

IMPROVING **Employee Health** IN **SIX** steps

A GUIDE
to Planning,
Implementing
and Achieving
Targeted
Outcomes



INSTITUTE ON
The Costs
AND **Health**
Effects
OF **Obesity**

OptumHealthSM

IMPROVING Employee Health IN SIX steps

A GUIDE to Planning,
Implementing and Achieving
Targeted Outcomes

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INTRODUCTION

This online document is a culmination of five years of collaboration between the National Business Group on Health's Institute on the Costs and Health Effects of Obesity and member companies. Based on research and the work of many companies, the steps outlined here provide an effective strategy for optimizing employee health and implementing health improvement programs.

The heart of the document is a set of six steps that can be used as a blueprint for making prevention and health improvement part of the culture of your company. As you read through the steps, you will notice words or phrases underlined. These are linked to data and explanations to broaden your understanding of a topic. This additional information, found at the end of the document, also can be read in its entirety. Both the six steps and the supporting material provide what you need to support the good health of your employees.

It should be noted that the term *health improvement*, used throughout this document, refers only to lifestyle health risk aspects and not disease management, care management or workplace safety.

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1 MAKE AND WORK FROM A PLAN

Define Strategy and Implement the Plan

- ▶ Clarify the purpose and set expectations
- ▶ Foster buy-in among key decision makers
- ▶ Allocate sufficient resources
- ▶ Articulate processes and tactics, drawing on steps 2 – 5
- ▶ Incorporate a process to evaluate program results

Leverage Stakeholders to Fulfill the Plan

- ▶ Manage the following [key stakeholders](#): allies and process owners (facilities, food service, communications); technical experts (benefits design, legal); influencers (senior management); and suppliers/business partners (health plan, fitness center, health education/coaching company, community resources)

Implement Plan through Effective Program Management

- ▶ Implementing and integrating [effective health and behavior change interventions](#) is required to achieve success in improving employee health. Often these interventions are supplied by [health plans and other vendors](#). Data, as well as legal and regulatory issues, are important components of any health improvement program and must be managed well by the company, its vendors and other health-related business partners.

Most companies that have successfully implemented comprehensive and effective (Platinum Level) programs did so by adopting and integrating key program components over a period of many months and years. They used regular evaluations, program assessments and participant feedback to identify problems and implement design improvements. During these months and years, they overcame changes in leadership and support, unanticipated employee backlashes, unexpected cost increases, numerous vendor problems and technology-driven errors.



2 SPEND WISELY

As employers take on the role of health facilitator and enabler, they will need to implement approaches that better leverage medical benefit funding to [reduce health risk and improve health status and well-being](#). Benefit design and program implementation need to incorporate [effective interventions](#) and meaningful [incentives](#) for risk mitigation, health maintenance and clinical prevention.

One of the most important parts of implementation is determining how to reallocate spending to create funding for health improvement. Current spending is heavily skewed toward the payment of claims, which continues to trend higher each year. As a result, many companies are left without a budget for health improvement. To adjust the spending budget, consider the guidelines listed on the next page.

Rebalancing the Treatment/Prevention Purchasing Ratio

A greater percentage of annual claims expense should be allocated to health improvement and health risk reduction.

One Approach to Allocations for Spending for Treatment and Health Improvement

SPENDING	PERCENT TREATMENT	PERCENT HEALTH IMPROVEMENT *
Current	97%	3% ¹
Future	90%	10% **

* Percent of annual claims cost

** Resources that can be used to pay for company-sponsored health improvement programs.

Restructuring the approach to employer/employee funding contribution can drive employee adoption of health improvement practices.

Possible Changes in Employer/Employee Contributions to Health Spending

FUNDING	PERCENT TREATMENT		PERCENT HEALTH IMPROVEMENT **	
	EMPLOYER	EMPLOYEE	EMPLOYER	EMPLOYEE
Current	80%	20%	3%	Not known
Future	80% moving toward 50%	20% moving toward 50%	10-20%	5-10%

** Resources that can be used to pay for company-sponsored health improvement programs.

From Activity-Based to Impact-Based Funding

In many companies, the effort and funding for health improvement interventions is miniscule compared with the funding for annual medical claims costs.² For example, medical treatment costs may average between \$350 and \$500 per member per month (pmpm) while a mere \$2 – \$3 pmpm (less than .02%) is carved out as an administrative expense for health risk improvement — a level that is not sufficient to deliver meaningful health impact. As a result, the company health improvement effort is little more than a collection of time-limited activities directed to single health risks that have low participation. Rebalancing the funding to allocate 5% to 10% (\$30 to \$50 pmpm) of claims expense to health improvement will allow implementation of a comprehensive, systematic and integrated approach that drives participation and achieves a greater impact.³

From Treatment-Oriented Care to Prevention-Oriented Strategies

The current medical system delivers complex medical and pharmaceutical products and services to treat disease conditions. Although the majority of these conditions are caused by lifestyle-related health threats, the majority of employee health benefits funds medical treatment that plays little role in diminishing health threats or future disease. Presumably, businesses benefit from funding medical treatment that reduces employee time away from work and financial strain. However, the return on investment for treatment-oriented care is likely to be small.⁴ Of equal concern is the emerging realization that increased spending for health care has brought neither higher quality nor better outcomes.⁵

Reducing lifestyle-driven health risks involves a prevention approach rather than a medical approach. The overall value of the prevention approach is illustrated in the following chart.

Comparison of Approaches: Medical Treatment versus Health and Well-being Improvement

MEDICAL TREATMENT	HEALTH AND WELL-BEING IMPROVEMENT
Individual-based, one person at a time	Group-based, many people per intervention
Uniquely skilled technical professionals	Broadly skilled technical professionals
Complex technology, procedures and medications	Systems for the following: messaging and repetition (message not technically complex), information exchange, enabling tools for health self-assessments, self-directed risk reduction and health improvement interventions, feedback and health practices adoption and skills building
Individual disease remission or disease management	Group health status level and level of well-being
\$\$\$\$ per person	\$ per person
Clinics, hospitals, labs, pharmacies and outpatient medical facilities	Workplace fitness centers, Web-enabled, telephone, community-based facilities, and peer support groups



CHOOSE INTERVENTIONS THAT WILL WORK

- ▶ [Adjust employee workplace policies and practices](#)
- ▶ [Target behavior change](#)
- ▶ [Identify important features of health risk reduction products and services](#)
- ▶ [Select appropriate suppliers](#)
- ▶ [Use incentives as a motivating tool](#)



COUNT YOUR PROGRESS

Keep track of the impact of the interventions by measuring key outcomes such as the following:

- ▶ [Who participates?](#)
- ▶ [How do they change?](#)
- ▶ [What is the impact on health care costs?](#)
- ▶ [Does your company support a “culture of health”?](#)



GET INPUT FROM THE OUTSIDE

- ▶ ***Best Employers for Healthy Lifestyles Award:*** One of the key benefits of this award sponsored, by NBGH’s Institute on the Costs and Health Effects of Obesity, is that it provides companies with the means to evaluate their programs and performance. Completing the application process has the following benefits for employees:
 - ▷ Complete review of the employer program
 - ▷ Documentation that can serve as a strategic report for senior management
 - ▷ Identification of program gaps and weaknesses
 - ▷ Collection of data that can serve as a baseline for a subsequent strategic plan
 - ▷ Contribution toward formulating a strategy to achieve a higher level of the award or other recognition
 - ▷ Obtaining recognition for innovation
 - ▷ Informal benchmarking with other companies
 - ▷ Setting expectations for program achievement that is appropriate to the level and stage of implementation



RESOURCES FOR WELLNESS PROGRAMMING

Organizations such as OptumHealth, one of the nation's largest health and well-being companies, take a holistic, integrated approach to wellness programming. The strategy of OptumHealth and other organizations is to incorporate a combination of individual- and population-based interventions, creating a program based on the employer's unique culture, goals and population.

Examples of individual-based intervention programs include the following:

- ▷ **Health risk assessment**
- ▷ **Telephonic wellness coaching**
- ▷ **Online health coaching**
- ▷ **Healthy Weight**
- ▷ **Tobacco Cessation**
- ▷ **Disease Management**
- ▷ **Disability Management**
- ▷ **Treatment Decision Support**
- ▷ **Biometric measures**

Population-based interventions include the following:

- ▷ **Incentives**
- ▷ **Online portal**
- ▷ **Employee assistance programs**
- ▷ **Risk reduction activities**
- ▷ **Injury prevention**



CLOSING THOUGHTS

As your business or organization moves toward consumerism and defined contribution medical plan designs, keep in mind that these strategies will not remove the impact of employee health on business. The goal instead is to rebalance responsibility and risk sharing from the employer alone to the employer and employee.

The points listed below summarize the key reasons why consumerism is important and the benefits of this approach for both employers and employees.

Moving To Consumerism and Defined Contribution

To date, the employee (and/or plan member) has been a passive recipient of benefits. Although consumerism will not remove the impact of employee health on business, it does require employees to become active managers of their health status *and* their health finances — both current and future. While this approach may ultimately limit the level of health care expense to business, the potential impact of poor health status (if employees are not successful managers) will contribute to declines in worker productivity and job performance that challenge business operations and profitability.

Modifiable health risks account for 21% to 31% of annual employee health claims costs.⁶ Employees with negative lifestyle habits, such as tobacco use, high blood pressure, high cholesterol, overweight and obesity, high blood glucose, high stress and lack of physical activity, can cost employers up to 228% more than employees without these risk factors.⁷ Employee health status is increasingly compromised by (1) earlier onset of chronic diseases among the working population, (2) lifestyle-related factors and (3) the aging of the working population. These threats to employee health status will grow if employees do not succeed in taking control of their health under the consumerism model.

Re-Orienting the Culture to Maximize Employee Well-being

The current environment of transformation offers an unprecedented opportunity for employers to make a radical shift in their approach to employee benefit coverage, moving from providing financial protection for the cost of treating disease to facilitating employee well-being throughout the company. In this case, well-being means the following: The *absence* of physical and mental conditions (i.e., good to excellent health status) and the *presence* of high levels of physical and mental functioning. When the culture of business includes a culture of health (COH), employee well-being is much more attainable.⁸

A culture of health is created when company policies, practices and social norms of expected and accepted behaviors drive positive health practices throughout the organization. Leadership that makes “emotional connections that motivate and inspire people”⁹ to value good health status and well-being provides a good starting point for achieving and sustaining a COH.

Cultural attributes have a tremendous, though often unrecognized, impact upon individual behavior. They influence choices and determine the effectiveness of individual initiatives.¹⁰ Evidence from published studies and experienced employers indicate that taking steps to create and maintain a COH in the work environment results in improved employee health status, productivity and a reduction in the rate of increase in the costs of medical care.^{11,12,13} The Towers Perrin 2007 Health Care Cost Survey documented that employers who made aggressive ef

forts to manage health care performance — including implementing health improvement features — succeeded in slowing the upward spiral in their own program costs when compared with similar companies that did not make efforts to manage health program performance.¹⁴ Skill in facilitating good health among employees, including the appropriate use of consumer-directed care plans for medical services utilization, will be a key differentiator of success for business in the future.¹⁵

Transitions in Roles of Health Care Management

The roles played by employer and employee will be significantly different under the new emerging models of health care management.¹⁶

Emerging New Roles

EMPLOYER	EMPLOYEE
Plan design and effective purchasing	High engagement and making the right choices
Enabling employee decision making	Using tools/programs effectively
Facilitating access to health improvement	Taking responsibility and making the effort
Adopting the larger concept of well-being as the overall objective	Becoming responsible and informed partners

Achieving the Well-Being Advantage

A growing number of scholars from different disciplines are arguing that human health is a valuable form of human capital. Drawing on examples from around the world, economists are questioning the longstanding assumption that wealth causes health. Instead, they argue that health contributes to the creation of wealth.¹⁷ Employers should leverage their culture, work environment, social norms, social characteristics and benefit design to facilitate good employee health. Achievements in these areas will result in higher work capacity and output, less time missed from work and significantly reduced health care services and prescription drug utilization.¹⁸

Achievements in these areas will also create value for the employee, which, in the upcoming anticipated war for talent, helps employers attract and retain the healthier employees who will have fewer associated health care costs, greater personal satisfaction, greater productivity and performance and will be in a position to positively influence the choices of workplace colleagues. In fact, collateral health effects that accrue to others have been validated by social scientists in numerous studies.¹⁹ For example, exercise or smoking cessation in one person may prompt numerous others to behave in a similar fashion. The good health status of the employee is contagious in a highly positive manner and can serve as a magnet, attracting healthy and health-conscious employees who will choose to work in healthy environments.

Acknowledgments

The National Business Group on Health would like to acknowledge the support of OptumHealth in completing this project. The Business Group also would like to thank Erica Brody for her assistance in completing the background research for this project.

RESOURCE LINKS

The information provided here is linked to underlined sentences, phrases or sections from the previous section. These pages also can be read as a separate document.

STAKEHOLDER ROLES

Stakeholder Roles

STAKEHOLDER	ROLE
Human Resources/Benefits	Benefits personnel to ensure that health improvement policies are advanced by appropriate employee benefits packages
Legal	Evaluate the suitability of the health risk assessment, incentives and other programs
Purchasing	Negotiate and contract with food suppliers for healthy dining options and vending
Facilities	Execute tobacco policy and other policies that impact the work environment
Employee representatives	Provide feedback from the perspective of potential program participants and serve as program champions
Management	Promote program participation, support flextime ²⁰

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WORKPLACE POLICIES AND PRACTICES

Initiating and updating policies that support healthy lifestyles is an easy way to contribute to the creation of a culture of health at the workplace.

- ▷ Policy development is inexpensive
- ▷ Policy development does not require external vendors or consultants
- ▷ Policies can be developed and implemented quickly, in weeks or months
- ▷ Policies have the potential to impact the entire employee population

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Foundational Policies

Tobacco

BENEFIT Limit smoking activity and exposure to environmental (i.e., second-hand) smoke

KEY RESOURCES http://www.cdc.gov/tobacco/secondhand_smoke/00_pdfs/chap3.pdf
http://www.cdc.gov/tobacco/secondhand_smoke/workplace_guide.htm

Food

BENEFIT Make it easy for employees to make smart food choices to maintain a healthy weight

KEY RESOURCES http://www.businessgrouphealth.org/benefitsttopics/et_dining.cfm
http://www.prevent.org/images/stories/Files/publications/Healthy_Workforce_2010.pdf – p. 20

Physical Activity

BENEFIT Give employees flexibility to incorporate physical activity into their regular routines and identify opportunities to increase physical activity (e.g., signs that encourage use of stairs)

KEY RESOURCES http://www.cdc.gov/nccdphp/dnpa/physical/health_professionals/index.htm

Stress

BENEFIT Improve mental well-being and increase productivity of employees

KEY RESOURCES <http://www.apa.org/topics/topicstress.html>
<http://www.cdc.gov/niosh/topics/stress/>

Benefit Design

BENEFIT Encourage use of appropriate preventive services and empower employees to be informed health care consumers

KEY RESOURCES <http://www.businessgrouphealth.org/benefitsttopics/topics/purchasers/index.cfm>
<http://www.prevent.org/>

TARGET BEHAVIOR CHANGE

Question: What is the number one reason people don't change?

Answer: They don't know how. Reducing health risks and improving health requires interventions that go beyond providing information and raising awareness. Techniques that have been used successfully to change behavior include goal setting, skill-building over time, tracking, feedback on progress and relapse prevention. Many of these techniques have emerged from the science of addiction treatment literature.

Health improvement programs cannot make a significant impact without changing behavior. In addition, the interventions commonly used in work settings need to be advanced enough to include validated methods for overcoming bad lifestyle habits and adopting good health practices, such as tobacco cessation, weight management, stress management and regular physical activity.

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Examples of Behavior Change Approaches that Enhance Health Improvement Interventions

BEHAVIOR CHANGE APPROACH	TECHNIQUES	THEORY/CREATOR
Goal Setting	Personal goal setting and follow-up on extent of goal attainment	Cullen ²¹
Stage of Change (SOC) (Transtheoretical Approach)	Successful self-change follows a predictable course and provides behavior change techniques for each stage of the course	Prochaska & DiClemente ²²
Motivational Interviewing	Individual thinks through and clarifies reason for attempting change, identifies barriers, plans how to overcome challenges and selects personal strengths to build upon	Miller & Rollnick ²³
Skills Based (Social Cognitive Theory)	Behavior change is a function of enhanced skills and confidence (self-efficacy) in doing new behavior via modeling and feedback	Bandura ²⁴

HEALTH RISK ASSESSMENT (HRA)

Population Health Status and HRAs

HRA Definition

The HRA uses a survey-feedback format to estimate the odds that a person with certain characteristics will die from selected causes within a certain time period. Although not a research-based technology, the HRA can be used to help individuals improve their odds of health and survival by using HRA feedback, which identifies behavior changes that can mitigate risk.

Benefits

- ▷ **Relatively inexpensive and easy to use**
- ▷ **Popular**
- ▷ **Provides a systematic approach to organizing preventive health information and tends to emphasize modifiable risk factors**
- ▷ **Provides group data that summarize major health problems and risk factors**
- ▷ **May assist participants to make positive health behavior changes**

HRA Mechanisms

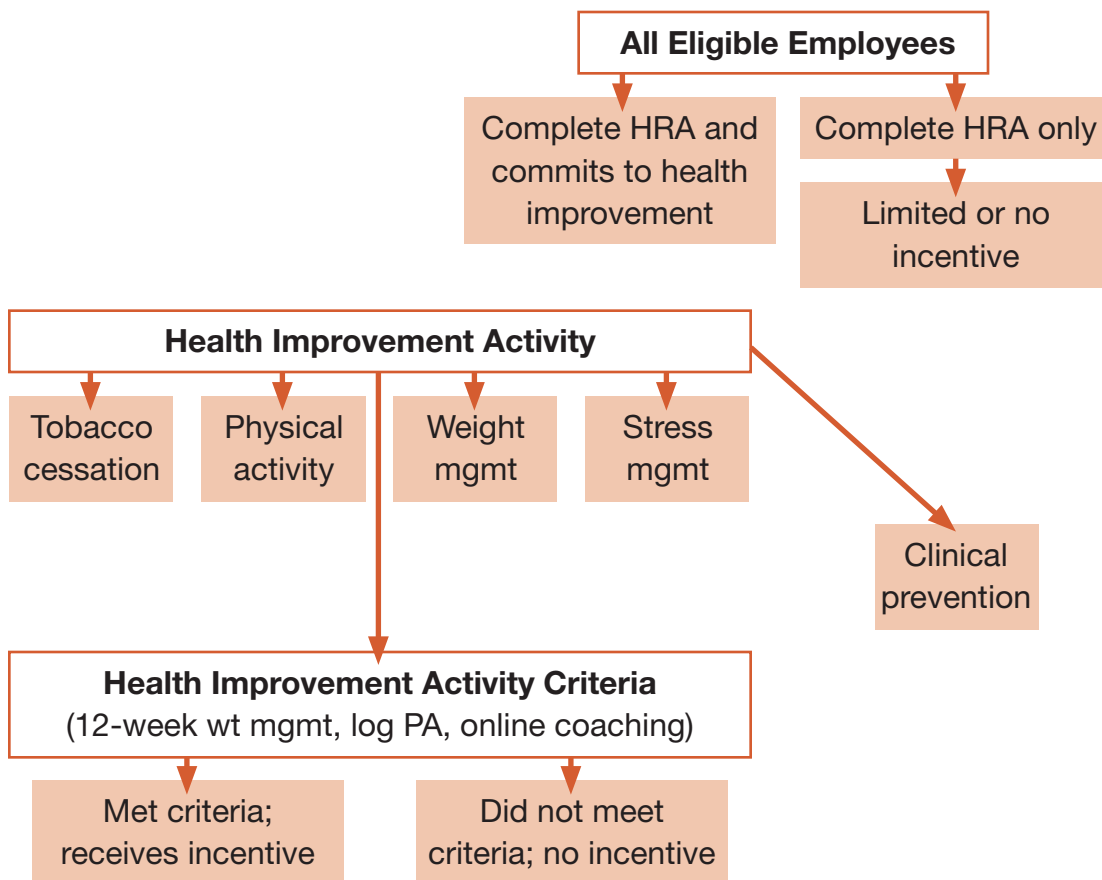
Questionnaire	<p>Demographics *</p> <p>Lifestyle factors *</p> <p>Limited personal and family history *</p> <p>Physiologic data (height, weight, blood pressure, cholesterol)*</p> <p>Clinical preventive screening (i.e., mammograms, Pap smears, immunizations)*</p> <p>Other assessments (stress, fitness, dietary patterns, life satisfaction, perception of health, health services utilization, diagnoses, drug utilization)</p> <p>Work-related factors such as absenteeism and presenteeism</p> <p>Attitudes and knowledge</p> <p style="text-align: right;">*Data elements usually used for calculating estimation of health risk</p>
Risk Estimation	Based on prediction algorithms that compare individual characteristics with population mortality databases to develop odds or likelihood of death in persons with these characteristics for specific causes of death. The HRA provider is responsible for the validity. The most robust databases are from the CDC and the Carter Center.
Individual Participant Feedback	<p>Should be succinct and understandable</p> <p>Accurate</p> <p>Confidential</p> <p>Offer useful recommendations and resources</p> <p>Provide bases for future comparisons</p>
Summary Reports	<p>Aggregated risk appraisal data used to characterize population health status</p> <p>Provides description of population risk levels</p> <p>Can serve as a baseline assessment and for future population health status comparisons</p>
HRA Certifications	At present there is no common agency to assess scientific integrity of HRA or competence and performance of providers of HRA services

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Rights of HRA Participant	<p>The primary beneficiary of the HRA is the individual participant</p> <p>Sufficient privacy and confidentiality</p> <p>Information regarding control, usage, storage and access to individual data and subsequent risk analysis and feedback</p> <p>Necessary information to give informed consent prior to HRA completion</p> <p>Confirmation that process is completely voluntary</p> <p>Ability to withdraw or cancel without fear of reprisal</p> <p>All communications treated as confidential</p> <p>Receipt of valid feedback concerning health risk</p> <p>Explanation of how data may be used to support subsequent outreach by other suppliers</p>
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The following diagram summarizes the role of HRAs in the total health improvement program. It also shows how employees “flow through” a comprehensive health improvement program.

Population Health Improvement Flow Diagram



IMPORTANT FEATURES OF HEALTH RISK REDUCTION PRODUCTS AND SERVICES

Communication increases awareness and is necessary, but it is NOT sufficient, to change behavior. Other techniques are needed. These techniques include HRA coaching and other specific interventions. Strategies that can be used to help change behavior are summarized in the following two charts.

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HRA COACHING

APPROACH	ATTRIBUTES	DELIVERY MECHANISMS
Motivational interviewing or self-directed approach ²⁵	Active listening, issue identification, personal action plan development, journaling, follow-up	Telephone In-person Internet
Guideline-driven/topic-specific counseling approach	Counseling on health standards (e.g., blood pressure, cholesterol, weight management and nutrition counseling)	Telephone In-person Internet

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Attributes of Effective Health Risk Reduction Interventions

SPECIFIC HEALTH RISK	STRATEGIES THAT INFLUENCE BEHAVIOR	SOURCES/DELIVERY OPTIONS
Tobacco Cessation ^{26, 27, 28, 29,30, 31, 32, 33}	Set quit date ³⁴ Tobacco-specific coaching Physical activity Assess need for medication/nicotine replacement Access medication (consider health insurance coverage) Environmental changes (e.g., tobacco policies) Develop social support, (coaches) Identifying triggers and making substitutions Building in reinforcements Rewards Managing relapse	Internet (e.g., QuitNet) Telephone In-person
Weight Management and Nutrition ^{35,36}	Evaluate level of weight (BMI) Determine level of healthy weight to achieve (clinically significant improvement) Set realistic target Set nutritional goals – calories, nutritional components Set physical activity goals Identify food management approaches for different situations (e.g., eating out) Ongoing behavior change feature Social support and community aspects Food diary Exercise tracking Ongoing monitoring and feedback Rewards	Internet (e.g., Weight Watchers) Telephone In-person Social Support On-site education

Physical Activity ^{37, 38, 39, 40}	Setting physical activity objectives Developing plan (frequency, intensity, duration) Tracking/evaluating activity levels Periodic reassessment Social support Rewards	Internet Telephone In-person Social Support Walking Club Interdepartmental competition
Stress Management ⁴²	Assess stress level and sources of stress Identify interventions <ul style="list-style-type: none"> — Time management — Priorities and limit setting — Negotiation — Leisure time activity — Relaxation — Physical activity — Cognitive therapy 	Internet Telephone In-person Social support Group On-site education
Clinical Prevention (screening, immunization) ⁴³	Provide benefit coverage and information for cardiovascular screening, cancer screening and immunization	Internet Print materials

SELECTING VENDORS

The following chart illustrates the issues and questions that should be asked before hiring a vendor. These questions will help you understand how effective the vendor has been in implementing improvements in their own company.

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ISSUE	QUESTIONS TO ASK
Features of product/service/intervention	To what extent do they contain the attributes of effective risk reduction (see Important Features of Health Risk Products and Services)?
Vendor COH	What is the COH level in the supplier's organization (see Measuring Culture of Health)?
Vendor Track Record	What outcomes that can be verified have been achieved in other customer settings

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INCENTIVES

Incentives can turn healthy behaviors into things people want to do.

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- ▷ Healthy behaviors have abstract and long-term benefits.
Incentives give people a clear and immediate benefit for engaging in a target behavior.
- ▷ Healthy behaviors seem difficult to adopt and seem boring (e.g., exercise).
Incentives make activities fun (e.g., rewards for health practices).
- ▷ People who have tried and failed to make healthy behavior changes may be afraid of failing again.
Incentives give people a sense of accomplishment and early success that motivates continued participation and work toward long-term goals.

Cautions

- ▷ **There are lots of choices:**
 - Individual vs. group-based incentives
 - Material goods (e.g., water bottles and other gifts used as incentives)
 - Cash
 - Discounts on health insurance or gym memberships
 - Intangible benefits (e.g., recognition for winning interdepartmental competition)
- ▷ **Return-on-investment for incentives is lower than for other health improvement interventions**
- ▷ **There are a lot of rules to follow – HIPAA regulations, tax laws, Americans with Disabilities Act⁴⁰**

COUNT PROGRESS

The following charts show different ways to measure success of the health improvement program. Possible measures include number of participants, change in claims submitted, impact on health care costs and changes in the culture of health at the workplace.

Who Shows Up?

This chart reinforces the importance of counting participants and then determining the proportion of the population involved in a health improvement program. These numbers can then be used to determine realistic behavior change targets.

Health Practices

NUMBER OF PARTICIPANTS /POPULATION	PERCENTAGE OF EMPLOYEE PARTICIPANTS
Smoking cessation: Number of employees/population eligible	% in smoking programs
Physical activity: Number of employees/population eligible	% in physical activity program
Weight management: Number of employees/population eligible	% in weight management program
Stress management: Number of employees/population eligible	% in stress management program
Other programs	

How Do They Change?

Health Status

WORKFORCE HEALTHY LIFESTYLE MEASURES	HEALTH RISK LEVELS	HEALTH CARE UTILIZATION
% non-smoker	% population at low risk	% low cost claims
% BMI <27.5	% pop at medium risk	% claims for chronic disease
% regular physical activity	% pop at high risk	% claims for acute care
% low stress/managed stress		

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Impact on Health Care Costs

Health Finance

CLAIMS COST HEALTH	PRODUCTIVITY	BENEFIT TREND
Decreases in health costs between participant vs. similar non-participant or participant at the beginning of the project vs. at the present time	Decrease in sick days between the beginning of the project vs. the present time	% increase in overall annual health claims cost time compared with like companies

Measuring Level of Culture of Health at the Workplace

Companies can fill in this chart to determine how the culture of health is changing as a result of the health improvement plan. You can use information about health practices, health status, and health finance to make these assessments.

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Culture of Health

ACHIEVEMENT	HIGH LEVEL	MEDIUM LEVEL	LOW LEVEL
Key Processes (plan, policies, communications)			
Health Status			
Health Practices			
Health Finance			

REFERENCES

- ¹ NBGH Price Waterhouse Webinar. May 23, 2007
- ² NBGH best practice. PriceWaterhouse.
- ³ Edington DW. (2006). Who are the intended beneficiaries (targets) of employee health promotion and wellness programs? *North Carolina Medical Journal*. 67(6): 425-427.
- ⁴ J. Michael McGinni JMs, Williams-Russo P, &Knickman JR. (2002). The case for more active policy attention to health promotion. *Health Affairs*. 21(2): 78-93.
- ⁵ Leonard D. Schaeffer. (2007). The new architects of health care reform. *Health Affair*. 26(6): 1557-1559.
- ⁶ Braunstein A, Li Y, Hirschland D, McDonald T, Eddington D. (2001). Internal associations among health-risk factors and risk prevalence. *American Journal of Health Behavior*. 25(4): 407-417.
- ⁷ Goetzel RZ & Ozminowski RJ. (2006). What's holding you back: Why should (or shouldn't) employers invest in health promotion programs for their workers? *North Carolina Medical Journal*, 67(6): 428-430.
- ⁸ Keyes CLM & Grzywacz, JG. (2005). Health as a complete state: The added value in work performance and healthcare costs. *Journal of Occupational and Environmental Medicine*. 47(5): 523-532.
- ⁹ Hemp P. (2008). Where will we find tomorrow's leaders? A conversation with Linda A. Hill. *Harvard Business Review*. http://harvardbusinessonline.hbsp.harvard.edu/hbsp/hbr/index.jsp?ml_issueid=BR0801. Accessed online: January 15, 2008.
- ¹⁰ Allen J. www.healthyculture.com. Accessed on: January 15, 2008
- ¹¹ Ozminowski RJ et al. (2002). Long-term impact of Johnson and Johnson's health and wellness program on health care utilization and expenditures. *Journal of Occupational and Environmental Medicine*. 44(1): 21-29.
- ¹² Goetzel RZ, et al. (2007). Promising practices in employer health and productivity management efforts: Findings from a benchmarking study. *Journal of Occupational and Environmental Medicine*. 49(2): 111-130.
- ¹³ Heaney CA & Goetzel RZ. (1997). A review of health-related outcomes of multi-component worksite health promotion programs. *American Journal of Health Promotion*. 11, 290-308.
- ¹⁴ Towers Perrin. (2007). 2007 Health Care Cost Survey. [http://www.towersperrin.com/tp/showdctmdoc.jsp?url=HR_Services/United States/News/Spotlights/2008/2008_01_29_spotlight_health_care_cost_survey.htm&country=usa](http://www.towersperrin.com/tp/showdctmdoc.jsp?url=HR_Services/United%20States/News/Spotlights/2008/2008_01_29_spotlight_health_care_cost_survey.htm&country=usa) Accessed on: January 15, 2008.
- ¹⁵ Keyes CLM & Grzywacz JG. (2005). Health as a complete state: The added value in work performance and healthcare costs. *Journal of Environmental and Occupational Medicine*. 47(5): 523-532.
- ¹⁶ Schult TMK, et al. (2006). The future of health promotion/disease prevention programs: The incentives and barriers faced by stakeholders. *Journal of Occupational and Environmental Medicine*. 48(6): 541-548.
- ¹⁷ Bloom DE & Canning D. (2000). The health and wealth of nations. *Science*. 287: 1207-1209.
- ¹⁸ Keyes CLM & Grzywacz JG. (2005). Health as a complete state: The added value in work performance and healthcare costs. *Journal of Occupational and Environmental Medicine*. 47(5): 523-532.
- ¹⁹ Christakis NA. (2004). Social networks and collateral health effects. *British Medical Journal*, 329(24): 184.
- ²⁰ Birken BE & Linnan LA (2006). Implementation challenges in worksite health promotion programs. *North Carolina Medical Journal*. 67(6): 438-440.
- ²¹ Cullenn KW, et al. (2001). Goal setting for dietary behavior change. *J Am Diet Assoc*. 101:(562-6).
- ²² Prochaska JO. (1994). *Changing for Good: A Revolutionary Six-Stage Program for Overcoming Bad Habits and Moving Your Life Positively Forward*. New York: Guilford Publications.
- ²³ Miller WR & Rollnick S. (2002). *Motivational Interviewing*. New York: Guilford Publications.
- ²⁴ Bandura A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*. 84: 191-215.
- ²⁵ Chapman L, Leach N & Baun, MBP. (2007). The role of health and wellness coaching in worksite health promotion. *American Journal of Health Promotion*. 21(16): 1A.
- ²⁶ Moher M, Hey K, & Lancaster T. (2005). Workplace interventions for smoking cessation. *Cochrane Database of Systematic Reviews*, 2.
- ²⁷ Stead LF & Lancaster T. (2005). Group behaviour therapy programmes for smoking cessation. *Cochrane Database of Systematic Reviews*, 2.

- ²⁸ Lancaster T & Stead LF. (2005). Individual behavioural counseling for smoking cessation. *Cochrane Database of Systematic Reviews*, 2.
- ²⁹ Fiore MC et al. (2000). Treating tobacco use and Dependence. AHCPR Supported Clinical Practice Guidelines. U.S. Department of Health and Human Services Public Health Service. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.chapter.7644>. Accessed January 15, 2008.
- ³⁰ U.S. Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General—Executive Summary*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.
- ³¹ U.S. Department of Health and Human Services. *Reducing Tobacco Use: A Report of the Surgeon General—Executive Summary*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2000.
- ³² Fiore MC et al. (2000). Treating tobacco use and Dependence. AHCPR Supported Clinical Practice Guidelines. U.S. Department of Health and Human Services Public Health Service. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.chapter.7644>. Accessed January 15, 2008.
- ³³ Stead LF, Perara R, & Lancaster T. (2006). Telephone counseling for smoking cessation. *Cochrane Database of Systematic Reviews*, 3.
- ³⁴ Hughes JR. (1994). An algorithm for smoking cessation. *Archives of Family Medicine*. 3(3):280-5.
- ³⁵ National Business Group on Health. Toolkit: Lasting Weight Loss: The Top 12 Ways to Keep it Off. <http://www.businessgrouphealth.org/benefits/topics/nbghpubs.cfm?topic=0057&desc=Nutrition>. Accessed February 23, 2008.
- ³⁶ National Weight Control Registry. Research Findings. <http://www.nwcr.ws/Research/published%20research.htm>. Accessed February 23, 2008.
- ³⁷ Hillsdon M, Foster C, & Thorogood M. (2004). Interventions for promoting physical activity. *Cochrane Database of Systematic Reviews*, 1.
- ³⁸ CDC. (2005). Health Behavior Change Programs Adapted for Individual Needs are Recommended to Increase Physical Activity. In *The Community Guide to Preventive Services*. <http://www.thecommunityguide.org/pa/pa-int-indiv-behav-change.pdf>. Accessed January 15, 2008.
- ³⁹ Matson-Koffman DM et al. (2005). A site-specific literature review of policy and environmental interventions that promote physical activity and nutrition for cardiovascular health: What works? *American Journal of Health Promotion*. 19(3): 167-193.
- ⁴⁰ CDC. (2005). Point of Decision Prompts that Encourage People to Use the Stairs are Recommended to Promote Physical Activity. In *The Community Guide to Preventive Services*. <http://www.thecommunityguide.org/pa/pa-int-decision-prompts.pdf>. Accessed January 15, 2008.
- ⁴¹ National Business Group on Health (2008). Financial Incentives for Healthy Lifestyles: Who's Doing It, What's Legal and Where's the Evidence?
- ⁴² American Psychological Association. (2008). Topic: Stress. <http://www.apa.org/topics/topicstress.html>. Accessed May 8, 2008.
- ⁴³ AHRQ. (2007). About the U.S. Preventive Services Task Force. <http://www.ahrq.gov/clinic/uspstfab.htm>. Accessed February 23, 2008.



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