitations to the program.

I - Implementation: The degree to which the program has been implemented.

P - Participation: The proportion of employees who enroll or participate in any aspect of the program.

E - Effectiveness: The rate of success among participants.

PIPE Impact Metric = Penetration x Implementation x Participation x Effectiveness.

Penetration and implementation are related to the energy and efforts required for program design and administration. Participation and effectiveness reflect employee engagement. The first two elements inform program administrators about opportunities for improvement. The second two elements are used for reporting on program outcomes. The PIPE Impact Metric may also be used to document changes in population health impact between measurement periods (Pronk, 2003).

12.8.1.a. Example of Calculating the PIPE Impact Metric

Setting: A population-based walking program designed to support individuals with diabetes to increase their physical activity to improve their health.

Penetration: Penetration is the proportion of employees that is reached with invitations to the program. The denominator is the total intended target population and the numerator is the number of people who were reached.

Denominator (target population) = all employees (n = 16,968).

Numerator = total number of employees actually reached with the invitation to participate.

(n = 16,574).

Penetration = 16,574÷16,968 = 0.98 (or 98%)

Implementation: Implementation represents program fidelity or the degree to which the work plan was implemented. The denominator is all the work plan action steps to be implemented. The documentation of work plan completion is the data source for the numerator.

In the walking program example, review revealed 85 percent of the work plan was implemented by the end of the measurement period.

Implementation = 0.85 (or 85%)

Participation: Participation is the proportion of employees who enroll or participate in any aspect of the program. The denominator is the same as the numerator for penetration (or the number of people reached with invitations to the program) and the number of enrollees is the numerator.

Denominator = total number of employees who were invited to participate (n = 16,574).

Numerator = number of people who enrolled in the walking program (n = 2,752).

Participation = 2,752÷16,574 = 0.17 (or 17%)

Effectiveness: Effectiveness is the rate of success among participants. The denominator for this is the same as the numerator for participation (e.g., number of people who enrolled in the program) and the number of individuals who met their goals is the numerator. Criteria for success are established during program design and should be related to anticipated health benefits.

Denominator = number of people who enrolled in the walking program (n = 2,752).

Numerator = number of people who reached a minimum of 8,000 steps per day on average during the last week of an 8-week intervention and returned an 8-week step log (n = 1,250).

Effectiveness = 1,250÷2,752 = 0.45 (or 45%)

PIPE Impact Metric = 0.98 x 0.85 x 0.17 x 0.45 = 0.0637 (or 6.37%)

In this example, participation was 17 percent, the lowest of the four elements. This reflects an opportunity for improving overall program impact by increasing rates of participation (Pronk, 2003).

12.8.2. Kirkpatrick Evaluation Model

Note: Reference herein to any trademark, proprietary product, or company name is intended for explicit description only and does not constitute or imply endorsement or recommendation by the VHA Center for Engineering & Occupational Safety and Health (CEOSH).

The Kirkpatrick Model is an easy-to-use framework for evaluation that combines both qualitative and quantitative methods. This model measures reaction (level one), learning (level two), behavior change (level three), and results (level four). Levels one and two focus on qualitative outcomes and are important in determining the degree of participant satisfaction. The model supports conducting these types of evaluations immediately following the conclusion of an employee health promotion program or activity. In addition to measuring reaction and learning at this time, information should also be collected on participation via the use of attendance sheets. Identifying reasons for nonparticipation is useful

information and will help to improve marketing strategies. A level one and two survey should include the following reasons for nonparticipation:

- Unaware of the program;

- Not interested in participating;

- Inconvenient location;

- Inconvenient class schedule;

- Lack of supervisor support;

- Lack of interest in wellness topics; and

- Lack of time.

The Kirkpatrick level three evaluation measures behavior change and can be obtained via self-report or through observation. A level three evaluation should be conducted a minimum of 3 months after the event has taken place in order to gain a true representation of behavior change. The use of an online tool is an easy way to obtain this level of feedback. Consider the following tips in designing and implementing an online survey:

- Set goals and objectives prior to implementing a survey;

- Make the survey brief;

- Inform employees ahead of time;

- Make the subject line inviting; and

- Keep the questions objective.

According to the Kirkpatrick model, a level four evaluation focuses on results such as program impact on people, products, processes, and profit, and should be conducted 6 months after the program or activity. The measurement of absenteeism, turnover, productivity, work-related injuries, and health care costs fall into this category. The ROI is the conversion of these results to a dollar amount.

12.8.3. The Wellness Impact Scorecard (WISCORE℠)

Note: Reference herein to any trademark, proprietary product, or company name is intended for explicit description only and does not constitute or imply endorsement or recommendation by the VHA Center for Engineering & Occupational Safety and Health (CEOSH).

WISCORE℠ was developed by a workgroup at the National Business Group on Health, which is a non-profit organization devoted exclusively to representing

large employers' perspectives on national health policy issues. According to the workgroup, the purpose of the scorecard is to:

- Share guidance with employers on what the appropriate data elements are to determine the impact of their wellness efforts;

- Offer a tool for employers to quantify the impact of their wellness efforts and follow trends over time; and

- Provide a process for employers to benchmark against other employers.

The WISCORE℠ Scorecard is available online at the National Business Group on Health's Web site to all employers (National Business Group on Health, 2010). The scorecard has three levels which include the following:

Level 1: Improving Health

a. This section of the scorecard focuses on understanding employer efforts in health improvement and captures data elements related to the strategies, tactics, and communications efforts that the employer has undertaken in promoting healthy lifestyles.

Level 2: Employee Engagement

b. This section of the scorecard gathers information on how engaged the employee population is in leading healthy lifestyles. Data elements include percentage of the population engaging in particular healthy practices and employee participation in particular health improvement programs.

- Much of the data for this level comes from an HRA or other employee surveys/biometric screenings.

- Employers determine their own targets for employee practices/participation prior to collecting the actual values in order to make comparisons. Default values are provided if targets are not set internally.

Level 3: Outcomes

c. The final section of the scorecard focuses on the outcomes that an employer has been able to achieve in improving employee behavior and health status. Data elements include changes in risk for several health behaviors over time and changes in utilization of health care and cost savings over time.

- Outcome data come from multiple years;

- Changes in risk for health behaviors come from several years of HRA and program participation data; and

- Changes in utilization are based on health care claims analyses.

The developers of the scorecard provide a very thorough checklist of the types of data needed to complete the scorecard and encourage users to complete the checklist prior to proceeding to the online tool. According to its developers, the scorecard "advances wellness program evaluation from counting health risks to measuring healthy behaviors that increase the level of health status among the entire employee population" and can certainly be used as a valuable guide when planning the evaluation of an employee health promotion program.

12.9. References and Resources

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12.10. Enclosures

Enclosure 63   Focus Groups

Enclosure 64   Obesity Cost Calculator Worksheet

Incentives

In the United States, health care costs continue to rise, and employers are increasingly dependent on health promotion to improve employee health and productivity as well as decrease health care costs. Although employee health promotion programs have the potential to be successful, their full potential can only be realized when there is a high participation and engagement rate. As a result, incentives have become an essential component of any health promotion program. In addition, incentives have been shown to increase participation, leading to increased productivity, which will further the mission of the agency.

An incentive is any reward given to an employee in exchange for a prescribed health behavior or action.

13.1. Legal and Policy Issues

Incentives that bear a direct relationship to enhancing health can be purchased with funds appropriated for employee health promotion. The value of incentives should be a reasonable amount. Some facilities and agencies have used $20-25 per employee/per year as a guideline, but this has not been captured in policy or regulation.

The rules of incentive programs should be clearly communicated with participants at the time of program enrollment or shortly thereafter. They have the potential to decrease participation and effectiveness if confusing, inconsistent, or perceived as unfair. Quality communication keeps people informed of expectations, progress, and benefits of any program.

In designing incentive programs, the following guidelines are important:

- The reward must be valued by participants (market research may help determine this);

- Several forms of rewards may be better than only one;

- Rewards should be large or interesting enough to motivate;

- The probability of receiving a reward should be reasonable with clearly defined expectations and simple to follow rules; and

- Incentive levels should never be reduced over time; adequate long-term funding should be budgeted.

13.2. Effectiveness of Incentives

Employee health promotion programs increasingly use a variety of incentives to encourage participation, sustain interest, and enhance outcomes. While research in this area has not been extensive, there are a limited number of studies from the

peer-reviewed literature that provide insight into the effectiveness of incentive programs.

Incentive use has been shown to have significant effects on increasing smoking cessation rates in the workplace, increasing participation rates in a variety of employee health promotion programs, and contributing to long-term outcomes such as improved morale, improved productivity, decreases in absenteeism, and lower health care expenditures (Goetzel et al., 2007; Sutherland et al., 2008; Volpp et al., 2009).

In studies by Jeffrey et al., 1993, incentives have been found to increase awareness, enhance motivation and participation, remind participants of their goals and commitment to the program, and enhance likelihood of participation in future program offerings. Some health promotion experts have indicated that incentives are an element of best practice in employee health promotion programs.

In their handbook, Rewarding Change: Principles for Implementing Worksite Incentive Programs, VanWormer and Pronk offer these summary thoughts, "Incentives are a tool to initiate change. They should be viewed as short-term interventions that give employees a reason to get excited about healthy lifestyle changes and be rewarded for initiating them. Incentives can convince employees to (improve their health) in the near term so they can be exposed to natural contingencies that maintain such behaviors in the long term." They also point out; however, that in the long run, small monetary incentives cannot compete with internal and social rewards such as feeling stronger, more attractive, more active, more fulfilled, or healthier (VanWormer et al., 2009).

13.3. Outcomes to Incentivize

Incentives should only be offered for outcomes that can be acceptably measured. If behaviors are not reasonably verifiable, they should not be incentivized. It also seems prudent for programs to incentivize those activities that are reasonably achievable within a given time period.

Incentives could be used to motivate:

- Attendance at one or more health promotion events or activities;

- Regular physical activity;

- Completion of a health risk appraisal (HRA);

- Participation in biometric screening [body mass index (BMI), blood pressure (BP), lipid testing];

- Participation in smoking cessation services;

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- Increased utilization of farmers markets or healthier choices in vending machines or cafeterias;

- Compliance with health coach or counseling visits for persons with chronic medical conditions; and,

- Outcomes such as weight loss, successful smoking cessation, and cholesterol or blood pressure reduction.

13.4. Types of Incentives

Incentives could be in cash or kind. Incentives for encouraging healthy behavior typically fall into one of these categories:

- Merchandise;

- Cash rewards;

- Other tangible health care benefits such as reduced-price fitness memberships or discounts on other health services; and

- Intangible benefits such as time off, preferred parking spaces, or recognition.

Although monetary incentives (cash, gift cards, coupons, gift certificates, and discounts) are generally more effective and more appealing to a diverse population than specific gifts, there are challenges with providing cash incentives in the federal government.

VanWormer and Pronk suggest that moderate, more frequent (and immediate) incentives coupled with frequent praise from a meaningful, respected source adds extra value to any incentive (VanWormer & Pronk, 2009).

To be effective, an incentive must be commensurate with the effort required to practice a desired health behavior. As such, incentives attached to quitting smoking or losing weight should be larger than incentives to attend a lunch and learn.

The key to success in the use of incentives lies in an effective, ongoing strategy.

13.5. Implementing a Successful Incentive Program

13.5.1. Consider the Culture of Employees

In determining what kind of incentive will serve as a motivation, it is important to consider the culture of employees. Will a drawing for a music player, time off, or a water bottle resonate with employees? Think about what will likely bring about long-term participation.

13.5.2. Be Familiar with Prevalent Behaviors and Conditions in the Population

Knowing what the prevalent conditions or behaviors are in the population will help decide what to incentivize. If there are no baseline data, providing an incentive for completion of a baseline health assessment like an HRA makes sense. On the other hand, if baseline data indicate a large population of smokers, then incentivize the tobacco cessation program.

13.5.3. Communicate Incentives

Communicate the incentive program, including how it supports health and wellness and the rules for participation. The communication should be simple and easy to understand.

13.5.4. Encourage the Small Step Approach

Incentivizing for small successes on an incremental basis keeps employees engaged and motivates further achievements. This helps the employees move towards lasting change.

13.6. References and Resources

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Enclosures

1. Outcome Measures for the Supportive Environment

2. Supports for Healthy Food Choices and Data Points

3. Outcome Measures for Worksite Wellness Program Integration

4. Outcome Measures for Linkage with Related Programs

5. Health and Wellness Volunteer Duties

6. Sample Goals and Objectives for Supporting a Culture of Wellness

7. Employee Health and Disease Prevention-FY 2008-GAP Analysis

8. Checklist for Planning an Employee Health Promotion Program

9. Project Management

10. Example of Naming Convention for Employee Wellness Clinics

11. Business Case

12. Sample Business Plan (1)

13. Sample Business Plan (2)

14. VA Finance Terms and Definitions

15. Employee Health Promotion Program Charter

16. Suggested Fit for Life Veterans Volunteer Corp Activities

17. Creating a New Project

18. Sample Logistics Checklist for Kick-Off Event

19. WIN Pamphlet

20. Example of Announcements in the Daily Briefing

21. Checklist for Equal or Reasonable Access to Health and Wellness Programs

22. What is Coaching?

23. GROW Model Template

24. Sample Agreement of Understanding

25. Coaching Sessions

26. GROW Coach Model for Groups