



# Employer Health Asset Management

A Roadmap for Improving the Health of Your Employees  
and Your Organization





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## Foreword

The challenge for leaders today is to create an organizational culture that promotes a high-performing workforce in a high-performance workplace. The challenge is particularly acute given the rising intensity of global competition. While many factors contribute to success in the global economy, no organization can be competitive without healthy and productive employees.

Workforce health and productivity translate into direct and indirect costs for every employer, and both the workplace environment and the lifestyles of employees and their families influence those costs. While employer-sponsored health insurance plays a part in maintaining employee health, any approach that relies primarily on providing medical services after employees get sick is a failed strategy. Enlightened employers are looking for creative ways to help employees and their families improve their health—or simply stay healthy.

The total costs of an unhealthy workforce are growing at an unsustainable pace. Beyond medical and pharmacy claims, total costs also include lost productivity from absenteeism and from presenteeism, which is a decrease in job performance due to health problems. To meet escalating costs, federal and state policymakers continue to look at raising healthcare taxes, while employers further reduce coverage and shift costs to employees. Cost shifting, however, is not a sustainable solution. More than another adjustment of “who pays,” we need new approaches for improving employee health in America. Employers could take a major step in the right direction by elevating employee health to an integral part of their human capital “asset management” strategy.

This document is intended to give key decision makers a roadmap for meeting this challenge. The process of addressing employee health must start at the top, whether the CEO of a corporation or the plan sponsors of multi-employer trusts. Only those at the very top have the authority to create the vision necessary to bring about such a fundamental change. Though it starts at the top, the change must flow throughout the culture of the organization to employees and their families. This roadmap provides some direction for making these changes, but each organization must respond in a fashion that reflects its own culture. Creating, enhancing, and supporting a healthier workforce are achievable objectives. If we are to remain among the most productive nations in the world, we must all meet this challenge. ■

Dee W. Edington, Ph.D.  
Director, University of Michigan  
Health Management Research Center

Andrew Liveris  
Chief Executive Officer  
The Dow Chemical Company



# Preface

The Change Agent Work Group (CAWG) is an unprecedented gathering of industry thought leaders and influencers working in collaboration to accelerate improvement in American workforce health and productivity. ■

## Our Vision

CAWG members believe the fundamental elements of health reform are:

- Improving the health status of the workforce. The issue is not what it costs to keep people healthy and productive but what it costs not to
- Providing incentives to encourage the use of high value, proven interventions and preventions and discouraging use of wasteful or unproven services
- Aligning economic and behavioral incentives for health care providers, employers, trust funds, suppliers and consumers to increase value
- Empowering employers, purchasers (trust funds, etc.), intermediaries, providers, and individuals with shared, clear roles of responsibility and accountability for health and resulting productivity
- Using broad metrics that go beyond medical costs and focus on improving health status. Measure the costs of doing nothing, the full return on investment available from increased productivity as well as medical costs and savings from continually improving the health status of the workforce

## Our Values

**Integrity.** We will conduct our collaborative work with the highest standards of ethical conduct, always putting our collaborative interests ahead of the interests of the individual participant or their respective organization.

**Team Work.** We recognize that superior performance results not just from the knowledge of individuals but will emerge through the collaboration of divergent perspectives and experience.

**Innovation.** We are not satisfied with the status quo but communicate new ideas, practices and strategies to meet the challenge of improving workforce health and productivity.

**Continual Improvement.** We believe that effective, long-term reform will result from continual improvement of the diverse elements of the system as they converge in a patient-centric model.



## Our Mission

Identify high impact policies, principles and strategies that will accelerate improvement in workforce health status, productivity, and quality of life,

Harmonize the divergent messages with a common language and definitions to make the information more actionable, and

Communicate the work product to those seeking guidance on improving the health status and productivity of their workforce. ■

## Our Members

Members of Change Agent Work Group collaborated to develop this roadmap for Employer Health Asset Management. Although CAWG members come from many organizations, their work product does not necessarily represent the views of their respective institutions. CAWG is funded by Pfizer Inc. and assisted by Thomas Group, Inc., an independent organization with expertise in group process facilitation. ■

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## Executive Summary

The Employer Health Asset Management roadmap is a guide for introducing cost-effective employee health programs. While the roadmap refers to “employees,” it can be applied equally within the framework of Taft-Hartley multiemployer trust funds to produce meaningful improvement in the health status of union participants. This roadmap:

- Details the processes required to achieve a healthier workforce
- Suggests ways to define, measure, and track specific initiatives using many of the same techniques that have improved the performance of business operations
- Offers proven tactics and strategies for managing complex change, particularly changes in the culture of an organization, and
- Helps organizations evolve from a basic understanding of the need for a healthier workforce (Phase 1) to complete integration of a comprehensive employee health strategy (Phase 3)

While no organization can expect to adopt all of the attributes of a Phase 3 organization overnight, the roadmap offers employers a natural progression of techniques to advance employee health and position themselves for success. As the term *roadmap* suggests, reaching the destination—a healthier and more productive workforce—requires a journey of incremental steps that will yield incremental successes.

Table 1  
**Phases of a Healthy Organization**

Phase 1	Phase 2	Phase 3
The organization has a basic understanding of the need to change its approach to employee health.	The organization is in a transition, beginning to facilitate and engage in activities that impact employee health.	The organization has a fully integrated employer health asset management strategy.

Rising healthcare costs present a core business challenge. U.S. healthcare spending approached \$2.25 trillion in 2007, more than 16% of the gross domestic product.<sup>1</sup> A 2008 *Health Affairs* study drawing on interviews with 1,927 public and private employers showed that average annual premiums increased 5 percent to \$4,704 for single coverage and \$12,680 for family coverage.<sup>2</sup>

Many organizations have successfully addressed key healthcare challenges by investing in an employee health strategy. (Case studies appear in Appendix A.) While individuals have the greatest control over their own health, employers have a vested interest in promoting good health and a unique capability to do so by providing a healthy environment and by offering powerful incentives and disincentives through workplace benefits and compensation programs. From a health perspective, value is defined as the full health-related benefit achieved for the worker and the employer—in terms of medical cost savings and health-related lost time and lost productivity—for the money spent. The ability to add value to the business through better management of employee health may be the largest untapped source of competitive advantage. The Change Agent Work Group (CAWG) developed this roadmap to help organizations capture that advantage.



The roadmap for Employer Health Asset Management involves seven main elements. Each of the seven elements requires involvement and accountability from employers and employees. They are:

- Develop and Embrace an Organizational Vision of Health
- Senior management participation and commitment
- Workplace policies and the work environment
- Diagnostics, informatics and health metrics
- Health goals and program elements
- Value-based plan design
- Patient-centered medical home (PCMH) / chronic care management

The roadmap describes three phases for each of the seven elements (Table 2, Executive Summary Appendix, page 11). Organizations will likely be at different phases for different elements at the same time. For example, an organization may be at Phase 3 in terms of its vision, but Phase 2 in the implementation of specific health programs. Still, certain elements are important precursors to others. Once a vision for health is defined, for example, senior management participation is critical before moving forward.

The most innovative organizations took a leap of faith with early investments in employee health, but many other employers have followed as evidence of the link between health and productivity has grown. More organizations now offer smoke-free worksites, walking trails, low-cost health-food options, and exercise facilities. The rise in disease management and other employee health programs reflects growing awareness of the value of well-executed population health management programs. Some employers have redesigned benefits so beneficiaries receive certain services at no cost, because encouraging use of those services now can improve quality of care and reduce health costs later.

Executives who achieve the greatest success begin with a vision of health for their entire employee population. They focus on achieving measurable outcomes—health management outcomes *and* business outcomes—in a defined timeframe. Successful organizations begin with the following steps:

- Establish a three-year vision
- Assess the current status on each of the seven elements in the roadmap
- Set 12-month goals to improve performance on those elements deemed to be most critical
- Include ongoing review of progress on the roadmap in the strategic planning process

Numerous Phase 3 organizations have proven that healthcare investments can achieve tremendous value. Improving health must become a fundamental organizational value and a key strategy. Creating a culture of health requires the commitment of top management, an involved leadership team, and a clear course to follow.

*Phase 3 Organizations recognize health is an investment to be optimized, not a cost to be minimized.*

When employers structure benefits and programs to optimize the health of their workforce, employees become more productive and the organization's healthcare cost trends improve. Using this roadmap as your guide, take the first steps toward solving America's healthcare problems. Improve the health and productivity of your workforce, and watch the benefits flow to your bottom line. ■



## Executive Summary Appendix

Table 2

Summary of the Employer Health Asset Management Roadmap

Elements	Phase 1	Phase 2	Phase 3	Accountability for Health	Total Employee Involvement
<b>1. Vision for health</b>	Focuses on reducing short-term healthcare costs	Transitions to health management with limited goals	Focuses on employer health asset management and business outcomes with explicit goals		
<b>2. Senior management participation and commitment</b>	Limited to Human Resources and benefits managers	Some involvement beyond HR, with accountability defined by specific initiatives	Senior leadership responsible for ensuring the workforce is healthy		
<b>3. Workplace policies and the work environment</b>	No wellness goals	Initial, “easy” changes to policy and work environment	Policies and work environment fully support wellness goals		
<b>4. Diagnostics, informatics and health metrics</b>	A few basic metrics reported annually	Demographics and disease burden analyzed; analysis drives programs on a limited basis	Health policies and initiatives fully linked to demographics and disease burden; periodic, regular review of metrics; all metrics have goals		
<b>5. Health goals and program elements</b>	A few programs with little or no integration	More sophisticated program elements and some integration	Full suite of integrated programs using state-of-the-art techniques		
<b>6. Value-based plan design</b>	No value-based elements; cost shifting as primary strategy	Initial value-based elements, probably in pharmacy co-pays	Comprehensive use of value-based plan elements		
<b>7. Patient-centered medical home (PCMH) / chronic care management</b>	Some understanding of PCMH; initial forays into disease management programming with few links to other program elements	Supports elements of the PCMH; evolving disease management programs integrated with other programmatic activities	Fully supportive of PCMH. Chronic care model integrates employer activities with providers and other community resources		



# Introduction

You can optimize your organization's productivity by improving the health of your workforce. This simple yet powerful idea is the driving force behind Employer Health Asset Management.

The roadmap for Employer Health Asset Management offers practical steps for integrating cost-effective health initiatives into an organization's culture and designing benefit programs with a focus on value and patient outcomes.

Healthier employees contribute more to the bottom line, so organizations have a strong incentive to help their employees achieve or maintain good health. Value-based benefit design, as detailed in this roadmap, aims to encourage the use of services and interventions that will produce the greatest impact on workforce health and productivity.

By improving the health of their workforce, executives can expect their organizations to reap considerable benefits, including:

- Lower healthcare cost-trends
- Greater productivity
- Less absenteeism
- Less presenteeism (a decrease in job performance due to the presence of health problems)
- Improved employee safety
- Enhanced recruitment and retention of employees
- Reduced rates of illness and injuries
- Improved employee relations and morale (and positive impact on customer service)

The roadmap for Employer Health Asset Management was developed by the Change Agent Work Group. CAWG brings together people with a wide range of experience—in academia, industry, government, nonprofits and labor unions—who share a common goal: accelerating improvement in the health and productivity of the American workforce. The roadmap was produced for use by thought leaders, including business leaders and multiemployer trust fund advisors.

In the foreword to this roadmap, it is noted that the costs of an unhealthy workforce are increasing too rapidly to be sustained. The scope and scale of the problem demand nothing less than a new approach for employers providing health benefits in America.

This roadmap offers practical steps for organizations that may just be starting out as well as for those that already integrate employee health programs. The roadmap provides:

- A seven-step template for building a healthier workforce
- A vision of where your organization can be in three to five years
- Guidelines for organizations at different phases of involvement in employee health initiatives
- Insights into the role of top decision makers in framing a strategy and making it work for their organizations

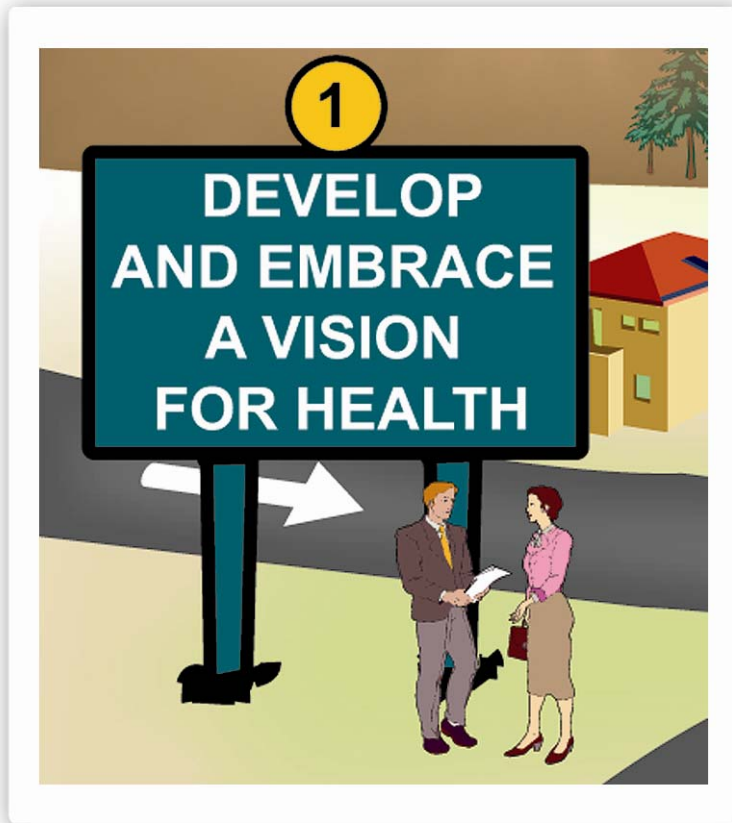


- Perspectives that reflect the need to balance costs with the desire to provide services that will attract and retain the most talented employees
- Viewpoints on balanced roles of employers and employees collaborating to achieve productivity outcomes for all
- Time-tested tools for implementing health-related initiatives and metrics to assess their impact within your organization
- A glossary of terms to provide a standard for plan designs and communications

This roadmap should stimulate your thought process on the art of the possible. It also provides a template and tools for making it happen. It includes steps that help your organization transition from an understanding of the need to change (phase 1) to a fully integrated employee health strategy. The roadmap also provides case studies, references and top-notch websites. The Dow Chemical Company (Dow) case study, for example, details how the company used a business case and a coordinated approach to deliver a broad range of services. An important component of the Dow Health Strategy is the ability to collect data globally to measure progress against the company's objectives: improved health, lower health risk, reduced cost, and greater productivity.

The roadmap is a call to action, emphasizing that organizations scrutinize healthcare decisions as diligently as they do product and marketplace decisions. A health strategy must include financial analysis and assessments of return on investment. The roadmap stresses accountability and responsibility for those at the top all the way through the organization to employees and their dependents.

The roadmap is an evolving document that has been endorsed by—individuals from government, industry, multiemployer trust funds and the academic community. It flexes with the economic times and can be adapted to your organization's culture and pacing for healthcare improvement initiatives. The creative ideas and experiences expressed by highly regarded members of the Change Agent Work Group make this roadmap a "must read." ■





## Chapter 1: Develop and Embrace an Organizational Vision for Health

The vision put forward by the senior leadership team can be one of the most powerful factors influencing an organization's behavior.

Phase 3 organizations have a clearly defined vision for health that includes goals, philosophy, and approach. Their vision is strongly articulated as a fundamental organizational value, and health is considered a key business strategy. As healthcare expert Dee W. Edington has noted, "All of our studies indicate that once employers reach a high level of employee engagement or an increase in their low risk population, healthy and productive employees increase economic value."<sup>1</sup>

For many organizations, awareness of the importance of employee health begins with a focus on reducing short-term medical costs. But evidence suggests that a short-term focus on medical costs, rather than a strategic vision of employee health, will yield only limited results. Consider these findings:

- Medical payments are a relatively small part of the total costs resulting from ill health.

Research by the Integrated

Benefits Institute shows that medical payments account for less than 40% of the cost when you also consider wage replacement benefits for absence and absence-related lost productivity.<sup>2</sup> This *does not include* the additional lost-time cost from presenteeism.

- The cost of productivity loss for certain conditions (including the effects of absence and presenteeism) was four times the medical and pharmacy expenditures for those conditions, according to research reported by Loeppke et al.<sup>3</sup>
- Presenteeism, a decrease in job performance due to the presence of health problems, accounts for one-fifth to three-fifths of the total costs attributed to 10 costly medical conditions, according to a study by Goetzel<sup>4</sup>, et al and a comprehensive paper review by Schultz and Edington.<sup>5</sup>

To achieve real health and productivity benefits, organizations need to make employee health an integral part of the vision and values of the organization. As a first step, leaders must emphasize that the people of an organization are its most important asset.

*"Corporations go through cycles of buying into big new ideas to move to a higher level—knowledge management, change management, technology management. Today, the big new idea is health management. This idea needs to become like its predecessors: a vital strategic function that businesses must perform while continually assessing and improving it. That's the only way to succeed in a competitive marketplace where the performance of human capital is a differentiator."*

Sean Sullivan, J.D.  
President and CEO  
Institute for Health and Productivity Management



## Moving Along

While Phase 1 organizations focus narrowly on reducing short-term costs, Phase 3 organizations understand that the broader purpose of managing employee health is to improve business performance. They recognize that health is a vital component in the measure of human capital value—equal in importance to employee knowledge and skill. Human capital is an asset that increases in value with nurturing and investment—investment in building knowledge, in developing skills, *and* in improving health. Organizations that recognize this and act on it will experience measurable returns.<sup>6</sup>

Once an organization establishes a vision of a healthy and productive workforce, it must support the programs that improve employee health with funding and with workplace policies that complement healthy values. The leadership must communicate the vision so that it is infused throughout the organization and embraced at all levels and in all departments. Employees cherish their health, and they value employers that try to help them deal with their health issues.

Phase 3 organizations understand the importance of creating a workplace environment that helps healthy people stay healthy. Many health promotion programs target high-risk individuals, while low-risk individuals receive little or no attention. Without programs to help them stay healthy, low- and medium-risk individuals are prone to move into the high-risk group. A business case study conducted by the Health Management Research Center at the University of Michigan suggests that health programs designed for low-risk employees are the key to maintaining lower healthcare costs.<sup>7</sup> ■

Table 3

### An Organizational Vision for Health

Phase 1	Phase 2	Phase 3
The vision focuses on reducing short-term healthcare costs, typically with a commitment to managing diseases that drive high costs.	The vision is transitioning to health management with limited goals.	The vision focuses on building human capital value with employer health asset management to produce business outcomes with explicit goals.
Cost-shifting strategies are used as a short-term solution to a long-term problem.	Cost-shifting strategies are re-examined to assess how much of the cost can be shifted to employees (such as prescription co-pays) without creating a detrimental impact on disease management.	The organization fully recognizes that the health of employees is a vital component of their overall value. The employer understands that investing to improve the health of employees produces substantial economic returns for the organization.
	The organization has a health vision that is consistent with their business strategy. There is a common health vision shared by management and union organizations and it is understood by employees.	The vision has galvanized employees to get involved and take responsibility for their health.
		The organization acknowledges that it is in the business of promoting employee health.





## Chapter 2: Secure Senior Management Commitment and Participation

To make a real difference in employee health and productivity, the senior management team must be committed to improving the overall health of the workforce. Senior leadership sets the tone for a culture of health, and employees are much more likely to participate when they know that CEOs, trustees and senior managers are actively engaged. The senior leadership must also be accountable for ensuring that managers throughout the organization recognize their own responsibilities in the culture of health. After all, it is those managers who will be responsible for implementing the programs and policies designed to drive positive health outcomes for employees.

How do employees know what is important to the senior leadership? When it comes to vision and values, the acid test is how well the organization “walks the talk.” What senior leaders do is far more important than what they say. If employees don’t see management actively involved in promoting good health, they will have little regard for health as a fundamental value of the organization.

The senior management in a Phase 3 organization takes a significant leadership role in support of health—not consigning sole responsibility to the human resources and employee benefits departments. The departments may implement many of the programs and policies, but it is senior leadership that must set a visible example. Phase 3 organization will continue to address healthcare in good economic times and in bad times.

Securing the commitment of top management for an investment in health and productivity often requires evidence. A compelling business case analysis will demonstrate the bottom-line impact of health interventions in meaningful terms, such as savings per-share or the dollar value of lost productivity. Reliable modeling tools are available to help any organization develop its own business case for a culture of health.

### Moving Along

In Phase 3 organizations, all senior managers actively promote the corporate vision for health. In advanced organizations, the leadership understands how important it is to consider the impact of health-related metrics—such as demographics, risk factors, and disease burden—on the bottom line in terms of lost time and reduced productivity. A business case built on financials can help senior management assess the value of a potential investment and determine if it makes sense for the organization.

An excellent way to engage the participation of top management is to have each senior executive sponsor at least one key health initiative for the organization. Sponsorship includes personal accountability for the entire initiative, including metrics. Senior managers should create programs and services that speak to employees’ physical needs, mental health needs, and work-life balance.

*“Senior management of high-performing Phase 3 organizations realize that the culture of health they create and nurture will be as important in determining program success as any health-management vendor they select.”*

Joe Marlowe, M.Sc., MPH  
Senior Vice President  
Aon Consulting

*Employers will always be in the business of optimizing productivity. Employees must be healthy and engaged to achieve optimal productivity.*

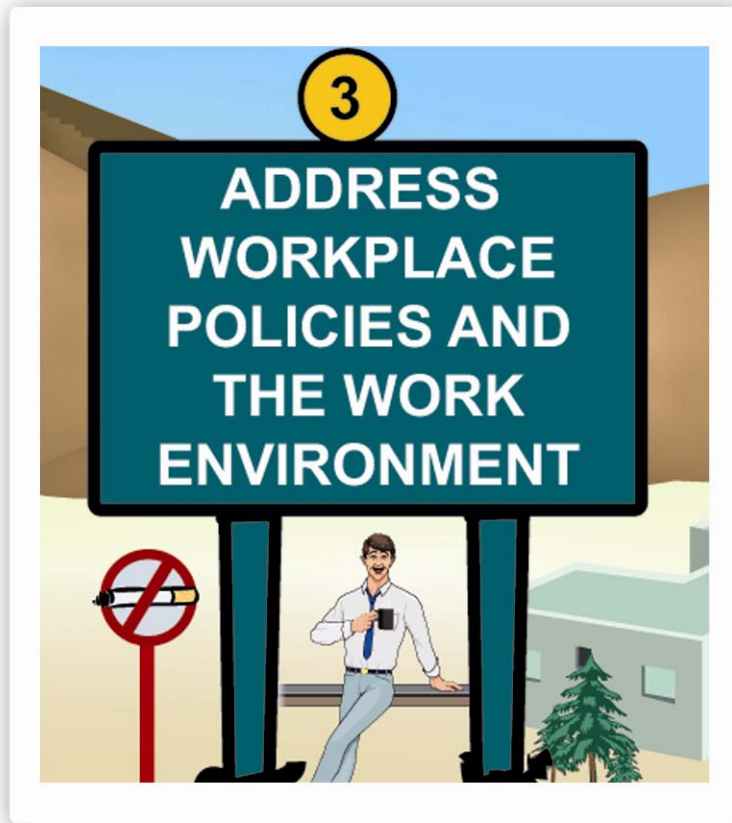
Ron Finch, Ed.D.  
Vice President  
National Business Group on Health



As organizations move through the phases of the roadmap, support for health initiatives will grow as senior management emphasizes the links between improvements in health, productivity and profitability. The process begins with senior management articulating issues of health-related productivity and developing appropriate strategies and initiatives. This sets the stage for employee buy-in, which will increase their willingness to participate in the organization’s health programs. All employees, from senior management on down, need to understand the value of health-related incentives, health risk assessments, prevention programs, return-to-work programs, and disease management programs.

Table 4  
**Senior Management Commitment and Participation**

Phase 1	Phase 2	Phase 3
Participation, accountability, and responsibility are limited to senior managers in human resources and benefits departments.	Some senior management participation exists beyond human resources, with responsibilities defined by specific initiatives.	Senior management commitment is evident throughout the organization. The senior management team actively promotes health in addition to any responsibilities for specific initiatives.
The organization has a compartmentalized approach to employee health, and commitment is not infused throughout.	The organization begins to recognize the link between employee health, productivity, and financial success. Some senior managers articulate the organization’s key health issues, strategies, and initiatives.	The organization understands the link between employee health, productivity, and financial success. The entire senior management articulates the organization’s key health issues, strategies, and initiatives.
Health focus begins to make a difference in the health status of some employees.	A few senior managers accept group and personal accountability for the success of some health initiatives. They drive employee involvement within their areas of responsibility. Some employees are accountable for their health.	Each senior manager accepts group and personal accountability for the success of the organization’s health vision and initiatives.
		Each senior manager sponsors at least one key health initiative for the organization with personal accountability for its success.
		There is a well-defined understanding of the organization’s health vision with widespread employee involvement and accountability for health.





## Chapter 3: Address Workplace Policies and the Work Environment

Workplace policies and the work environment should fully support the health goals of an organization. Many organizations have already taken a strong first step by adopting smoke-free workplace policies, which reduce exposure to secondhand smoke. By considering a broader array of workplace policies, however, employers can achieve better health outcomes and greater increases in productivity.

Organizations already have policies that guide employee behavior, especially in the area of safety. It is easy to see how safety policies can reduce the costs associated with workplace injuries. When a substantial portion of the employer's healthcare costs result from unhealthy lifestyle choices made by employees, health policies are as important as safety policies. Written policies do a good job defining and communicating expectations. However, the most effective way to weave expectations for healthy behaviors into the culture of the organization is through the example set by the leadership.

*“A value-based health plan is an investment in improving health and enhancing the quality of life. By helping our participants achieve optimal health, we can increase productivity and reduce costs for multiemployer healthcare trusts, members, and employers.”*

Steve Barger, Past President  
Michael Wilson, CEO  
International Foundation of Employee Benefit Plans

### Moving Along

In Phase 3 organizations, organizational policies and the work environment fully support health goals. Management expresses a commitment to health and the organization's intention to carry out the policies. More than just lip service, the management commitment involves an investment of time and resources into proactive health initiatives.

#### Work Policies and Environmental Considerations

- No smoking on campus
- Encourage use of stairs
- Flexible work schedules
- On-site fitness centers
- Healthy cafeteria choices

The work environment is a critical component of the health strategy. Job design, ergonomics and safety are a critical part of health asset management. Lifting techniques and safety attire—such as shoes, gloves, and glasses—all are in place to protect the health of the employee. Health challenges may be less obvious than the external dangers addressed by safety policies. But health protection is no less important. Organizations with a commitment to health should adopt policies that

reduce unnecessary work-related stress in addition to work-related injuries. All procedures must be organized around a healthy and productive environment.

Health policies must be communicated effectively to all employees through written statements and presentations and then reinforced through the actions of managers. When senior managers ensure that the work environment and workplace policies and practices reflect their commitment to improving health, employees will also view health as a priority on par with other organizational values.



The goals of the communication strategy should include informing employees about policies, influencing behavior, and sharing positive results. A “high touch” communication effort will be more effective in shaping employee behaviors. The following list shows a progression from “low touch” or information sharing activities to “high touch” behavior shaping elements:<sup>1</sup>

- General publications such as fliers, newsletters, articles or posters (low touch)
- More personal publications, such as individually addressed letters or postcards
- Interactive activities, such as e-mails, telephone calls, seminars, or focus groupss
- Public events, such as road shows, health fairs, conferences, exhibits, and mass meetings
- Face-to-face activities, such as one-on-one meetings, mentoring or coaching (high touch)

A 2005 study described a model for spreading improvements that has great applicability for employers.<sup>2</sup> The model shows the role of executive sponsors, senior leaders, “adopters” and “spread agents.” Communications, coaching and support will help employees recognize the value of health-oriented policies, leading to welcome changes in the behavior of individuals and the culture of the organization.

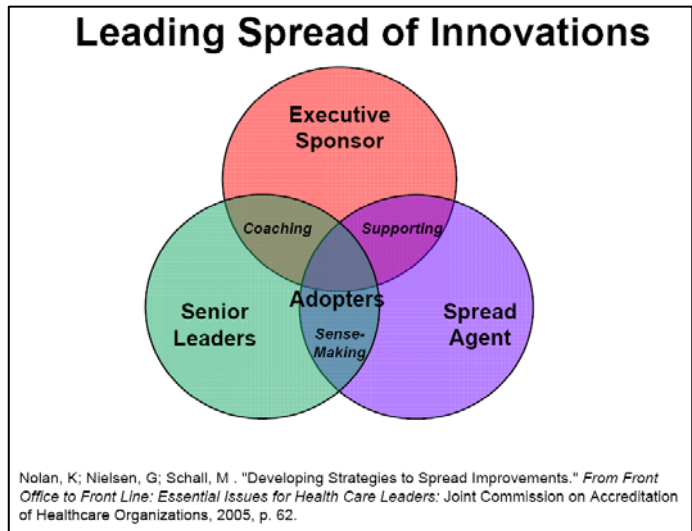
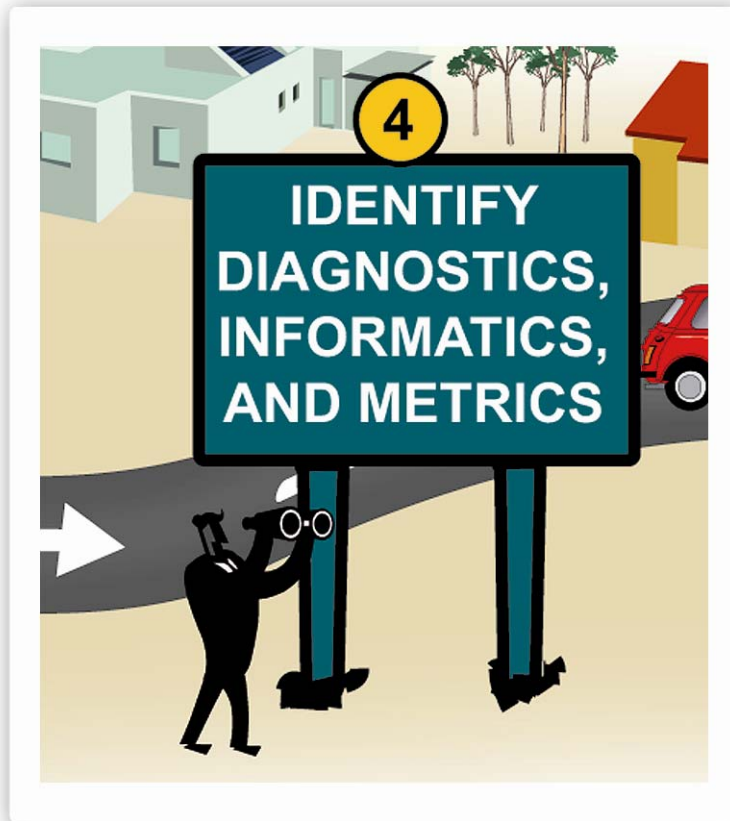


Table 5  
**Workplace Policies and the Work Environment**

Phase 1	Phase 2	Phase 3
Workplace policies and environment begin to be “health friendly.” Examples: bike racks; no on-site smoking areas; employee assistance programs; healthy food choices in vending machines, cafeterias and meetings.	Selected changes have been made to workplace policies and environment. Examples: set walking paths; flexible work schedules; access to fitness centers.	Workplace policies and environment fully support health goals. Examples: substance- and alcohol-free workplace; stairwell enhancements; financial subsidy of healthy food choices; on-site clinic, on-site fitness center; healthline.
Human resources department uses low-touch communications.	Human resources department expands communications beyond low-touch efforts to include one-on-one activities.	Health policies are communicated to all employees through high-, medium- and low-touch approaches. More high-touch offerings address general health as well as disease-specific issues.
	Management addresses some aspects of health, though policies to maintain or improve employee health status are limited.	Management is committed to health and carrying out policies to keep low-risk employees healthy and improve employee health status.
	Management invests time and resources into selective health initiatives.	Management invests time and resources into proactive health initiatives.





## Chapter 4: Employ Diagnostics, Informatics and Metrics

Organizations that embark on a strategy to improve employee health and productivity are tacitly acknowledging that in our current employer-based health insurance system, they are, by default, “in the business” of health. And for the most part, neither they nor their vendors have done a very good job running this aspect of their business.

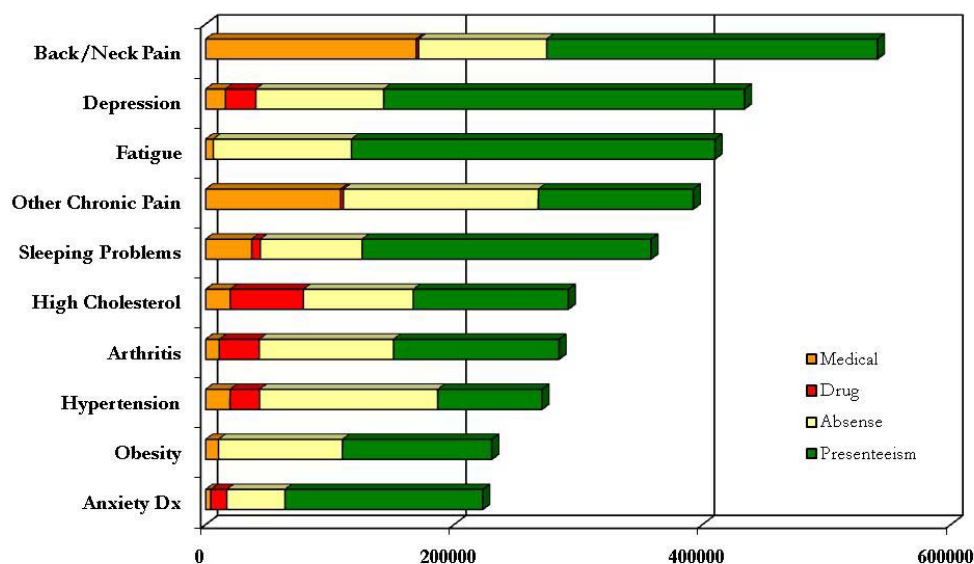
Before they can succeed in the business of population health management, leaders must determine what tools and skills are required to actively support disease prevention and health improvement. Population health management begins with data, demographics, and behaviors.

Data collection and analysis are critical because they provide a baseline measurement of the problem; a way to measure progress; and discrete metrics for managing and communicating information that will drive the necessary behavior changes in employees, vendors, and management. To get a true assessment of health-related costs, the data analysis must include more than medical and pharmaceutical claims data. Ronald Loeppke, et al., reported in the *Journal of Occupational and Environmental Medicine* that when lost-time information collected in a Health and Productivity Questionnaire (HPQ) was included in an analysis of 10 health problems, their study found that for every 1 dollar employers spend on worker medical or pharmacy costs, they absorb at least 2 to 4 dollars of health-related productivity costs from absenteeism and presenteeism (see chart).<sup>1</sup>

*“Many employers believe they lack the data to justify and implement workforce health and productivity programs. New modeling, benchmarking, and self-report tools, however, are now available from various sources to fill this gap.”*

Thomas Parry, Ph.D.  
President  
Integrated Benefits Institute

Total Medical, Pharma, and Productivity Costs per 1000 FTEs



Source: Loeppke, et al; JOEM July 2007



Few organizations maintain an integrated data warehouse capable of producing the entire complement of metrics and measurements necessary to analyze all factors contributing to the total cost of poor health and the true impact of health initiatives. But vendors in the health benefits and analytics marketplace can help. While some vendors offer standalone tools that can provide a comprehensive analysis, other tools can be enhanced to provide a more complete picture. A health risk assessment, for example, can be supplemented with questions that ask employees to report their own lost time due to absence and presenteeism. From this information, an organization can calculate some measure of the cost of lost productivity.

As a prerequisite to establishing healthcare goals and programs, the management team should conduct a basic analysis of demographics, risk factors, and disease burden (the impact of health problems measured by indicators such as financial cost, mortality, and morbidity). Using the results of that analysis as a guide, senior leaders may select specific healthcare strategies to address those problems having the greatest impact on health and productivity costs.

*“If you are looking at medical and pharmacy claims data, Health Risk Assessment results, or objective biometric data independent of one another, you are missing major opportunities to identify, educate, and motivate those most likely to provide program ROI.”*

Jorge Font, MPH  
Principal, Houston Health & Productivity Practice  
Leader  
Buck Consultants

One goal of the data analysis is to identify employee populations that will benefit most from specific programs. To stratify the employee population precisely requires more than medical and pharmacy claims data; it also requires data on disability, workers’ compensation and absence as well as health risk assessment (HRA) and biometric data. Here is one way that an employee population might be stratified:

- **Level 1: High/Acute Risk.** Medically unstable patients who require frequent use of services and are non-compliant with evidence-based treatments. Many are candidates for case management. Also may include individuals who demonstrate high cardio-metabolic risk due to recent biometric testing and/or family history.
- **Level 2: Chronic Risk.** Less stable, evidence of non-compliance, poorly controlled disease state. Non-compliant / non-adherent members risk moving to level 1 without behavior change.
- **Level 3: Moderate Risk.** Medically stable, compliant, and well-controlled
- **Level 4: Low Risk.** Relatively healthy, undiagnosed, and exhibit healthy behaviors

Once the employee population is stratified, management can select specific prevention and intervention strategies that will have the greatest impact on health status, healthcare costs and health-related productivity. Programs should also address employee relations and morale and job satisfaction, as well as discrete improvements in measurable biometrics such as blood pressure, cholesterol, blood sugar and stress levels.

Ongoing analytics should be performed on the common drivers of healthcare costs. Management should analyze metrics associated with specific programs along with a comprehensive set of metrics for overall health management performance. (For example, what impact is the disease management vendor having on costs associated with diabetes? How successful has a health coaching service been in directing at-risk employees to their doctors or producing healthy behavior changes?) In addition to measuring the impact of programs on medical cost trends, analytics should measure their impact on incidental absence, short term disability, long term disability and workers’ compensation. ■



## Moving Along

Phase 3 organizations set the foundation of the health improvement process by creating a baseline risk profile of the employee population, including measurements of health, lost time, and lost productivity. Benefits consultants, specialty data analytic groups, non-profit organizations and insurance carriers can provide programs to perform the analyses. While understanding the baseline is important, leading organizations use data to stratify the employee population and medical conditions for targeted health programs and look at metrics that measure the changes those programs produce.

Organizations striving to reach Phase 3 will progress to having comprehensive metrics, reported periodically, arrayed against goals, in addition to metrics for specific programs. Health risk assessments (HRAs) and biometric testing are both important as part of an annual health survey. Employee health practices and behaviors should be analyzed to discover trends.

Metrics for healthcare cost drivers and health program results are defined, monitored, and managed using data-driven root-cause analysis. Results may include changes in annual employee medical costs, productivity measures, workers' compensation costs, short- and long-term disability costs, and biometric data and health behaviors. Looking beyond traditional health results, Phase 3 employers also assess program results for their impact on morale, productivity, job satisfaction, absenteeism, and presenteeism. Non-financial performance metrics may include changes in risk profiles, compliance and adherence rates, employee participation, and employee satisfaction.

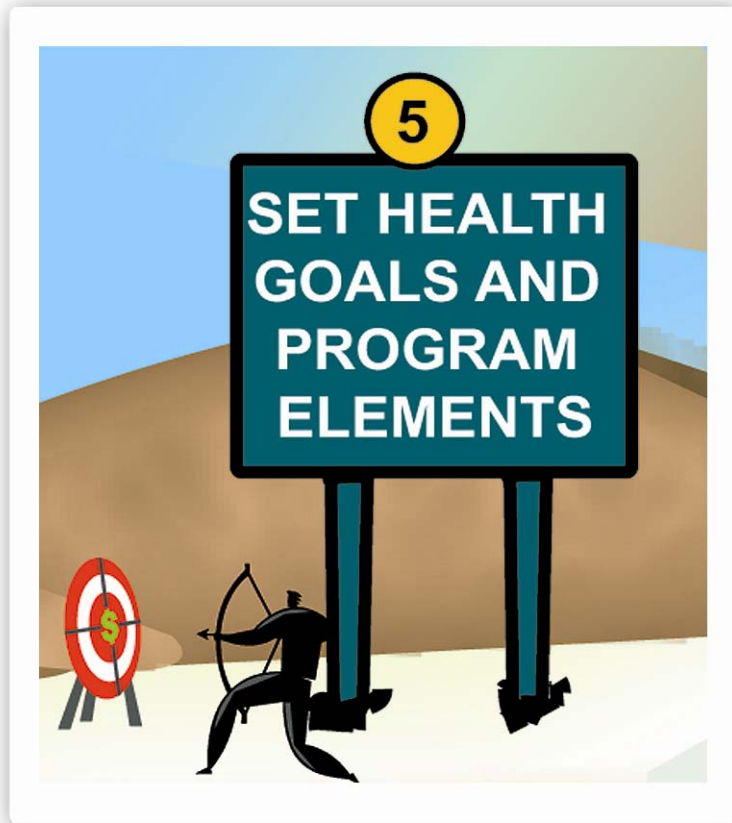
Organizations should evaluate the effectiveness of all health program elements throughout the year. These include health-related policies, health benefit plans, health programs, and incentives. Employers often rely on third-party experts, such as benefit consultants, specialty vendors, health plans and pharmacy benefit managers (PBM) to perform independent analyses. Phase 3 organizations conduct statistical process analyses, surveys, interviews, and questionnaires to ensure they are receiving the appropriate return on their investment in health. ■



Table 6

**Diagnostics, Informatics and Metrics**

Phase 1	Phase 2	Phase 3
<p>Organization administers HRAs, but not subject to schedule. A few basic metrics around major diagnostic categories, cost, and participation are reported periodically. Demographics and disease burden have not been analyzed.</p>	<p>HRAs are administered every two-three years to all employees; family members may be included, too. Demographics and disease burden are understood and drive programmatic initiatives on a limited basis. Some additional metrics that are leading indicators of cost and changes in population health status are reported, a few with goals.</p>	<p>HRAs are completed annually on employees and family members. The organization offers strong incentives for biometric testing and communicates its value to employees. Health policies and initiatives are fully linked to demographics, risk factors, and disease burden. Comprehensive metrics, including those tracking the total value of health, are reported periodically, all with goals.</p>
	<p>Organization has only limited measurements of the value added by investments in health. Selected health elements are included in strategic business activities.</p>	<p>Organization insists on credible measurement of the value added by investments in health, including specific improvements in biometric results, shifts in health risks and utilization gaps according to evidence-based medicine. All health elements are included in major strategic business activities.</p>
	<p>Organization monitors participation and outcomes metrics to track changes in the population health status.</p>	<p>In addition to monitoring participation and change metrics, organization has metrics for risk and cost tracking of the total value of health.</p>
	<p>Modeling tools are used to estimate impact of health-related lost time on productivity and identify medical conditions affecting the workforce. This information is used to create a health and productivity business case.</p>	<p>Comprehensive self-report surveys are conducted to identify the impact of lost time on productivity and to identify which medical conditions would benefit from interventions.</p>





## Chapter 5: Set Health Goals and Tailor Program Elements to Meet Them

At this point on the roadmap, CEOs, trustees, and other senior leaders recognize that there is a high cost of doing nothing when it comes to workforce health and productivity. Once organizations begin to examine medical claims and conduct health risk assessments to identify health risk factors, early goals tend to focus on treating those at high risk, but they do little to eliminate risk.

*The obesity epidemic is estimated to cost private employers \$45 billion per year in combined medical expenditures and worker absenteeism.<sup>1</sup>*

As they progress to Phase 3, organizations broaden their health goals, focusing on treating high-risk employees, putting at-risk employees on the road to better health, and keeping healthy employees healthy.

Goals tied to improvements are preferable to goals that have fixed endpoints. Health programs should be selected based primarily on their ability to get trends moving in the right direction and accelerate the pace of improvement.

Once health goals are in place, the organization can choose from a wide range of program elements to help meet those goals. Table 8 identifies various elements of health programs that organizations can implement at different phases.

### Moving Along

Seeking continual improvement in health-related outcomes is the hallmark of a Phase 3 organization. Organizations at Phase 3 ensure that the elements of their health programs are designed to meet specific health and productivity goals.

*“For those companies that have really moved forward on the roadmap, it is not because they have bought good health benefits; it is because they made the decision to espouse the whole value concept and do things internally with respect to the culture of health.”*

Dr. Joe Fortuna  
Co-chairman, Health Focus Group  
Automotive Industry Action Group

In following the roadmap for health asset management, organizations accept responsibility for employee health at multiple levels. In a Phase 3 organization, both the employer and employees are jointly responsible for meeting health goals. There are well established health committees comprised of employees and executives that support and execute the organization’s health vision in their work locations.

External partners may assist the organization in implementing various elements of a health program. Potential partners include health plans, benefit consultants, pharmaceutical companies, community health associations, nonprofit measurement and research organizations, physicians, and health management companies. These partners bring diverse expertise, resources, and knowledge that could be valuable even if the organization elects to manage most of the health program implementation internally.

A wide range of program elements contribute to the success of an organization’s health strategy. Table 8 lists some of these program elements, including those addressing the vision, the work environment, health plan benefits, and metrics for measuring progress. The list, while not exhaustive, shows what successful organizations have done to improve their employee health and productivity.



One widely used program is referred to as “know your numbers.” Organizations encourage employees to keep track of health indicators, such as weight, body mass index, and blood pressure, cholesterol, and/or blood sugar levels. The indicators selected for a “know your numbers” program may vary depending on health goals. A “know your numbers” program can only be effective if employees understand the relevance of the indicators and have incentives to improve them.

Many organizations use incentives as a way to promote healthy employee behavioral changes. Incentives range from cash cards and reward points for catalog shopping to a reduction in co-pays or premium contributions. Incentives drive participation, participation drives health improvement, and health improvement drives cost and productivity improvement.

Table 7  
**Health Goals and Program Elements**

Phase 1	Phase 2	Phase 3
Organization has a few programs and goals focused on cost with little or no integration. Goals are limited to isolated programs. There is initial promotion of a “know your numbers” program.	Programs and goals are aligned with disease burden and cost with some integration. Promotion of “know your numbers” is well established.	Full suite of integrated programs and goals are linked to demographics, risk factors, and disease burden. Use of “know your numbers” is widespread: Employees throughout the organization know what their numbers are and what they should be.
The human resources department is the primary driver of health activities and teams.	A health committee with multi-department representation drives health activities and teams.	A health committee drives health activities and teams with periodic reports provided to the organization’s board.
Health is introduced as part of the culture.	Health is driven by top leadership and senior management as part of the culture, but not fully adopted throughout the organization.	A culture of health is fully ingrained among the leadership and employees.
Incentives are tied to initial participation, such as completing an HRA.	Incentives (e.g., reduced co-pay) may be tied to initial participation, benefit design and program participation.	Organization has a long-term focus on achievement of outcomes. Some incentives are tied to benefit design, program participation, behavior change, and achievement of improved outcomes.



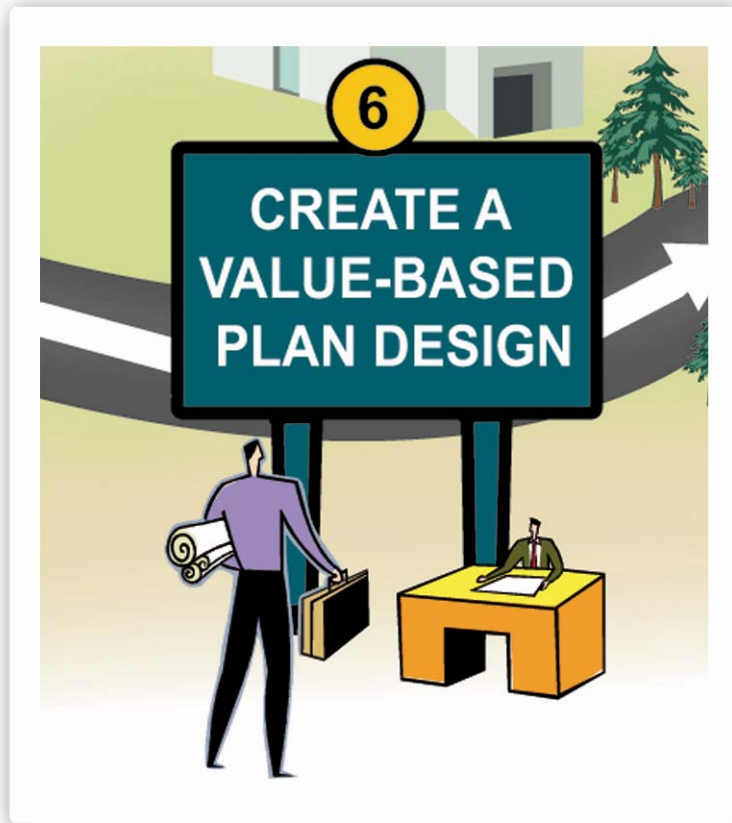
The following table summarizes health program elements appropriate for organizations at Phase 1, Phase 2, and Phase 3. Appendix C offers a more detailed description of these and other program elements.

Table 8  
**Summary of Health Program Elements and Phases**

HEALTH PROGRAM ELEMENTS	Phase 1	Phase 2	Phase 3
<b>VISION FROM SENIOR LEADERSHIP</b>			
Consistent with business strategy		✓	✓
Management and union integration		✓	✓
Shared with employees		✓	✓
<b>HEALTH-FRIENDLY ENVIRONMENT</b>			
Bike racks	✓	✓	✓
Showers, lockers, and changing facility			✓
Designated no-smoking areas	✓	✓	✓
Walking paths		✓	✓
Flexible work schedules		✓	✓
Worksite relaxation center		✓	✓
Substance and alcohol-free workplace			✓
Effective job design and redesign		✓	✓
Stairwell enhancements (carpet, music, etc.)			✓
Healthy food choices in vending machines	✓	✓	✓
Healthy food offerings in cafeteria	✓	✓	✓
Healthy food subsidized in cafeteria and vending machines		✓	✓
Healthy food offerings at meetings	✓	✓	✓
Facilities for employees who bring lunch	✓	✓	✓
On-site clinic			✓
Access to fitness center		✓	✓
On-site fitness center			✓
Health line			✓
Employee Assistance Program (EAP)	✓	✓	✓
<b>HEALTH PROMOTION FOR ALL</b>			
Multi-department health committee		✓	✓
Employee health recognition/acknowledgment	✓	✓	✓
Health posters and health exhibits	✓	✓	✓
Stairwell health messaging/postings	✓	✓	✓
Social activities	✓	✓	✓
Educational classes/seminars	✓	✓	✓
Worksite classes	✓	✓	✓
Brown bag workshops	✓	✓	✓
New employee orientation includes health	✓	✓	✓
Website/Web-based health tools		✓	✓
Health newsletter		✓	✓
Health library/resource room			✓
Self-help guides		✓	✓
<b>PHYSICAL EXAM/HEALTH SCREENINGS</b>			
Blood pressure screening	✓	✓	✓
Prostate cancer screening	✓	✓	✓
LDL/HDL Cholesterol testing	✓	✓	✓
Cervical and vaginal cancer screening	✓	✓	✓
Weight and BMI testing			✓
Diabetes/glucose testing		✓	✓
Breast cancer screening	✓	✓	✓
Colon and rectal cancer screening	✓	✓	✓



HEALTH PROGRAM ELEMENTS	Phase 1	Phase 2	Phase 3
Dental health		✓	✓
Eye exam		✓	✓
Osteoporosis testing		✓	✓
Flu shots		✓	✓
Immunizations	✓	✓	✓
Allergy shots		✓	✓
<b>HEALTH MANAGEMENT</b>			
Access to health coaches		✓	✓
Stress management programs		✓	✓
Weight management programs		✓	✓
Tobacco cessation programs		✓	✓
Chronic care/disease management programs		✓	✓
Health Risk Assessments (HRA)	✓	✓	✓
<b>VALUE-BASED PLAN DESIGN</b>			
Access to primary care	✓	✓	✓
Access to secondary care	✓	✓	✓
Access to chronic care			✓
Access to behavioral and mental healthcare		✓	✓
Access to pharmaceuticals	✓	✓	✓
Non-sedating antihistamines		✓	✓
ACE inhibitors for diabetics		✓	✓
Access to dental care	✓	✓	✓
Access to vision care	✓	✓	✓
Use of incentives/disincentives		✓	✓
Pay for performance			✓
Employee contributions to premium	✓	✓	✓
Balanced affordability with shared accountability			✓
Co-pay reductions for preventive services		✓	✓
Non-tobacco premium credit		✓	✓
<b>INCENTIVES</b>			
Incentives tied to initial participation	✓	✓	✓
Incentives tied to benefit design		✓	✓
Incentives tied to program participation		✓	✓
Incentives tied to achievement of outcomes			✓
<b>MEASUREMENT</b>			
Metrics for participation	✓	✓	✓
Metrics for changes in population health status		✓	✓
Metrics for tracking risk and outcomes around the total value of health			✓





## Chapter 6: Create a Value-Based Plan Design (VBPD)

With the burgeoning costs of health, cost-sharing initiatives seem to be everywhere. But employers are struggling to figure out exactly how costs should be shared.

Rather than relying on the typical “one-size-fits-all” solution, it often makes more sense to consider health costs based on the value of particular benefits to individual patients. Value-based plan design (VBPD) is a system of cost sharing that tailors co-payments to the evidence-based value of specific services for

*“Purchasers and policy makers must strive to design benefit packages that recognize the variation in value that healthcare services offer and attempt to avoid creating financial barriers for access to high-value services.”*

Michael Chernew, Ph.D.  
Professor of Health Care Policy  
Harvard Medical School<sup>1</sup>

targeted groups of patients. (This is also referred to as value-based insurance design or VBID). Currently, cost sharing is nearly always based on the cost of the service or medicine and rarely is related to its potential benefit to a patient.

The pressures created by skyrocketing healthcare costs make VBPD very timely. The approach can help mitigate a key downside of cost sharing by reducing financial barriers to

critical medical services and medicines. Many organizations still rely on benefit designs created years ago with little understanding of healthcare cost drivers and followed the lead of competitors without thinking through how well a benefit design would fit within their own organization. However eager one is to temper rising healthcare costs, neither the employee nor the employer benefits if, for example, high copayments deter diabetics from taking their medicine, getting nutritional advice, or having regular eye and foot exams. Ignoring chronic problems when they are still treatable will require more expensive treatments in the future. VBPD is a common-sense approach that encourages the use of services when the clinical and lost-time benefits exceed the costs.

Michael Chernew, a professor of healthcare policy at Harvard University, developed the VBID concept with Drs. Mark Fendrick and Allison Rosen of the Division of General Medicine at the University of Michigan. “There is understandable concern that if employers just charge people more money, they’ll get negative outcomes,” according to Chernew. “Employers want to control costs and provide quality healthcare benefits. Value-based insurance design allows them a way to minimize the deleterious consequences to straight-up cost sharing.”

Packaging benefits according to the value they offer individual employees may provide a practical answer to health disparities. In a recent article published in the *Journal of General Internal Medicine*, Chernew et al. found that more highly paid employees tend to have superior medication adherence. The authors expressed concern that rising co-payments may actually increase this disparity, particularly in low-income populations.<sup>2</sup> When one large employer reduced co-pays for certain medication classes, non-adherence rates dropped by 7 percent to 14 percent, demonstrating the positive effects of a value-based plan design.<sup>3</sup>

### Moving Along

In its simplest form, VBPD gives employees the benefits that help them (and their families) become healthier and more productive. Employees may see cost savings in the form of lower insurance premiums and co-pays, and reimbursement for fitness center fees.



Organizations progressing to a value-based plan design define the structure of the health and healthcare products offered to their workforce, taking into account the diversity of their employee population, including age and health status and impact of medical conditions. They consider access to pharmaceuticals, primary care, specialty care, chronic care, and mental health care. They also hold health plans accountable for measuring and reporting on the health status of the population at least annually.

Many organizations using value-based plan design offer incentives and rewards that may be tied to the following:

- Completion of health risk assessments
- Healthy profiles
- Participation in health behavior change programs
- Physical activity
- Diet or nutrition
- Weight management
- Non-smoking status
- Allergy shots
- Health screenings, such as a comprehensive physical exam, blood pressure, cholesterol/HDL testing, body mass index, glucose levels, mammograms, colonoscopy screenings, immunization status
- Behavior change
- Improved health outcomes

Value-based plan design is about improving access to care in a way that makes good business sense. Care that is affordable for both the patient and the organization will produce a return on investment in terms of lower healthcare cost trends and improved productivity.

David Hom, President, David Hom, LLC, explains to leaders, that organizations need to use data from HRAs, clinical and disability claims, and other sources to find patterns that exhibit barriers to care. Are they seeing a decrease in compliance with preventive screenings, blood tests, and medication adherence? It is critical for organizations to look at the consequences of plan-design changes that on the surface seem to encourage desirable behavior. Hom cites an example of an employer that provides generic medications for free. Asthma patients benefit in one way, because they get generic “rescue inhalers” at no cost. However, the medications that prevent asthma attacks are not generic; the higher cost of preventive medicines presents a barrier that can lead to an increase in emergency room visits. A value-based design would include a low or no co-payments for the branded prevention medications as well. Investing in population health by improving access to care—such as physician office visits, laboratory tests, diagnostics, and medication for chronic conditions—will improve health over time and decrease the rate of healthcare and disability inflation.



With a value-based plan design, health plans should play an integral role in the health improvement effort. They can bring health programs—such as blood pressure screenings and health seminars—to the worksite. Employers should encourage health plans to assist in the analysis of integrated health informatics and to offer recommendations relative to the health status of the population. Health plans should prepare practice profiles for physicians and share results with them. And they should survey patients about how their physicians communicate health promotion services during medical appointments. Health plans can be major players in the role of disease management. Employers should encourage them to offer reminder letters and scorecards to physicians and patients and to offer education or intensive case-management options for the sickest employees. Employers need to ensure that the actions of the health plan reinforce the organization’s health vision and strategy.

When designing a value-based insurance plan, employers should include the following major steps:

- Determine the high-cost drivers by understanding the risk profile and total cost of disease burden of the covered population and how they impact health status and productivity for the workforce
- Determine which services and benefits have value. Determine which conditions drive total costs, including medical costs and lost productivity
- Design the benefit plan to encourage utilization of value services, benefits, and interventions
- Evaluate programmatic activity. The first year may focus on evaluating the impact of benefit design on compliance; the second year on lab results; and later, the impact on emergency room visits, lost time/lost productivity, disability claims, and hospitalizations
- Communicate to employees early, effectively, and often■



Table 9

**Elements of a Value-Based Plan Design**

Phase 1	Phase 2	Phase 3
<p>Employees have access to primary and specialty care. There is a pharmacy benefit as well as dental and vision care. Employees contribute toward premiums.</p>	<p>Organizations expand access to behavioral and mental healthcare. Pharmaceutical benefit design addresses frequently used medications, such as non-sedating antihistamines and ACE inhibitors for patients with diabetes. There are co-pay reductions for preventive services and a premium credit for non-tobacco use.</p>	<p>Organizations bring value-based plan design to chronic care services. Employee contributions to premiums balance affordability with shared accountability.</p>
<p>No value-based elements in the benefit plan design. Primary strategy is cost shifting.</p>	<p>Initial value-based elements are introduced, probably in pharmacy co-pays.</p>	<p>Comprehensive use of value-based plan elements.</p>
<p>Employers may begin to have early discussions surrounding VBPD. Discussions are focused on selective disease categories. Physician community provides little knowledge or support for incorporating an evidence-based approach.</p>	<p>Organizations are in deep discussions around VBPD and support its tenets. Discussions become focused on the greatest value for the employees and employer. There is community support for incorporating an evidence-based approach.</p>	<p>Organizations have taken full advantage of the VBPD approach and fully support its tenets. Multiple evidence-based guidelines are used, promoted and measured. Plan design doesn't focus solely on medical-cost savings but also considers lost productivity savings, morale, etc.</p>





## Chapter 7: Integrate Patient-Centered Medical Home and Chronic Care Management

An approach to providing comprehensive primary care with the goal of achieving better health outcomes, a more positive experience for patients and a more efficient use of resources is the Patient-Centered Medical Home (PCMH).<sup>1</sup>

Under the principles of PCMH, each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous, and comprehensive care. The personal physician:

- Leads a team at the practice level that collectively takes responsibility for the continuing care of the patient
- Provides all of the patient's healthcare needs or takes responsibility for arranging care with other qualified professionals. This includes acute care, chronic care, preventive services, and end-of-life care
- Coordinates care across all elements of the healthcare system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g., family, public and private community-based services)
- Advocates for the patients to promote optimal patient-centered outcomes that are guided by evidence-based medicine and clinical decision-support tools

*“The American healthcare system is oriented towards treatment of acute-care illness. It is high time that we redirect the system towards health promotion, disease prevention and primary care starting with the Patient-Centered Medical Home.”*

Andrew Webber  
President and CEO  
National Business Coalition on Health

Although the concept of the medical home is not new, the continuing healthcare crisis has stimulated new interest in this model of care. The Patient-Centered Medical Home was developed by the American Academy of Pediatrics in 1967 to provide appropriate care to children with special health needs. It was further developed and promoted by the American Academy of Family Practice, The American College of Physicians and the American Osteopathic Association. The Patient-Centered Primary Care Collaborative is a large group of patient representatives, payers, purchasers and providers who are collaboratively advancing the concept of the PCMH throughout the American healthcare system.

Many employers and fund trustees understand the value of prevention and are receptive to the PCMH concept. They see it as a way to improve preventive care and chronic care management. For those patients whose diseases need to be closely managed to prevent their health from deteriorating, the PCMH provides an integrated approach to care. Chronic care management through the PCMH can reduce the costs related to uncontrolled health conditions.

Several national pilot programs are underway, including the North Carolina Community Care program. In that program, an upfront investment of \$10.2 million saved \$244 million in overall healthcare costs for the state in 2004, with similar results in 2005 and 2006.<sup>2</sup>



Many employers are already focusing on preventive health and management of chronic illnesses. According to the Centers for Disease Control and Prevention, chronic diseases—such as heart disease, cancer, and diabetes—are the leading causes of death and disability, accounting for 70% of all deaths in the United States. These diseases also cause major limitations in daily living for almost 1 out of 10 Americans, or about 25 million people. While chronic diseases are common and costly, they are preventable.<sup>3</sup> The PCMH strives to incorporate an evidence-based model to improving health outcomes for patients with chronic illnesses and even avoid the development of chronic conditions.

## Moving Along

As organizations grow from Phase 1 to Phase 3, they gain a deeper understanding of the importance of creating a community approach to care. Employers alone do not have the resources or expertise to offer this model of healthcare. Creating partnerships with the medical community, either through health plans or directly, will pay huge dividends—especially in managing the complex health issues of people with chronic illnesses.

Phase 1 organizations usually begin to address chronic diseases with a disease management program focused on lowering costs. A review of claims or health plan data will readily identify those beneficiaries with high-cost chronic diseases. However, this review will identify only the impact those conditions have on medical and pharmaceutical costs. Self-reported information can provide a truer gauge of all cost drivers. Other problems may be affecting health, lost-time and productivity. Depression, fatigue, and sleeping disorders, which often accompany chronic illnesses, are three of the five most significant cost drivers for employers. (See Chapter 4 chart: Total Medical, Pharma, and Productivity Costs per 1000 FTEs.) Because of the strong relationship that develops between the patient and the personal physician, the PCMH approach also addresses these aspects of care.

By adopting the following six strategies, organizations can play a pivotal role in the establishment of the PCMH.<sup>4</sup>

- Participate in a regional pilot
- Incorporate the PCMH and insurer procurement performance assessment activity
- Align payment strategy with the PCMH adoption objectives
- Build coalitions in support of the PCMH healthcare practices
- Engage employees
- Integrate the PCMH into other health strategies

This is a basic overview of the PCMH. Additional resources are available in Appendix B. ■

Table 10

### Patient-Centered Medical Home and Chronic Care Management

Phase 1	Phase 2	Phase 3
Organization has a basic understanding of the Patient-Centered Medical Home. Initial forays into programs for chronic care management have limited linkage to other program elements.	Organization supports elements of the Patient-Centered Medical Home. Evolving programs for chronic care management are integrated with other activities.	Organization fully supports the Patient-Centered Medical Home. Chronic care model integrates employer activities with providers and other community resources.





## Chapter 8: Portrait of a Phase 3 Organization

The roadmap for Employer Health Asset Management provides organizations with suggestions, processes, and case studies to help them on the journey to becoming a Phase 3 organization. It is not meant to imply these are the only methods of value, but they are tried-and-true techniques that deliver results. Organizations following some tenets of the roadmap have had various degrees of success. Organizations may have strong chronic care programs with a promising return on investment, though it may occur in the absence of a vision or senior leadership participation. The goal is to integrate all elements of the roadmap to create an entirely Phase 3 organization. Using the roadmap as a template will assist in creating a culture of health that can achieve the greatest results in terms of both health status and productivity.

Successful Phase 3 organizations transition from just looking at reducing the short-term costs of healthcare to creating a vision for a healthy and productive worksite. They recognize that investing in the health of their employees is just as important as investing in training to develop their skills. They focus on employer health asset management and develop explicit and measurable goals.

*“The goal of organizations should be to make employees the CEO of their health. They need the tools and understanding of their condition so they can return to work, be high performers and live their future dreams.”*

David Hom  
President  
David Hom, LLC

Phase 3 organizations recognize that the support of senior management is critical. They understand this is not just the job of the human resources department; leaders of the organization are personally responsible for achieving specific health goals. In Phase 3 organizations, senior managers lead by example: They take the stairs, they don't smoke, and they choose healthy meal options in the cafeteria and at employer-sponsored events.

These organizations understand the need for informatics to manage employee health. If they don't have internal systems to provide the necessary data analysis, they use tools available in the marketplace. Demographics and disease burden are clearly understood. Measures aligned with explicit goals are reported quarterly. Senior managers take ownership for the results and ensure they are communicated throughout the organization.

To achieve an integrated approach to health that reaches the entire employee population, Phase 3 organizations select a full range of complementary health program elements. In these organizations, employees are aware of their health risks and know which program element will help them reduce or eliminate these risks. The organizations also offer programs that enable healthy and low-risk employees to stay that way. Employees in Phase 3 organizations support each other in their efforts to improve their health. Workers may use the organization's health facility. There may be friendly “biggest loser” competitions between shifts and divisions. Employees use flex time to visit on-site medical clinics and pick up an initial supply of medications and order renewals through a mail-order pharmacy.

The design of the health plan encourages the use of services and medications that promote cost-effective and high-quality care. Most or all preventive services and certain high-value medications are covered under the plan design with little or no out-of-pocket cost to the member. As a result, medication compliance increases dramatically and the need for medication decreases. Employees feel healthier. The employees with chronic conditions are managing their health and becoming more productive. Their disease progression is halted and hospitalizations are going down.

The accountability for health and total employee involvement has led to decreases in turnover, absenteeism, presenteeism, long- and short-term disability, and emergency room visits. The employer has also noticed increases in quality, satisfaction, and retention. By using the roadmap to reach Phase 3 in Employer Health Asset Management, the organization has become an employer of choice. ■



## Appendix A: Case Studies

### Chapter 1: Develop and Embrace an Organizational Vision for Health

#### The Dow Chemical Company Global Approach to Employee Health Management

Source: Gary Billotti, Global Leader, Health and Human Performance, The Dow Chemical Company Global Approach to Employee Health Management, personal correspondence, May 29, 2008.

With annual sales of \$54 billion and 46,000 employees worldwide, The Dow Chemical Company (Dow) is a diversified chemical company that combines the power of science and technology with the "human element" to constantly improve what is essential to human progress. The company delivers a broad range of products and services to customers in over 150 countries, connecting chemistry and innovation with the principles of sustainability to help provide everything from fresh water, food, and pharmaceuticals to paints, packaging, and personal care products.

The Dow Chemical Company has always provided occupational health services for all global locations, and for well over a decade it has had a centrally coordinated health and human performance effort in conjunction with occupational services. The health services function has led the way with a global operating discipline designed to assure consistent application of fundamental health services around the globe. The implementation of services is managed through a group of regional health directors, who cover all locations worldwide. In addition, a core group of subject matter experts, primarily located at the corporate headquarters in Midland, Michigan, supports the regions through the development and/or identification of health promotion and educational programs, materials, and toolkits that meet their region or site-specific needs. Also, regional health promotion coordinators are located in each global region to support implementation. A unique aspect of this structure is the accountability of the regional health directors, as well as the entire health services staff, for employee health outcomes. Essentially, year-end performance awards are partially based on the achievement of actual employee health outcomes, based on goals set independently by each region, based on their specific needs.

The adoption of a global Dow Health Strategy in 2004 has established a clear business case and ensured a more coordinated approach to the delivery of a broadened scope of services. These go beyond the typical occupational health and health promotion to include medical benefits, work/life program, and Employee Assistance Programs. This Dow Health Strategy is a cross-functional effort that is sponsored by two executive vice presidents. There is also a senior level steering team and an implementation team that guide the strategy development and delivery of services, including multifunction, business, and global representation. This approach ensures the strategy is indeed global and is globally applicable.

The actual programs and services delivered are data driven. There are several vehicles for collecting data globally to measure progress against their primary outcome objectives of improved health, reduced health risk, reduced cost, and improved productivity (including absenteeism and presenteeism). The primary tools used include the following:

- A globally standardized health assessment delivered through the occupational health groups
- A global health questionnaire administered in 12 languages to sites in 16 countries. This is actually a compilation of several established instruments along with a series of other HRA-type questions to collect information about functional health, presenteeism, self-reported absenteeism, primary health condition prevalence, essential healthy lifestyle behaviors, and employee perception of whether they have a "healthy culture."
- A Healthy Workplace Index developed to assess the site contributions to creating a healthy environment and culture
- A total cost of health analysis that captures medical benefit costs along with all other health-related costs globally



These data are collected annually and used to monitor trends to assess needs and priorities. Data are reviewed with the health strategy implementation team and regional health directors and provided to the health strategy steering team.

The Dow Chemical Company has collected extensive information and knowledge about the global application of employee health management. Following are some of the most important key lessons learned:

- Creating a business case is essential to secure management commitment
- Determine the total economic impact of all health-related costs both direct and indirect
- Establishing an organizational strategy is essential
- Have a long-term view and commitment for the health strategy
- Have a measurement strategy to set priorities and track outcomes
- Create internal partnerships of related functional groups
- Implementation strategies should include individuals, small groups, and cultural aspects
- Efforts must align to organizational priorities or they will not be supported
- Consider involvement of labor organizations in the strategy and implementation
- Ensure confidentiality of all personal health data by meeting any government requirements
- One size does not fit all, and program/services design and implementation must be culturally sensitive
- Develop and adhere to a clearly documented operating discipline that is supported by all applicable functions within the organization

The Dow Chemical Company is committed to the health and well-being of employees around the world, regardless of the location. Time has proven that global investment in human capital is a win-win situation. ■

## Navistar International

Source: Navistar website  
[www.navistar.com/portal/site/NavistarDotCom/menuitem.619df6dcb5f969c3a1f344ae931010a0/?vgnnextoid=a1b0fed452ea5119VgnVCM10000085d0eb0aRCRD&vgnnextfmt=default](http://www.navistar.com/portal/site/NavistarDotCom/menuitem.619df6dcb5f969c3a1f344ae931010a0/?vgnnextoid=a1b0fed452ea5119VgnVCM10000085d0eb0aRCRD&vgnnextfmt=default) (accessed 2 September 2008)

Navistar has annual metrics posted on absenteeism, disability, incident frequency, and lost-time case rate. All trends are going in the correct direction. Navistar describes its proactive approach to employee health, safety and security on its website:

**Supporting Employee Health.** At Navistar, we believe that the health and well-being of our employees directly impacts our bottom line. Helping employees maintain a healthy lifestyle helps to minimize absenteeism and keep our healthcare costs manageable. It also improves productivity and keeps us focused on producing high-quality products for our customers. For all these reasons, the company works assiduously to drive the “1, 2, 3’s” of health management and disease prevention, including: 1) primary prevention that seeks to prevent smoking, obesity or other risk factors; 2) secondary prevention, which manages or reduces the risk factors in order to prevent disease; 3) tertiary prevention that aims to manage disease in order to prevent catastrophic consequences.

**Adding to Global Knowledge on Workplace Health.** Beyond treating individual employees, Navistar also actively pursues health research initiatives that are based on careful analysis of company medical claims data and that contribute significantly to global literature on workplace health issues.

**Enhancing Prevention by Promoting Fitness.** One of the company’s key tools in primary prevention is a strong emphasis on promoting employee fitness.



**Establishing Global Systems for Safety and Security.** With the growth of our global business, travel has increased significantly, and Navistar is in the vanguard of new approaches designed to keep traveling employees safe and secure.

**Recognized for Leadership.** Navistar's results-oriented approach and commitment to employee health and safety has achieved extensive recognition. From 2000 through 2006, the company won seven consecutive regional Gold Awards and a national Platinum Award for outstanding wellness programs from the Wellness Councils of America (WELCOA), designating it as one of America's healthiest companies. ■

## Chapter 2: Secure Senior Management Commitment and Participation

### PPG Industries

Source: Colombi, Alberto; Pringle, Janice and Welsh, George; "Not Waiting for Godot: The Evolution of Health Promotion at PPG Industries," *American Health and Drug Benefits*, April 2008, Vol. 1, No. 3, pages 28-36. Used with permission of *American Health and Drug Benefits*.

PPG Industries is a manufacturer of coatings, chemicals, optical products, specialty materials, glass, and fiberglass. This overview of how PPG Industries created a vision and involved senior leadership is based on an article published in the April 2008 issue of *American Health and Drug Benefits*.

PPG worked on creating management awareness and obtaining commitment for funding to launch the "Lifestyle Partnership" initiative. The Lifestyle Partnership established a health information management system comprising claims data and a self-reported online HRA in eight languages prominently embedded in a web-based wellness resource center; disease-specific health promotion priorities (e.g., cardiovascular disease, musculoskeletal diseases, depression, diabetes, and women's health issues); and facility-based wellness teams comprising groups of employee volunteers as an adjunct to the limited occupational health nursing staff. At the end of 2004, PPG counted 71 wellness teams in more than two-thirds of the major manufacturing facilities, involving 28 nurses and 448 wellness volunteers.

In phase 2 of its strategy (2004-2007), PPG focused on developing the conceptual model—establishing metrics, targets and reports; developing leadership and management engagement through health summits; conducting annual wellness conferences; developing an occupational nurse career ladder; and extending the HRA to family and retirees. The most prominent feature of this phase was the development of an intervention process for plants with the highest health-care costs through a series of "health summits." A typical "summit" would entail: 1) involving plant leadership, the wellness team, and other employee health stakeholders in a participatory review of the facility HRA and claims data to develop a strategy for addressing the problems revealed by this review; 2) examining existing plant health promotion initiatives and providing input into how these can be enhanced to meet employee health risk needs; 3) defining, empowering, and supporting the role of the local leadership team, and refocusing wellness teams to provide appropriate direction, tools, and support.

They also learned the importance of establishing "SMART" health promotion goals (Specific, Measurable, Agreed, Reasonable, and Time-bound). To establish baselines and measure progress, they gave themselves the capacity of reporting both healthcare costs and health/risk assessment through a work-site specific Healthcare Initiative Scorecard.

PPG's approach is an excellent example of a Phase 3 organization with active promoters at all levels and a vision focused on explicit goals. ■



## Chapter 3: Address Workplace Policies and the Work Environment

### Union Medical Center

Source: Used with permission of Ken Boyd President UFCW Local 1546.

The UFCW Local 1546 Union Medical Center (UMC) in Chicago is a jointly trusteed multiemployer healthcare facility that provides medical services for approximately 5,500 union members and their families. The members covered are employed by 90 employers under contract with UFCW Local 1546.

The UMC is a bargained benefit for healthcare. The jointly trusted plan has a Board of Trustees that is comprised of half union trustees and half employer trustees from the represented employers. In existence since the mid 1960s, it is used to deliver a traditional style of healthcare. Within the last decade, the Board of Trustees and the Administrator enhanced services by designing and implementing a healthcare plan that reduces barriers to care for the members and their families. This plan was designed to maintain both the health and productivity of the members while being cost effective for the employers.

The center provides a complete ambulatory healthcare facility that employs 56 medical support personnel and 28 full and part-time medical care providers of all specialties. They see over 300 patients a day. The Union Medical Center provides a wide array of services that include family practice, internal medicine, pediatrics, cardiology, audiology, orthopedics, ENT, OB/GYN, ophthalmology, optometry, podiatry and urology. The center also provides physical therapy, laboratory and ultrasound services, and optician and radiology services. In addition, the UMC Dental Center provides complete dental care with the latest equipment and technology. The Dental Center sees approximately 300 patients per week and employs four full-time dentists, two hygienists, and six support personnel.

The in-house pharmacy employs one full-time and two part-time pharmacists along with two full-time pharmacy technicians. To enhance cost control, the pharmacy buys directly from the suppliers. It fills on average between 250 and 270 prescriptions per day with approximately 75% percent using generic drugs. This is a major savings to the trust fund and is a result of the Union Medical Center doctors working directly with the pharmacy. This process, in turn, keeps the drug trend costs around 2% to 3%, which, when compared against a national trend, falls well below the average.

The UMC has a managed care department to arrange outside appointments for testing and hospitalization. The department also works directly with social service and state agencies for those members that may need extra help. An on-call nurse with access to an urgent care center is available during the hours that the medical center is closed. Educational classes are provided for nutrition, asthma, and diabetes, with a goal to change the behavior of the members, providing long-term benefits for the member and the employer.

The Union Medical Center is currently in the process of converting to tablet-based, paperless electronic medical records to include an electronic prescribing system. This system will also help avoid dispensing prescriptions that may interact with other prescribed medicines.

The Administrator of the UMC negotiates directly with area hospitals resulting in an incentive for the members to go to a hospital under the plan that will pay 100% of the bill with no deductible. Eighty-five percent of the member's are using this option. This results in the fund paying only the negotiated rates to the hospital. Overall, the current monthly cost is \$400 per month per employee.

All of these services at the Union Medical Center are a result of a collective bargaining agreement between the employers and UFCW Local 1546. The Board of Trustees continually works with the Administrator to maintain the most effective healthcare coverage at the most effective cost for the employer. ■



## General Electric Working Environment

Source: [http://www.ge.com/company/culture/working\\_environment.html](http://www.ge.com/company/culture/working_environment.html) (accessed 7 September 2008)

GE has roughly 319,000 employees across offices in 69 countries and an overall retention rate greater than 95%. Our employees' performance can only flourish in a sound work environment. That is why GE is committed to supporting its leadership culture through systems and policies that foster open communication, maintain employee and partner privacy, and assure employee health and safety.

**Operating with Integrity.** How we deliver results is as important as the results themselves. GE seeks to lead in workplace and marketplace integrity by respecting the human rights of everyone touched by our business, and by enforcing legal and financial compliance. These commitments are detailed in our integrity policy, *The Spirit & The Letter*, which every employee supports with a signed pledge. They are further enabled by our ombudsperson process, which encourages any employee to report integrity concerns without fear of reprisal.

**Work and Life Balance.** Naturally, the passion that our people bring to their work extends to their own private worlds, and GE is committed to enabling a healthy balance between the two. GE encourages our people to meet their work commitments while balancing their own life responsibilities. To support this balance, flexible work arrangements are an integral part of the way we conduct business. The company also offers many programs and resources to support employees including financial management, family counseling, and more. ■



## Chapter 4: Employ Program Evaluation Using Informatics and Metrics

### PPG Industries

Source: Colombi, Alberto; Pringle, Janice and Welsh, George; "Not Waiting for Godot: The Evolution of Health Promotion at PPG Industries," *American Health and Drug Benefits*, April 2008, Vol. 1, No. 3. pages 28-36. Used with permission of *American Health and Drug Benefits*.

PPG clearly defined and established baselines and measured progress, gave itself the capacity to report both healthcare costs and health/risk assessment through a worksite-specific Health Care Initiative Scorecard based on the following five measures, reported quarterly:

- Gross per employee healthcare costs
- Net per employee healthcare costs (after cost sharing)
- Percentage of employees who have taken the HRA at least once in the past three-years
- Percentage of HRA takers who are at low or no risk
- Percentage of HRA takers who have participated in a screening activity ("Know Your Numbers") and at least remember, and engage, to the point of entering their cholesterol and blood pressure readings

In this dynamic process, PPG's understands its employees' health risks as well as the HRA process increased. The company learned that stress risk is self-reported by about 60% of employees, but readiness to change in this area is less than 10%. In contrast, although self-reported weight risk is more than 50%, only 30% of respondents are willing to take action in this area. This comparison permits an understanding of which risk-specific health promotion programs are mature for action and which may require the application of initiatives to increase employee awareness and knowledge and ultimately change attitudes. PPG also learned that changes in HRAs over time can be multidirectional and dynamic.

Following health promotion advice in the course of time, some individuals may take action for better, some may worsen because of at-risk behaviors, and some may simply increase their risk through aging. Doing nothing to address employee health at a minimum will carry the burden of aging and increase the underlying risk burden that comes with it. If upon comparing health risk (and outcomes) at Time 1 and Time 2, the number of individuals who improved is not substantially higher than the number of those who worsened, and then their attempts at health promotion will have accomplished little. ■

## Chapter 5: Set Health Goals and Tailor Program Elements to Meet Them

### Johnson & Johnson HealthyPeople Medical Plan: Choice and Accountability

Source: HealthyPeople Medical Plan: Choice and Accountability. April 2008, Case study available at [www.vbhealth.org](http://www.vbhealth.org) (accessed 20 October 2008)

Johnson & Johnson is a consumer, medical device and diagnostics, and pharmaceutical corporation with 200 operating companies in 57 countries, with 45,000 U.S. employees, 126,000 covered lives, and \$61 billion in annual revenue. Seventy-percent of employees elect the HealthyPeople HRA Plan; an HMO option is available.

Johnson & Johnson realized that healthier employees and a tighter rein on costs would require a multi-dimensional approach to health. Fitness and wellness options have been available for years, as has disease management. An incentive medical plan was all that was missing. The new HealthyPeople HRA plan was rolled out in January 2008 to link it all together. With the use of incentives and data management, employees and their dependents have a fully integrated health management environment.



The HealthyPeople HRA plan:

- Account-based medical plan design integrated with Healthy People initiatives.
- Employees receive annual \$500 discount on medical plan contributions. To keep the discount, they must:
- Complete a Health Profile Risk Assessment every two years
- Participate in health risk counseling if identified as high risk
- Participate in case/disease management program, if identified by chronic or complex condition/criteria

Disease management covers diabetes, low-back pain, high-risk pregnancy, COPD, CAD, CHF, atrial fibrillation, asthma, complex cases, and rare diseases. A depression-screening tool is part of the disease-management effort.

With the new plan, data will be integrated and analyzed by Medstat and will include short-term and long-term disability, medical usage, health profile risk assessment data, and drug utilization.

Even with an active worker-to- retiree ratio of 4:1, further savings can be realized by having pre-Medicare retirees in the active plan. with care management, wellness, and disease management.

EAP has robust participation and integrates with behavioral health.

So far, it seems to be working. The latest annual healthcare survey of J&J's population indicated a 91% overall satisfaction rate with the health plans.

The 30% of employees not in the HealthyPeople HRA plan have elected either an HMO option or no coverage.

Building a culture of health that includes a value-based plan delivers:

- Net savings of \$5.1 million for the disease management program, in 2005; 95% of employees who needed disease management participated.
- Reduction in expenditures of \$224.66 per employee in medical utilization and expenditures as a result of health and wellness program.
- Programs designed to integrate occupational health, disability, wellness, and medical benefits should reap substantial health and economic benefits on an on-going basis. ■

## Chapter 6: Create a Value-Based Plan Design (VBPD)

### Caterpillar Managing Risk Clusters Will Save Dollars for CAT

Source: Managing Risk Clusters will Save Dollars for CAT, December 2007. Case study available at [www.vbhealth.org](http://www.vbhealth.org) (accessed 20 September 2008)

Caterpillar is a Fortune 100 company with \$36 billion in sales and revenue. It has 80,000 employees with 120,000 covered lives. The company has been actively managing risk clusters to save dollars. Dr. Mike Taylor, medical director for health promotion, is working with a CAT team that is focused on a risk-management strategy that identifies those at the highest risk for coronary, diabetes, or stroke events. These diseases are driving the claims costs as well as disability and unscheduled absences, and the team is determined to get the trend line under control.



The plan:

1. Develop our own Health Risk Appraisal based upon our findings.
2. Launch HRA and collaborative disease management within the exempt employee group.
3. Provide incentives to the participants by reducing monthly insurance premiums by \$75 for each employee, \$75 for each spouse, and \$75 for each retiree under age 65.
4. Stratify risk by cardio-metabolic indicators: waist>40/males, >35 females, triglycerides >150, blood pressure >130/85, fasting glucose 110-125, low HDL cholesterol (<40/men, <50 women).
5. Enroll in collaborative risk /disease case management with provider network.
6. Track clinical outcomes over time.
7. Track financial outcomes over time.

CEO Jim Owens is a strong advocate of initiatives and set an engagement target of 80% by 2010.

CAT delivers:

- 90% HRA participation
- Diabetes management success: 50% of enrollees experienced an HbA1C reduction (from 8.7 to 7.2), 96% are measuring their A1C, 72% meet the surgeon general's activity recommendations, and 98% are on aspirin
- The general employee group has seen a 50% reduction in disability days and a three-year trend of smoking cessation at 35%■

## Chapter 7: Integrate Patient-Centered Medical Home and Chronic Care Management

### Pfizer Helpful Answer Program

Source: <http://www.pfizerhelpfulanswers.com/pages/misc/Default.aspx>, (accessed 30 October 2008).

Pfizer offers a Helpful Answer Program that can assist employers with questions about pharmaceutical costs. Depending on pharmacy benefit design, this may provide a valuable resource for employees. Along that line, the Partnership for Prescription Assistance Program is another site that is supported by multiple agencies and may be a community resource to consider.

The American Diabetes Association has developed “Winning at Work: Detecting, Preventing, and Managing Diabetes for a Healthy Workplace.” This program creates a link between employers and a very valuable community resource. While it does not always link directly with the physician community, it provides an employer with a free toolkit from an extremely reputable source with a wealth of resources that do not need to be created from scratch.■



## Appendix B: Chapter Citations, Resources, and Websites

### Executive Summary

#### Citations:

1. U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, “NHE Projections 2007-2017, Forecast Summary and Selected Tables.” Available from: [www.cms.hhs.gov/NationalHealthExpendData/03\\_NationalHealthAccountsProjected.asp#TopOfPage](http://www.cms.hhs.gov/NationalHealthExpendData/03_NationalHealthAccountsProjected.asp#TopOfPage) (accessed 9 December 2008).
2. Claxton, G., Gabel, J. R., DiJulio, B., Pickreign, J., Whitmore, H., Finder, B., Jarlenski, M., and Hawkins, S. “Health Benefits In 2008: Premiums Moderately Higher, While Enrollment In Consumer-Directed Plans Rises In Small Firms.” *Health Affairs* 27, no. 6, (2008): w492-w502. Available from: Health Affairs <http://content.healthaffairs.org/cgi/content/abstract/hlthaff.27.6.w492> (accessed 2 October 2008).

### Chapter 1: Develop and Embrace an Organizational Vision for Health

#### Citations:

1. Edington, Dee. Interview by Marlene Abbott. 2 October 2008.
2. “The Business Response of Employers to Absence—Analytic Case Studies in Three Industries: Utilities, Finance and Retail.” *Integrated Benefits Institute* April 2008.
3. Loeppke, Taitel, Richling, Parry, Kessler, Hymel and Konicki. “Health and Productivity as a Business Strategy.” *Journal of Occupational and Environmental Medicine* 49 (2007): 712-721.
4. Goetzel R.Z., Long S.R., Ozminkowski R.J., Hawkins K., Wang S., Lynch W. “Health, absence, disability, and presenteeism cost estimates of certain physical and mental health conditions affecting U.S. employers.” *Journal of Occupational and Environmental Medicine* 46 (2004): 398-412.
5. Making the Business Case for Health and Productivity Management, -- by Sean Sullivan in *Journal of Occupational and Environmental Medicine*, v.46, n.6 supplement, June 2004.
6. Schultz, Alyssa and Edington, Dee. “Employee Health and Presenteeism: A Systemic Review.” *Journal of Occupational Rehabilitation* 17, (25 July 2007): 547-579.
7. Weatherly, Leslie A. “Human Capital—The Elusive Asset; Measuring and Managing Human Capital: A Strategic Imperative for HR -2003.” Available from: Research Quarterly [http://findarticles.com/p/articles/mi\\_m3495/is\\_3\\_48/ai\\_98830435/print?tag=artBody;col](http://findarticles.com/p/articles/mi_m3495/is_3_48/ai_98830435/print?tag=artBody;col) (accessed 25 August 2008).
8. Schultz and Edington, 15.
9. Health and Productivity Management: An Emerging Paradigm for the Workplace –by Larry Chapman and Sean Sullivan, in *The Art of Health Promotion*, v.7, n.3, July/August 2003.



## Resources:

- ❑ Colombi, Alberto, Pringle, Janice, Welsh, George. “Not Waiting for Godot: The Evolution of Health Promotion at PPG Industries.” *American Health and Drug Benefits* (April 2008) 28-36.
- ❑ Hunnicutt, David, Leffelman, Brittanie. “WELCOA’s 7 Benchmarks of Success: Developing Results-Oriented Wellness Programs One Company at a Time.” *2006 Wellness Council of America*. Available from: [www.welcoa.org](http://www.welcoa.org). (accessed 11 April 2008).
- ❑ Levy, James. “Costs of ‘Presenteeism’ Make Preventive Care a Worthy Investment.” *Prevention & Cure, Baltimore Business Journal* (1 June 2007), Available from: <http://www.bizjournals.com/baltimore/stories/2007/06/04/focus4.html> (accessed 10 September 2008).
- ❑ Mayo Clinic Health Management Resources. “Presenteeism and the Value of Productivity Instruments,” presented to NASA, Dec. 1, 2005. Available from: [http://ohp.nasa.gov/disciplines/hpromo/hpwTeam/meetings/presentations/2005-12\\_pres.pdf](http://ohp.nasa.gov/disciplines/hpromo/hpwTeam/meetings/presentations/2005-12_pres.pdf) (accessed 30 October 2008).
- ❑ National Business Group on Health. “Improving Health, an Employer Toolkit.” Contact NBGH, 50 F Street NW, Suite 600, Washington, DC 20001.
- ❑ Nicholson S., Pauly M.V., Polsky D., Sharda C., Szrek H., Berger, M.L. “Measuring the Effects of Work Loss on Productivity with Team Production.” *Health Economics* 15 (2006) 111–123.
- ❑ Partnership for Prevention. “Leading by Example CEO-to-CEO.” Available from: [http://www.prevent.org/LBE/LBE\\_USCC\\_FullBook.pdf](http://www.prevent.org/LBE/LBE_USCC_FullBook.pdf) (accessed 10 September 2008).
- ❑ IHPM’s Platinum Book: Practical Applications of the Health and Productivity Management Model
- ❑ Rosen, Robert. *The Healthy Company Strategies to Develop People, Productivity, & Profits* Tarcher/Putnam, 1991.
- ❑ Rubenstein, Sarah. “Keeping Workers Healthy Pays off at Dow Chemical.” *The Wall Street Journal Online*, 24 October 2005 (accessed 10 April 2008).
- ❑ WELCOA. “The Cost of Wellness, 2004 Expert Interview with Ron Goetzl.” Available from: [www.welcoa.org](http://www.welcoa.org) (accessed 10 April 2008).
- ❑ Wells, David A., M.Sc.; Ross, Joseph S. M.D., MHS; Detsky, Allan S. M.D., Ph.D. “What Is Different About the Market for Health Care?” *Journal of the American Medical Association*. 298 (2007) 23: 2785-2787.

## Websites for further information:

- ❑ AON Corporation, [www.aon.com](http://www.aon.com)
- ❑ Bridges to Excellence, [www.bridgestoexcellence.org](http://www.bridgestoexcellence.org)
- ❑ Integrated Benefits Institute, [www.ibiweb.org](http://www.ibiweb.org)
- ❑ Institute for Health and Productivity Management, [www.ihpm.org](http://www.ihpm.org)
- ❑ National Business Group on Health, [www.businessgrouphealth.org](http://www.businessgrouphealth.org)
- ❑ National Business Coalition on Health, [www.nbch.org](http://www.nbch.org)
- ❑ Partnership for Prevention, [www.prevent.org](http://www.prevent.org)
- ❑ Wharton, University of Pennsylvania, Research Center: Health Care Systems Department, [http://www.wharton.upenn.edu/faculty/acad\\_depts/hcmgdept.cfm](http://www.wharton.upenn.edu/faculty/acad_depts/hcmgdept.cfm)



## Chapter 2: Secure Senior Management Commitment and Participation

### Citations:

1. Integrated Benefits Institute Health & Productivity Snapshot; National Business Coalition on Health / American College of Occupational and Environmental Medicine Blueprint for Health; and the NCQA Quality Dividend Calculator.

### Resources:

- ❑ “The Health and Economic Implications of Worksite Wellness Programs,” *American Institute for Prevention Medicine Wellness*. Available from: [www.HealthyLife.com](http://www.HealthyLife.com) Johnson & Johnson. Johnson & Johnson Healthy People Initiatives: <http://www.jnj.com/connect/caring/employee-health/> (accessed 10 September 2008).
- ❑ Arizona Health Pulse. “Workers’ Poor Health Habits Costing Employers.” Study for Blue Cross Blue Shield of Arizona. Available from: <http://www.azhealthpulse.com/pdf/Arizona-HealthPulse.pdf> (accessed 10 September 2008).
- ❑ Centers for Disease Control and Prevention. “The Power of Prevention.” Available from: [http://www.cdc.gov/diabetes/ndep/power\\_to\\_prevent.htm](http://www.cdc.gov/diabetes/ndep/power_to_prevent.htm) (accessed 12 September 2008).
- ❑ Integrated Benefits Institute. “Winning Ways: How to Gain C-Suite Support for Health & Productivity Improvement,” DVD available free of charge from: [www.ibiweb.org](http://www.ibiweb.org).
- ❑ Healthy Human Capital: An Essential – and Appreciable – Asset Catches the Eye of the C-Suite – by Harris Allen and Sean Sullivan, in *Health & Productivity Management*, v.5, n.2, April 2006.
- ❑ National Quality Institute. “Healthy Workplace Employee Survey.” Available from: [www.nqi.ca/nqistore/product\\_details.aspx?ID=132](http://www.nqi.ca/nqistore/product_details.aspx?ID=132) (accessed 26 September 2008).
- ❑ NaturalNews survey results, part 3: “Making health changes that positively affect work performance available.” Available from: <http://www.naturalnews.com/019349.html> (accessed 26 September 2008).
- ❑ Nicholson et al. “How to Present the Business Case for Health Care Quality to Employers.” *Applied Health Economics and Health Policy* 4 (2005) 4: 209-218.
- ❑ Parry, T., Jinnett, K., Molmen, W., Lu, Y. Integrated Benefits Institute. “The Business Value of Health: Linking CFOs to Health and Productivity.” May 2006. Available for IBI members at: <http://ibiweb.org/do/PublicAccess?documentId=513> (Employer membership is free).
- ❑ Parry, T., Molmen, W., Newman, A., Durfee, D. Integrated Benefits Institute, “On the Brink of Change: How CFOs View Investments in Health and Productivity,” December 2002. Available for IBI members at: <http://ibiweb.org/do/PublicAccess?documentId=491> (Employer membership is free).
- ❑ The Health and Productivity Management Toolkit is a workplace resource created by the American College of Occupational and Environmental Medicine (ACOEM). The Toolkit promotes understanding of health and productivity management and the value of a healthy workforce by providing access to video, audio and written content – including more than 1,000 pages of academic and research material. The HPM Toolkit is periodically updated and is available through an on-line subscription at <http://www.acoem.org/publication.aspx?id=48>.



Websites for further information:

- ❑ Integrated Benefits Institute, [www.ibiweb.org](http://www.ibiweb.org)
- ❑ Michigan.gov Module 1: Management Leadership and Commitment  
[http://www.michigan.gov/documents/cis\\_wsh\\_module1\\_134124\\_7.doc](http://www.michigan.gov/documents/cis_wsh_module1_134124_7.doc) (accessed 10 September 2008).
- ❑ National Quality Institute, [www.nqi.ca](http://www.nqi.ca)
- ❑ Partnership for Prevention, [www.prevent.org](http://www.prevent.org)



## Chapter 3: Address Workplace Policies and the Work Environment

### Citations:

1. “Understanding Spread of Innovation Medical Home Grantee Meeting.” Available from: [www.medicalhomeinfo.org/grant/Grantee/grantee2004/Spread-Medical%20Home%20Grantee%20Meeting.ppt](http://www.medicalhomeinfo.org/grant/Grantee/grantee2004/Spread-Medical%20Home%20Grantee%20Meeting.ppt) (accessed 30 October 2008).
2. Nolan, K., Nielson, G., Schall, M. “Developing Strategies to Spread Improvements, From Front Office to Front Line: Essential Issues for Health Care Leaders.” Joint Commission on Accreditation of Health Care Organizations (2005) 62.

### Resources:

- ❑ Bandura, A. *Social Foundations of Thought and Action*. Englewood Cliffs, N.J.: Prentice Hall, Inc. 1986.
- ❑ Brown J., Duguid P. *The Social Life of Information*. Boston: Harvard Business School Press, 2000.
- ❑ Dixon, N. *Common Knowledge*. Boston: Harvard Business School Press, 2000.
- ❑ Gladwell, M. *The Tipping Point*. Boston: Little, Brown and Company, 2000.
- ❑ Massoud MR, Nielsen GA, Nolan K, Nolan T, Schall MW, Sevin C. “A Framework for Spread: From Local Improvements to System-Wide Change.” *IHI Innovation Series* white paper. Cambridge, MA: Institute for Health care Improvement (2006) Available from: <http://www.ihc.org/IHI/Results/WhitePapers/AFrameworkforSpreadWhitePaper.htm> (accessed 10 July 2008). (Membership is free.)
- ❑ Merrill R.M., Aldana S.G., Greenlaw R.L., Diehl H.A., Salberg A., Englert H. “Can newly acquired healthy behaviors persist? An analysis of health behavior decay.” *Preventing Chronic Disease* 5 (2008) 1. Available from: [http://www.cdc.gov/pcd/issues/2008/jan/07\\_0031.htm](http://www.cdc.gov/pcd/issues/2008/jan/07_0031.htm). (accessed 10 July 2008).
- ❑ Nolan, T.W. “Execution of Strategic Improvement Initiatives to Produce System-Level Results.” *IHI Innovation Series* white paper. MA: Institute for Health Care Improvement 2007. Available from: <http://www.ihc.org/IHI/Results/WhitePapers/ExecutionofStrategicImprovementInitiativesWhitePaper.htm> (accessed 10 October 2008) (Membership is free).
- ❑ Prochaska J., Norcross J., Diclemente C. “In Search of How People Change.” *American Psychologist* September 1992.
- ❑ Measuring Employee Productivity: A Guide to Self-Assessment Tools (IHPM’s “Gold Book”).
- ❑ IHPM’s Platinum Book: Practical Applications of the Health and Productivity Management Model.
- ❑ Academy Briefs and Research Abstracts from the published peer-reviewed literature, on the Academy web site – [www.ahpm.org](http://www.ahpm.org)
- ❑ Rogers E. *Diffusion of Innovations*. New York: The Free Press, 1995.
- ❑ Rosen, Robert. *The Healthy Company Strategies to Develop People, Productivity, & Profits* Tarcher/Putnam, 1991.



Websites for further information:

- ❑ Center for Health Improvement, Health Policy Guide, [www.healthpolicyguide.org/doc.asp?id=3144](http://www.healthpolicyguide.org/doc.asp?id=3144) (accessed 10 September 2008).
- ❑ Michigan.gov Module 1: Management Leadership and Commitment  
[www.michigan.gov/documents/cis\\_wsh\\_module1\\_134124\\_7.doc](http://www.michigan.gov/documents/cis_wsh_module1_134124_7.doc) (accessed 10 September 2008).
- ❑ Partnership for Prevention, worksite health [www.prevent.org/content/view/29/39/](http://www.prevent.org/content/view/29/39/) (accessed 20 September 2008).



## Chapter 4: Employ Diagnostics, Informatics and Metrics

### Citations:

1. Loeppke, Ronald M.D., MPH; Taitel, Michael Ph.D.; Richling, Dennis M.D.; Parry, Thomas Ph.D.; Kessler, Ronald C. Ph.D.; Hymel, Pam M.D., MPH; Konicki, Doris MHS. “Health and Productivity as a Business Strategy.” Fast Track Article, *Journal of Occupational & Environmental Medicine*, 49 (July 2007) 7: 712-721.

### Resources:

- ❑ The Health Institute. *Tufts Medical Center Work Limitations Questionnaire*. Information available at: <http://160.109.101.132/icrhps/resprog/thi/wlq.asp> (accessed 16 October 2008).
- ❑ HERO Assessment for Best Health Practices. Available from: <http://www.the-hero.org>, (accessed 16 October 2008).
- ❑ Integrated Benefits Institute: includes health & productivity snapshot business case modeling tool (<http://ibiweb.org/do/PublicAccess?documentId=781>), IBI lost time and disability benchmarking (<http://ibiweb.org/do/PublicAccess?documentId=780>) and the HPQ-Select self-report tool identifying lost time and lost productivity by 27 medical conditions (<http://ibiweb.org/do/PublicAccess?documentId=785>). Available for IBI members (Employer membership is free).
- ❑ Jinnett, K and Molmen, W. Integrated Benefits Institute, “The Business Response of Employers to Absence—Analytic Case Studies in Three Industries: Utilities, Finance and Retail.” April 2008.
- ❑ National Business Group on Health, EMPAQ®— Employer Measures of Productivity, Absence, and Quality™. Available to members at [www.empaq.org](http://www.empaq.org).
- ❑ State of Health Care Quality, 07 Industry Trends and Analysis. Available from: [http://www.ncqa.org/Portals/0/Publications/Resource%20Library/SOHC/SOHC\\_07.pdf](http://www.ncqa.org/Portals/0/Publications/Resource%20Library/SOHC/SOHC_07.pdf) (accessed 2 September 2008).

### Websites for further information:

- ❑ Health Enhancement Research Organization (HERO) [www.the-hero.org](http://www.the-hero.org)
- ❑ Health and Productivity Questionnaire (HPQ) Data Consortium, [www.hpq.org](http://www.hpq.org)
- ❑ Institute for Health and Productivity Management, [www.ihpm.org](http://www.ihpm.org)
- ❑ Integrated Benefits Institute, [www.ibiweb.org](http://www.ibiweb.org) – Industry group comparisons available to employer members with free IBI employer membership
- ❑ National Business Group on Health, [www.businessgrouphealth.org](http://www.businessgrouphealth.org)
- ❑ National Business Coalition on Health, [www.nbch.org](http://www.nbch.org)
- ❑ National Coalition on Health Care, [www.nchc.org](http://www.nchc.org)



## Chapter 5: Set Health Goals and Tailor Program Elements to Meet Them

### Citations:

1. Rosen, B. and Barrington, L. “Weights & Measures: What Employers Should Know about Obesity.” New York, NY: The Conference Board, April 2008.

### Resources:

- ❑ Action on Smoking and Health “Smoking in the Workplace Costs Employers Money.” Available from: <http://www.ash.org/papers/h100.htm> (accessed 7 September 2008).
- ❑ Centers for Disease Control and Prevention. “Successful Business Strategies to Prevent Heart Disease and Stroke.” Toolkit Guide. Available from: [www.cdc.gov/DHDSP/library/toolkit/pdfs/toolkit.pdf](http://www.cdc.gov/DHDSP/library/toolkit/pdfs/toolkit.pdf) (accessed 14 September 2008).
- ❑ Integrated Benefits Institute. “Employer Incentives for Workforce Health and Productivity—Actions for American Business Today: Expert Tips from the Member Solutions Board of the Integrated Benefits Institute.” October 2008. Available at <http://ibiweb.org/do/PublicAccess?documentId=879>.
- ❑ Integrating Employee Health: A Model Program from NASA. Available from: [http://www.nap.edu/catalog.php?record\\_id=11290](http://www.nap.edu/catalog.php?record_id=11290) (accessed 16 October 2008).
- ❑ Jinnett, K., Parry, T., and Molmen, W. “Employer Incentives for Workforce Health and Productivity. Integrated Benefits Institute.” October 2008. Available for IBI members at <http://ibiweb.org/do/PublicAccess?documentId=879> (Employer membership is free).
- ❑ Mahoney, John J. “Value-Based Benefit Design: Using a Predictive Modeling Approach to Improve Compliance.” *Journal of Managed Care Pharmacy* 14 (2008) 6 (suppl S-b) S3-S8.
- ❑ National Business Group on Health. Employers’ Guide to Behavioral Health Services. Available from: <http://www.businessgrouphealth.org>
- ❑ National Business Group on Health Investing in Maternal & Child Health: An Employer’s Toolkit. Available from: <http://www.businessgrouphealth.org>
- ❑ National Business Group on Health. “A Purchaser’s Guide to Clinical Preventive Services: Moving Science into Coverage.” Available from: <http://www.businessgrouphealth.org/benefitsttopics/topics/purchasers/index.cfm> (accessed 16 October 2008).
- ❑ Productivity Impact Model. Depression calculator: Available at: <http://www.depressioncalculator.com> or <http://www.workplacementalhealth.org>.
- ❑ Scott, Matthews. “Obesity More Costly to U.S. Companies Than Smoking, Alcoholism.” April 9, 2008. Available from: <http://www.workforce.com> (accessed 10 July 2008).
- ❑ The Health and Productivity Management Toolkit is a workplace resource created by the American College of Occupational and Environmental Medicine (ACOEM). The Toolkit promotes understanding of health and productivity management and the value of a healthy workforce by providing access to video, audio and written content – including more than 1,000 pages of academic and research material. The HPM Toolkit is periodically updated and is available through an on-line subscription at <http://www.acoem.org/publication.aspx?id=48>.



Websites for further information:

- ❑ Action on Smoking and Health, [www.ash.org](http://www.ash.org)
- ❑ Integrated Benefits Institute: [www.ibiweb.org](http://www.ibiweb.org) business tools  
<http://ibiweb.org/do/PublicAccess?documentId=875> (accessed 13 October 2008).
- ❑ National Business Group on Health, [www.businessgrouphealth.org](http://www.businessgrouphealth.org)
- ❑ National Coalition on Health, [www.nbch.org](http://www.nbch.org)
- ❑ Partnership for Prevention clinical preventive services available at  
<http://www.prevent.org/content/view/21/30/> (accessed 22 September 2008).
- ❑ Partnership for Prevention, Obesity, Activity and Nutrition available at:  
<http://www.prevent.org/content/view/21/30/> (accessed 22 September 2008).
- ❑ Partnership for Prevention, Tobacco Use available at <http://www.prevent.org/content/view/28/38/>  
(accessed 22 September 2008).



## Chapter 6: Create a Value-Based Plan Design (VBPD)

### Citations:

1. Chernew, Michael PhD, Professor of Health Care Policy Harvard Medical School. May 14, 2008, testimony before the Subcommittee on Health of the House Committee on Ways and Means available for download at: [http://www.sph.umich.edu/vbidcenter/pdfs/Chernew%20Testimony%2005-12-08%20\\_final.pdf](http://www.sph.umich.edu/vbidcenter/pdfs/Chernew%20Testimony%2005-12-08%20_final.pdf) (accessed 11 September 2008).
2. Chernew, M., Gibson TB., Yu-Isenberg, K., Sokol, M.C., Rosen, A.B., Fendrick, A.M. “Effects of Increased Patient Cost Sharing on Socioeconomic Disparities in Health Care” *The Journal of General Internal Medicine* (2008) 1131-6.
3. Value-based insurance design: Employee compliance rises as medicine co-pays drop. *Consumer Driven Healthcare*. 7 (March 2008) 3: 2. Available for download at: <http://www.sph.umich.edu/vbidcenter/pdfs/March%202008%20CDH.pdf> (accessed 30 October 2008).

### Resources:

- ❑ Baase, Catherine, Berger, Marc, Billotti, Gary; Nicholson, Sean; Ozminkowski, Ron; Pauly, Mark; Polsky, Daniel; Sharda, Claire; “How to Present the Business Case for Health care Quality to Employers.” August 01, 2005 in *Knowledge@Wharton*. Available from: <http://knowledge.wharton.upenn.edu/paper.cfm?paperID=1314> (accessed 2 July 2008).
- ❑ Chernew, M. and Fendrick, A.M. “Value and Increased Cost Sharing in the American Health Care System,” *Health Services Research*. 43(1 Apr 2008) 2: 451 Available from: <http://www.sph.umich.edu/vbidcenter/news.htm> (accessed 16 October 2008).
- ❑ Chernew, M.E., Shah, M.R., Wegh, A., Rosenberg, S.N., Juster, I.A., Rosen, A.B., Sokol, M.C., Yu-Isenberg, K., Fendrick, A.M. “Impact of Decreasing Copayments on Medication Adherence Within a Disease Management Environment.” *Health Affairs* 27 (2008) 103-112.
- ❑ Denny, C.C., Emanuel E.J., Pearson, S.D. “Why Well-Insured Patients Should Demand Value-Based Insurance Benefits.” *Journal of the American Medical Association* 297 (June 13, 2007) 22: 2515-2518.
- ❑ Fendrick, A.M., and Chernew, M.E. “Fiscally Responsible, Clinically Sensitive, Cost Sharing: Contain Costs While Preserving Quality.” *American Journal of Managed Care* 13 (June 2007) 325-327.
- ❑ Goldman, D.P., Joyce G.F., Zheng Y. “Prescription Drug Cost Sharing.” *Journal of the American Medical Association* 298 (4 July 2007) 1: 61-9.
- ❑ Jinnett, K., Parry, T., and Lu, Y. “Integrated Benefits Institute: A Broader Reach for Pharmacy Plan Design: The Disability Effects of Cost Sharing.” June 2007. Available for IBI members at <http://ibiweb.org/do/PublicAccess?documentId=519> (Employer membership is free.)
- ❑ Mahoney, John J. “Value-Based Benefit Design: Using a Predictive Modeling Approach to Improve Compliance.” *Journal of Managed Care Pharmacy* 14 (2008) 6 (suppl S-b):S3-S8.
- ❑ Mahoney, Jack and Hom, David. “Total Value Total Return,” 2006 Available for ordering from: <http://www.centervbhm.com/vb/totalvaluetotalreturn.html>
- ❑ Pan F, Chernew, M.E., Fendrick, A.M. “Impact of Fixed-Dose Combination Drugs on Adherence to Prescription Medications.” *Journal of General Internal Medicine*, 23 (May 2008) 5: 611-614.
- ❑ Value-Driven Health Care, A Purchaser’s Guide Version 2.0, May 2007. Available from: [www.leapfroggroup.org/media/file/Employer\\_Purchaser\\_Guide\\_05\\_11\\_07.pdf](http://www.leapfroggroup.org/media/file/Employer_Purchaser_Guide_05_11_07.pdf)



Websites for further information:

- ❑ Agency for Healthcare Research and Quality, Lessons from the Pioneers Theory and Reality of Value-Based Purchasing. Available from: <http://www.ahrq.gov/QUAL/meyerrpt.htm>
- ❑ Bridges To Excellence, [www.bridgestoexcellence.org](http://www.bridgestoexcellence.org)
- ❑ Center for Health Value Innovation, [www.vbhealth.org](http://www.vbhealth.org)
- ❑ Center for Value Based Insurance Design, [www.sph.umich.edu/vbidcenter](http://www.sph.umich.edu/vbidcenter)
- ❑ eValue8™ - Tool to measure the effectiveness of an organization's plan in terms of total health management. <http://www.nbch.org/eValue8/index.cfm>
- ❑ Institute for Health and Productivity Management, <http://www.ihpm.org> (Members have access to: Tools for Measuring Full Business Impact of Workforce Health).
- ❑ Integrated Benefits Institute, [www.ibiweb.org](http://www.ibiweb.org)
- ❑ National Business Group on Health Purchasers Guide available at [www.businessgrouphealth.org/benefitstopics/topics/purchasers/index.cfm](http://www.businessgrouphealth.org/benefitstopics/topics/purchasers/index.cfm) (accessed 19 September 2008).
- ❑ National Committee for Quality Assurance 2007 Annual Report available from: [www.ncqa.org/LinkClick.aspx?fileticket=SINjD7N5D54%3d&tabid=64&mid=3057&forcedownload=true](http://www.ncqa.org/LinkClick.aspx?fileticket=SINjD7N5D54%3d&tabid=64&mid=3057&forcedownload=true) (accessed 22 September 2008).

## Chapter 7: Integrate Patient-Centered Medical Home and Chronic Care Management

Citations:

1. Patient-Centered Primary Care Collaborative. "Evidence on the effectiveness of the patient-centered medical home on quality and cost." Available from: <http://www.pcpc.net/node/10> (accessed 20 October 2008).
2. Patient Centered Primary Care Collaborative. "Purchasers Guide to PCMH," page 18, Available from: <http://www.pcpc.net> (accessed 2 September 2008).
3. Centers for Disease Control and Prevention, content source: National Center for Chronic Disease Prevention and Health Promotion. Available at: <http://www.cdc.gov/nccdphp/> (accessed 14 September 2008).
4. Patient Centered Primary Care Collaborative. "Purchasers Guide to PCMH," page 11. Available from: <http://www.pcpc.net> (accessed 2 September 2008).



#### Resources:

- ❑ American Diabetes Association. “Winning at Work: Detecting, Preventing and Managing Diabetes for a Healthy Workplace.” Available from: <http://www.diabetes.org/communityprograms-and-localevents/waw-default.jsp>
- ❑ Grumbach, K. and Bodenheimer T. “A Primary Care Home for Americans: Putting the House in Order.” *Journal of the American Medical Association*, 288 (2002) 7: 889–893.
- ❑ Health and Human Services. “The Advanced Medical Home: A Patient-Centered, Physician-Guided Model of Health Care Policy.” Monograph of the American College of Physicians, 22 January 2006. Available from: [http://www.hhs.gov/healthit/ahic/materials/meeting03/cc/ACP\\_Initiative.pdf](http://www.hhs.gov/healthit/ahic/materials/meeting03/cc/ACP_Initiative.pdf)
- ❑ Joint Principles of the Patient-Centered Medical Home, March 2007. Available from: <http://www.medicalhomeinfo.org/Joint%20Statement.pdf>
- ❑ National Committee on Quality Assurance. “Coming Home to Better Care,” Annual Report 2007, available for download at: [http://www.ncqa.org/Portals/0/Publications/Resource%20Library/Annual%20Report/NCQA\\_Annual\\_2007.pdf](http://www.ncqa.org/Portals/0/Publications/Resource%20Library/Annual%20Report/NCQA_Annual_2007.pdf)
- ❑ Patient-Centered Primary Care Collaborative. “Purchasers Guide to PCMH.” Available from: <http://www.pcpc.net>

#### Websites for further information:

- ❑ Centers for Disease Control and Prevention, Preventing Chronic Disease, [www.cdc.gov/pcd/](http://www.cdc.gov/pcd/)
- ❑ National Committee for Quality Assurance, [www.ncqa.org](http://www.ncqa.org)
- ❑ Partnership for Prescription Assistance, [www.pparx.org/Intro.php](http://www.pparx.org/Intro.php)
- ❑ Patient-Centered Primary Care Collaborative, [www.pcpc.net](http://www.pcpc.net)
- ❑ Pfizer Helpful Answers, [www.pfizerhelpfulanswers.com/pages/misc/Default.aspx](http://www.pfizerhelpfulanswers.com/pages/misc/Default.aspx)



## Appendix C: Program Elements

**Know your numbers.** There are several vendor-related and home-grown programs attempting to familiarize employees with their biometrics. These may include items such as weight, body mass index, cholesterol, and/or sugar level, blood pressure, and stress level.

**Health-friendly environment.** This includes changing in the work environment to support a healthy organizational culture, such as stocking the vending machines and cafeteria with healthy food options, financial subsidy of healthy food choices, declaring a tobacco-free campus, and offering on-site walking paths.

**On-site fitness centers.** Depending on the number of participants, this may be a viable option, rather than contracting with off-site fitness centers.

**On-site clinics.** When consideration is given to the impact on medical costs, absence, presenteeism, and early return-to-work, evidence shows that onsite clinics save money. This may result in savings through decreased time from work and improved compliance with evidence-based guidelines and clinical outcomes. The level of staffing at a location is a factor for consideration if an on-site clinic is beneficial. Organizations need to assess when the model pays off. In addition to an on-site clinic; on-site pharmacy care, counseling, and physical therapy are additional options.

**Flexible work schedules.** These are options to allow participants time for exercise or attending health-related appointments and disease or health-related classes, and include compressed work week, e.g., working four 10-hour days rather than five 8-hour days.

**Focus on health promotion.** There are multiple vendors that provide health promotion, as well as many employers creating home-grown programs. There are pros and cons of each option. In a WELCOA expert interview, Ron Goetzel identified the pros and cons to consider in a “make-versus-buy” decision. Programs that are home-grown may be shaped to the organization’s unique population, culture, and politics. Home-grown programs may be less expensive and offer staff development and team building opportunity. However, vendors may be successful because it is their full-time focus. Vendors have the infrastructure developed and are devoted to the development of new programs and usually have systems in place to measure and monitor. Vendor programs are usually easier to renew or terminate as well. Available at: [http://www.welcoa.org/freeresources/pdf/goetzel\\_interview\\_cost.pdf](http://www.welcoa.org/freeresources/pdf/goetzel_interview_cost.pdf). (accessed 20 October 2008)

**Educational seminars/worksite classes/brown bag workshops.** Based on feedback from employees, an organization may find areas that participants want further education related to health and/or wellness.

**Health coaches.** Organizations have successfully integrated health coaches into the workplace across multiple locations. This is a high touch item which is more likely to drive behavior change than telephone-based coaching or online programs. One-on-one contact can be important in securing employee attention and driving behavior change.



**Measurement.** Chapter 4 explains the importance of measurement to health and productivity initiatives. Corporate measures are needed to make the business case for health and productivity, to establish a baseline, to focus efforts on the right conditions, and to monitor results. Unless an employer has the resources to invest in an integrated data warehouse, employers must use other available tools to accomplish these measurement goals. Three types of measurement tools exist:

- Modeling tools to adjust a large, national database to reflect the employer's own workforce demographics and corporate descriptors. Modeling tools generate results without needing claims information. Tools, at a minimum, predict the lost time from absence and presenteeism, if the employer's workforce is typical. Some tools go so far as to calculate the employer's health-related lost productivity from absence and presenteeism, by medical condition
- Employee self-report tools that, at a minimum, quantify the amount of actual health-related absence and presenteeism in the workforce. Some tools go so far as to calculate the resulting lost productivity, focus interventions by identifying the extent to which various medical conditions drive such lost time and indicate the extent to which the condition is being treated by a medical professional
- Benchmarking lost-time and group health programs against industry group comparisons. Some benchmarking tools enable on-line comparisons by industry group and benefit plan and include robust, multi-level Standard Industrial Classification comparisons

**Health offerings.** There are multiple options for programs and may include:

- Weight management programs and/or diet and nutrition programs
- Behavioral health programs
- Disease management programs which will provide short term savings and quality of care improvement if properly designed, executed, and communicated
- Stress management programs
- Nutrition programs
- Tobacco cessation programs
- Physical activity programs

**Communication.** There is a wide variety of options for communicating with employees. Internal marketing is an ongoing and critical process. An organization is never done communicating. It may be related to all the items in this section and/or the entire document. The closer communications get to a personal touch, the greater the chance of driving behavioral change. Refer back to Chapter 3, "Address Workplace Policies and the Work Environment", for consideration of low-to-high touch communication methods. Some common communication methods seen from employers include:

- Intranet web-based health tools / site
- Monthly health newsletters
- Self-help guides. These guides may come in multiple forums. Hard copies may be created and placed in key employee locations such as break areas. Organizations have successfully used their intranet as an option to post materials as well. Much of this will depend on an organization's culture and access to technology
- Employee orientation includes health. As an employee is indoctrinated into an organization's culture, there should be an emphasis on the health-related benefits, programs, and how senior management receives feedback. Create a system for two-way communication



**Creating a culture of health.** Communicating health is not just about how the participant may increase their health status. Participants need to be fluent in understanding the culture of health and how their benefits are designed to promote health. There are program elements that should be taken into consideration as health initiatives are developed. They include items such as:

- Elements that encourage health: health and wellness screenings, physicals, health screening (blood pressure, cholesterol/HDL testing, BMI, glucose), preventive services (mammograms, colonoscopy, PAP smears, prostate checks), risk reduction, and health promotion. Many organizations offer these at zero co-pay to their members to promote health
- Elements that assist participants in decision-making:
  - Triage/Ask-a-Nurse programs
  - Health library/reference books
- Completion of health risk assessments (HRAs)
- Incentives such as gift cards, raffles, employee contributions to premium
- Pay for performance
- Pharmacy benefit design
- Non-tobacco use premium credit
- Access to:
  - Primary care (and if on-site clinic is an option);
  - Secondary care
  - Mental healthcare
  - Chronic care
  - Dental care
  - Vision care
  - Short-term disability
  - Long-term disability
  - Workers' Compensation
  - Family Medical Leave Act (FMLA)



## Appendix D: Glossary/Terms.

*Disclaimer* - This glossary may contain information related to business products. This information is provided solely as a convenience to the users of this document. CAWG does not endorse or directly support any of the products in this glossary.

<b>ACE Inhibitors</b>	“Drugs that inhibit ACE (angiotensin converting enzyme) which is important to the formation of angiotensin II. Angiotensin II causes arteries in the body to constrict and thereby raises the blood pressure. ACE inhibitors lower the blood pressure by inhibiting the formation of angiotensin II. This relaxes the arteries. Relaxing the arteries not only lowers blood pressure, but also improves the pumping efficiency of a failing heart and improves cardiac output in patients with heart failure. ACE inhibitors are therefore used for blood pressure control and congestive heart failure.” Available from: <a href="http://www.medterms.com">www.medterms.com</a> (accessed 22 September 2008).
<b>Allergy Shots</b>	“These may offer the best relief for employees with persistent allergies that don't respond to medication or if the side effects of allergy medication are intolerable. In children, allergy shots can reduce asthma symptoms and may even play a role in preventing asthma in children who have hay fever.” Available from: Mayo Clinic: <a href="http://www.mayoclinic.com/health/allergy-shots/AA00017">www.mayoclinic.com/health/allergy-shots/AA00017</a> (accessed 23 September 2008).
<b>Behavioral Health Programs</b>	These programs are related to behavioral difficulties and diagnoses including: depression, co-existing chemical dependency issues, anxiety and panic disorders, eating disorders, trauma/abuse recovery, dissociative disorders, suicidal behaviors, self-harmful behaviors, obsessive compulsive disorders.
<b>Biometric Screenings</b>	Patient screenings that include checking blood pressure, cholesterol, triglycerides, weight and blood sugar.
<b>Blood Pressure Screenings</b>	Should be part of a routine screening. “In adults with diagnosed hypertension, six counseling, treatment, and monitoring sessions are recommended per year.” (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services”).
<b>Body Mass Index</b>	“A key index for relating a person's body weight to their height. The body mass index (BMI) is a person's weight in kilograms (kg) divided by their height in meters (m) squared. The National Institutes of Health (NIH) now defines normal weight, overweight, and obesity according to the BMI rather than the traditional height/weight charts. Since the BMI describes the body weight relative to height, it correlates strongly (in adults) with the total body fat content. The Body Mass Index (BMI) is widely used as an index of body composition and weight. BMI's in the range of 18.5 to 24.9 are generally considered to be optimal for adults. “Underweight” is generally defined as a BMI less than 18.5, “overweight” as BMI between 25 to 29.9, and “obesity” as a BMI greater than 30. Age- and gender-specific standards also exist for children and adolescents that take into account the changes in body composition that occur as children grow. The National Heart, Lung, and Blood Institute (NHLBI) recommends that surgical procedures be reserved for obese patients with class III obesity (BMI greater than 40) and patients with class II obesity (BMI of 35 to 39.9) who have at least one obesity-related illness. Surgical procedures, such as bariatric surgery, are effective for treating obesity in the short-term (on average, extremely obese patients lose 10 to 159 kg [22 to 349.8 lbs] in 1 to 5 years). Note, however, that some very muscular people may have a high BMI without undue health risks.” Screening for obesity may also include measurement of waist circumference because central adiposity (excess fat around the middle) can also increase an individual's risk of developing cardiovascular disease. A waist circumference greater than 102 centimeters for men and 88 centimeters for women is associated with an increased risk of cardiovascular disease. However, waist measurements are not reliable indicators of cardiovascular disease risk in obese patients with a BMI of 35 or above. Available from: <a href="http://www.medterms.com">www.medterms.com</a> (accessed 23 September 2008).
<b>Breast Cancer Screening</b>	Begin at age 40 at least every one to two years thereafter; earlier if at high risk. (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services”).
<b>Brown Bag Workshops</b>	Brown bag lunches are held periodically, during which health experts from within and outside the organization share information about issues like heart disease, health, safety, nutrition, etc. Help employees manage their work-life issues by sponsoring brown bag lunch series of speakers that features expert speakers on topics: stress management, cholesterol-know your numbers, healthy eating, bone density screening, weight management, nutrition, etc.
<b>Cervical and Vaginal Cancer Screening</b>	“All women aged 21 to 65 or within 3 years of the onset of sexual activity: screen at least once every three years and no more than once per calendar year. For women over 65, screen as medically indicated.” (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services”).



<b>Cholesterol/High Density Lipoprotein (HDL) Testing</b>	“All adults should be screened at least every 5 years. Adults with a lipid disorder should receive six counseling, treatment, and monitoring sessions per year.” (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services”).
<b>Chronic Care, Access To</b>	Refers to medical care which addresses pre-existing or long term illness, as opposed to acute care, which is concerned with short-term or severe illness of brief duration. Chronic medical conditions include, but are not limited to: asthma, emphysema, chronic bronchitis, congestive heart disease, cirrhosis of the liver, hypertension, and depression. Chronic medical care accounts for more than 75% of healthcare dollars spent in the US.
<b>Chronic Care/Disease Management Programs</b>	Is the concept of improving a patient’s clinical condition, reducing healthcare costs and/or improving quality of life for individuals with chronic disease conditions by preventing or minimizing the effects of a disease, or chronic condition, through integrative care? The underlying premise is that when the right tools, experts, and equipment are applied to a population, then labor costs (specifically: absenteeism, presenteeism, and direct insurance expenses) can be minimized in the near term, or resources can be provided more efficiently. Concerned with common chronic illnesses, and the reduction of future complications associated with those diseases and may include: coronary heart disease, kidney failure, hypertension, heart failure, obesity, diabetes, asthma, cancer, arthritis, depression, and other common ailments. Disease management components include: population identification processes; evidence-based practice guidelines; collaborative practice models to include physician and support-service providers; patient self-management education (may include primary prevention, behavior modification programs, and compliance/surveillance); process and outcomes measurement, evaluation, and management; and routine reporting/feedback loop (may include communication with patient, physician, health plan and ancillary providers, and practice profiling).
<b>Claim</b>	An itemized statement of services rendered by a healthcare provider for a given patient. The claim is submitted to a health benefits plan for payment. Also, a request for payment under an employee benefits plan (pension or health and welfare) or insurer by a plan participant or beneficiary for the payment of certain benefits. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Clinical Outcomes</b>	Health status changes or effects that individual patients experience resulting from the delivery of healthcare, usually measured in terms of morbidity, mortality, functional capability, and satisfaction with care. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Colon and Rectal Cancer Screening</b>	“All adults over 50: screen every 5 to 10 years depending on method.” (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services”).
<b>Consumer-Driven Health Care</b>	Any type of employer-sponsored health benefits plans or initiative that seeks to give employees greater responsibility for choosing their own healthcare and provides incentives for them to seek the most cost-effective care. Internet-based plan administration and internet use by employees for personal health management can be part of these plans. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Co-Pay Reductions For Preventive Services</b>	Preventive medicine physicians focus on medical services that help employees get healthy and stay healthy. Preventive medicine is a proactive approach, designed to avert and avoid disease. Medicare pays for many preventive services, including : cardiovascular screening, smoking cessation (counseling to quit smoking), cancer tests, breast cancer screening (mammograms), cervical and vaginal cancer screening (pap test and pelvic exam), colon cancer screening (colorectal), prostate cancer screening (PSA), shots: flu, pneumococcal, hepatitis B; bone mass measurements, diabetes screening, supplies, and self-management training, glaucoma tests and one-time "Welcome to Medicare" physical exam. Available from: Medicare Preventive Services, <a href="http://www.medicare.gov/Health/Overview.asp">www.medicare.gov/Health/Overview.asp</a> (accessed 23 September 2008).
<b>Demographics</b>	The statistical study of the characteristics of a given population. May include such factors as birth rate, age, and gender, marital status, income, employment, urban/rural distribution and mobility. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Dental Care, Access To</b>	Dentistry, more appropriately "dental medicine", is the art and science of prevention, diagnosis and treatment of conditions, diseases, and disorders of the oral cavity, the maxillofacial region, and its associated structures, as it relates to human beings. Available from: <a href="http://www.wikipedia.com">www.wikipedia.com</a> (accessed 23 September 2008).
<b>Depression Screening</b>	Should occur whenever medically indicated. (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services”).



<b>Diabetes/Glucose Testing</b>	If results from other tests indicate high blood pressure, high cholesterol or triglycerides, obesity, or if there is a family history of diabetes, then physician will determine frequency of testing. NBGH recommends all adults over 50 are screened once every three years and high risk adults once every two years. (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services”).
<b>Diet, Physical Activity, and Other Lifestyle Practices</b>	Goals, such as not smoking cigarettes and reduction of stress, are important in the prevention of chronic diseases. Proper nutrition and other healthy lifestyle practices also aid in maintaining individual well-being and productivity. The worksite is an ideal place to teach people about good health habits, including sound nutrition, weight control, and exercise practices. It is an excellent forum for efficiently disseminating information and monitoring and reinforcing changes that have been made. Nutrition programs rank among the most commonly included activities in health programs sponsored by employers, labor unions and, sometimes, jointly. In addition to formal classes and programs, other supportive educational efforts such as newsletters, memos, payroll inserts, posters, bulletin boards, and electronic mail (e-mail) can be offered. Nutrition education materials can also reach employees' dependents through mailings to the home and making classes and seminars available to homemakers who are the gatekeepers of their families' food intake practices and habits. These approaches provide useful information that can be applied easily both at the worksite and elsewhere, and can help reinforce formal instruction and encourage workers to enroll in programs. Moreover, carefully targeted materials and classes can have a very significant impact on many people, including the families of workers, especially their children, who can learn and adopt good nutrition practices that will last a lifetime and be passed on to future generations. Nutrition is the science that studies how what people eat affects their health and performance, such as foods or food components that cause diseases or deteriorate health (such as eating too many calories, which is a major contributing factor to obesity, diabetes, and heart disease). The field of nutrition also studies foods and dietary supplements that improve performance, promote health, and cure or prevent disease, such as eating fibrous foods to reduce the risk of colon cancer, or supplementing with vitamin C to strengthen teeth and gums, and to improve the immune system.
<b>Disability</b>	A condition that renders an insured person incapable of performing one or more duties of his or her regular occupation. Benefit plan definitions of disability vary. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Disease Burden</b>	Also known as “burden of disease.” This term can refer to the overall impact of diseases and injuries at the individual level, at the societal level, or to the economic costs of diseases. (World Health Organization, <a href="http://www.who.int/trade/glossary/story036/en/index.html">www.who.int/trade/glossary/story036/en/index.html</a> ) It refers to the magnitude of a health problem in an area, measured by mortality (deaths), morbidity (persons affected by disease or illness), and other indicators such as permanent disability. Knowledge of the burden of disease can help determine where investment in health interventions and systems should be targeted. Disease burden studies are carried out at global, regional, and national levels to guide vaccine investment policy and introduction decisions. Available from: GAVI Alliance, <a href="http://www.gavialliance.org/media_centre/glossary/index.php">www.gavialliance.org/media_centre/glossary/index.php</a> (accessed 9 December 2008).
<b>Disease Management</b>	A proactive, integrated systems approach targeting individuals who are, or may become, at risk for chronic conditions. Uses educational and prevention initiatives, careful monitoring techniques, patient self-care and evidence based clinical practice guidelines to improve health outcomes and reduce healthcare costs for chronic disease patients. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Educational Seminars</b>	. Knowledge about health and wellness is the cornerstone to making healthy decisions. These offer opportunities to learn about various health issues using an array of teaching methods and formats. (See: brown bag lunches). Posters and health exhibits on various health issues are often displayed in the lobby. Information on health issues is often shared in the participant newsletter which is emailed to all participants and community partners and is available on the employer website.



<b>Employee Assistance Programs (EAP)</b>	<p>EAP and MAP (Membership Employee Plan) may be used interchangeably. Employee-benefit programs offered by employers for purposes of assisting employees manage personal problems that might adversely impact their quality of life, health, and work performance (absenteeism, presenteeism, productivity, and morale). It may serve as a resource for managers and supervisors for managing employees whose job performance is adversely affected by some personal issue, or employees whose performance is deteriorating. EAPs generally include assessment, short-term counseling and referral services for additional resources. Examples may include: financial/legal issues, family/marital relationship issues, substance abuse, anger management, depression/stress management issues, child/elder care resources, health concerns, etc. To be successful, EAP must be integrated with employee relations, benefit, and medical department.</p>												
<b>Employee Orientation Includes Health</b>	<p>Assists new employees with the orientation of the new employee to the organization. Employers have a responsibility to ensure that their new employees' first days on the job provide a successful launch to their careers. It is critically important that we provide them with the foundation tools, resources, and organizational perspective that ensure their rapid inclusion within our workforce and culture. The message sent during orientation communicates that health is something the employer values. During orientation discussion with the new employee, take the opportunity to stress "how we do things around here". This is the best time to create the desired attitude for workers to have in performing their jobs. Remember to set the tone for the remainder of their employment. Make it positive and stress the things which are truly important to the organization.</p>												
<b>Employer</b>	<p>Any person acting directly as an employer, or indirectly in the interest of an employer, in relation to an employee benefit plan. The term also includes a group or association of employers acting for an employer in such a capacity. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI (<a href="http://www.ifebp.org">www.ifebp.org</a>).</p>												
<b>Exercise</b>	<p>The performance of some activity in order to develop or maintain physical fitness and overall health.</p>												
<b>Eye Examinations</b>	<p>Many people may not notice any signs that they have uveitis until they notice a change in their vision. Prevent Blindness America recommends that everyone receive a comprehensive eye exam through dilated pupils regularly, as recommended by their eye doctor. In general, the recommended frequency of comprehensive eye examinations for people without signs of eye problems or special risk factors is as shown in the table. People with special risks, such as diabetes, a previous eye trauma, surgery, or a family history of glaucoma, may need an eye exam more often. Available from: Prevent Blindness America, <a href="http://www.preventblindness.org">www.preventblindness.org</a> (accessed 23 September 2008).</p> <p><b>Eye Examination Suggested Schedule:</b></p> <table border="1" data-bbox="474 1276 1393 1381"> <thead> <tr> <th>Age</th> <th>Caucasian</th> <th>African-American</th> </tr> </thead> <tbody> <tr> <td>20-39</td> <td>Every 3 - 5 years</td> <td>Every 2 - 4 years</td> </tr> <tr> <td>40-64</td> <td>Every 2 - 4 years</td> <td>Every 2 - 4 years</td> </tr> <tr> <td>65 or older</td> <td>Every 1 - 2 years</td> <td>Every 1 - 2 years</td> </tr> </tbody> </table>	Age	Caucasian	African-American	20-39	Every 3 - 5 years	Every 2 - 4 years	40-64	Every 2 - 4 years	Every 2 - 4 years	65 or older	Every 1 - 2 years	Every 1 - 2 years
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<b>Family Medical Leave Act (FMLA)</b>	<p>Covered employers must grant an eligible employee up to a total of 12 work weeks of unpaid leave during any 12-month period for one or more of the following reasons: the birth and care of the newborn child of the employee; for placement with the employee of a son or daughter for adoption or foster care; care for an immediate family member (spouse, child, or parent) with a serious health condition; or to take medical leave when the employee is unable to work because of a serious health condition. Available from: US Department of Labor, <a href="http://www.dol.gov/esa/whd/fmla/">www.dol.gov/esa/whd/fmla/</a> (accessed 23 September 2008). State laws may also apply.</p>												
<b>Flexible Work Schedules</b>	<p>Flexible work arrangements that may include flex hours, part-time work, job sharing, compressed work week, variable schedules and telecommuting.</p>												
<b>Flu Shots</b>	<p>Annual flu shots are required because the vaccine changes from year to year. A flu shot is between 70 percent and 90 percent effective in warding off illness, depending on the length and intensity of a given flu season and overall health. (Reference: NBGH "Purchaser's Guide to Clinical Preventive Services).</p>												



<b>Full Cost of Absence</b>	<p>“Using data from a survey of 800 managers in 12 industries, we find empirical support for the hypothesis that the cost associated with missed work varies across jobs according to the ease with which a manager can find a perfect replacement for the absent worker, the extent to which the worker functions as part of a team, and the time sensitivity of the worker's output. We then estimate wage 'multipliers' for 35 different jobs, where the multiplier is defined as the cost to the firm of an absence as a proportion (often greater than one) of the absent worker's daily wage. The median multiplier is 1.28, which supports the view that the cost to the firm of missed work is often greater than the wage.” Reference: Nicholson, Sean, Pauly, Mark V., Polsky, Daniel, Sharda, Claire, Szrek, Helena, Berger, Mark L. “Measuring the Effects of Workloss on Productivity with Team Production.” <i>Health Economics</i> 15 (2006) 2: 111-123.</p>
<b>Health and Productivity Snapshot</b>	<p>A tool developed by Dr. Ron Kessler of Harvard Medical School and the Integrated Benefits Institute and offered by IBI to model health-related lost productivity costs and to identify the medical conditions, treated and untreated, that result in absence and presenteeism. The employers' results are modeled from the large HPQ database, as supplemented by HPQ-Select participation, and are reported in terms of the employer's own business measures.</p>
<b>Health Coaches</b>	<p>Health coaches are specially trained healthcare professionals (nurses, respiratory therapists, and dietitians) with 10 to 15 years experience. They are available by phone 24 hours a day, 7 days a week to help employees understand health issues and provide support.</p>
<b>Health Committee</b>	<p>A diverse group of participants who work to improve the health and well-being of their worksite with activities and organizational policy and environmental changes. They are typically comprised of participants from all divisions and levels within the organization to promote ownership of the program at the “grass roots” level and assist with implementing programs designed to facilitate participant health. Such efforts are carefully planned around feedback gathered from participants and managers, to ensure resources are targeted towards areas where they will be most useful.</p>
<b>Health Fair</b>	<p>Type of wellness program conducted to prevent disease, increase employee awareness about unhealthy habits such as smoking or overeating, promote healthful activities such as physical fitness programs, and increase community good will. Can also be used as marketing tool for medical providers. (Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI <a href="http://www.ifebp.org">www.ifebp.org</a>).</p>
<b>Health Friendly Environment</b>	<p>A healthy work environment ensures the safety of all individuals, is aesthetically pleasing, and creates a supportive atmosphere.</p>
<b>Health Library</b>	<p>An employee educational library on health topics. Materials should be available in the common language of the employees and available to mail, fax, or e-mail to employees.</p>
<b>Health Line</b>	<p>The availability of healthcare and doctors online (potentially available 24 hours) or chat for any kind of medical support. For participants to take responsibility and an active role in their healthcare, they need information. Employer provides participants with access to registered nurses and healthcare professionals through a health information line, a toll-free telephone service, mailed educational information, and the internet. Participants can call a nurse for health information daily (hours specified). This call line is a participant information service only and is not intended to be a triage service or to replace or question the diagnosis of a physician or healthcare provider. At all times, the provider remains responsible for the participant's medical care.</p>
<b>Health Newsletter</b>	<p>Monthly, weekly, or even daily news briefing on healthcare policy and business.</p>
<b>Health Promotion</b>	<p>Studies show that worksite health promotion can help improve employee morale, reduce turnover, aid in recruitment, reduce absenteeism and presenteeism, assist with containment of healthcare costs, and improve health status of employees.</p>
<b>Health Risk Assessments (HRAs)</b>	<p>A wellness program instrument that can evaluate the health status of an individual and the relative risk of disease, injury or death associated with a specific set of lifestyle behaviors when combined with specific information about the individual involved. (Reference: “Benefits and Compensation Glossary” 11th Edition, copyright 2005, <i>International Foundation of Employee Benefit Plans</i>, Brookfield, WI <a href="http://www.ifebp.org">www.ifebp.org</a>).</p>



<b>Health Screenings</b>	Regular physical exams and health screening tests are an important part of preventive healthcare. They can help ensure that common, serious diseases are detected and treated. Health screenings are necessary to monitor health status and identify problems before they become serious so that further medical care can be obtained. Basic health services and screenings are offered by trained health professionals to allow individuals to assess their health status in a variety of areas. Initiatives include: bone density screenings, low cost flu shots, regular blood drives which allow participants to get results on cholesterol levels, smoking cessation classes offered to those who want help quitting, numerous screenings and health information offered free of charge.
<b>Health and Productivity Questionnaire (HPQ)</b>	A short survey instrument that was developed by a group composed of Prof. Ronald Kessler of Harvard Medical School, in conjunction with researchers from the World Health Organization, to facilitate research on the workplace costs of illness and the cost-effectiveness of diverse health-related interventions. The HPQ is part of the WHO initiative of the Global Burden of Disease. Further development work at Harvard Medical School has been sponsored by the John D. and Catherine T. MacArthur Foundation. The HPQ can be self-administered either as a paper and pencil questionnaire, an internet questionnaire, or an interactive voice-response (IVR) interview. The HPQ can also be administered by an interviewer either over the telephone or face-to-face. Available from: <a href="http://www.hpq.org/Backhpq.htm">http://www.hpq.org/Backhpq.htm</a> (accessed 22 September 2008).
<b>“Health and Productivity Management Toolkit”</b>	The Health and Productivity Management Toolkit is a workplace resource created by the American College of Occupational and Environmental Medicine (ACOEM). The Toolkit promotes understanding of health and productivity management and the value of a healthy workforce by providing access to video, audio and written content – including more than 1,000 pages of academic and research material. The HPM Toolkit is periodically updated and is available through an on-line subscription at <a href="http://www.acoem.org/publication.aspx?id=48">http://www.acoem.org/publication.aspx?id=48</a> .
<b>Healthy Food Offerings at Meetings and Conferences</b>	Offer healthy menu choices at each work meeting, conference, and training where food is served. Provide fruit and vegetable food choices that are low in fat at organizational meetings and functions. At functions which offer a selective menu or buffet, one or more healthful entrees, side dishes, or desserts will be served. When non-selective menu is served, healthful selections will be offered. Worksites also can implement healthy catering policies and offer nutrient-dense foods that are low in fat, cholesterol and sodium. Consider modifying menu choices to provide low-fat, low-calorie and high-fiber foods or to highlight “heart healthy” foods.
<b>Healthy Food Offerings in Cafeteria</b>	Healthy choices offered at on-site cafeteria should be considered by employers. Break room with microwaves and refrigerators should be available. There should be fruit and vegetable choices available at the worksite (community fruit bowl, cafeteria, and/or vending). In fact, cafeteria interventions are one of the most popular worksite nutrition programs as they allow point-of-choice nutrition information to be readily made available. Other interventions include modifying menu choices to provide low-fat, low-calorie, and high-fiber foods, or to highlight “heart healthy” foods.
<b>Healthy Food Choices in Vending</b>	Work with vendors to offer healthy options in vending machines based on customer preferences. Post healthy eating messages in vending areas. Policies regarding healthy choices offered and labeled in vending machines. Negotiations can be conducted with food service vendors to also provide low-fat food items, including fruit and nuts in vending machines. In addition, employer-provided or entrepreneurial lunch wagons can offer nourishing food on the spot at field worksites remote from feeding facilities.
<b>HPQ-Select</b>	An employee self-reporting tool that captures employee-reported data on health conditions, absence, presenteeism and health-related lost productivity. The tool simplifies and refines the Health and Work Performance Questionnaire (HPQ) that was developed by Dr. Ronald Kessler of Harvard Medical School and the World Health Organization, and provides a more employer-focused outcome report. IBI developed the HPQ-Select in partnership with Dr. Kessler and the Midwest Business Group on Health. <a href="http://ibiweb.org/do/PublicAccess?documentId=785">http://ibiweb.org/do/PublicAccess?documentId=785</a> .
<b>Human Capital</b>	Human capital represents the knowledge, experience, and attributes of employees. (From Weatherly, Leslie A., “Human Capital - The Elusive Asset; Measuring and Managing Human Capital: A Strategic Imperative for HR.” <i>Research Quarterly</i> (2003) 3.
<b>Immunizations</b>	Immunizations are one of the best ways to protect children from a multitude of serious diseases. Children in the United States routinely get vaccines that protect them from more than a dozen diseases. Some vaccines are given in combination with others. Most vaccines require multiple doses given at various intervals. There are also a variety of immunizations for adults, such as annual flu shots, that should be considered.



<b>Incentives</b>	Used by several of the leading health partners today to support their programs and achieve performance targets tied to diverse health and productivity programs and may be targeted to initial participation, benefit design, program participation and/or achievement of outcomes. Specific examples may include: health risk assessment completion, lifestyle management program enrollment, compliance and persistency efforts, generic drug purchasing, CDH plan selection and other health and health activities. Offers a variety of incentive administration solutions specifically designed to drive business objectives for employers, health management partners, and health plans. Integrated incentive solutions can help drive consumerism and healthcare cost reductions.
<b>Internal Marketing</b>	An employee health-related website can contain a wealth of information on many health issues and the programs of the employer. The intranet contains useful information about activities for staff and serves to connect employees working in different program areas. The intranet has been used to post surveys to obtain input on various agency projects. The newsletter contains articles and information on a variety of health topics and programs. Email messages to “all employees” are used to inform employees about events and issues. Post calendars of health activities each month in kitchen areas. Utilize various bulletin boards throughout the building to promote health activities, as well as refrigerators, stairwells, and restrooms.
<b>Know Your Numbers</b>	There are a variety of ‘know your numbers’ programs available commercially or home grown through various employers. The numbers typically include a combination of the following: weight, body mass index (BMI), cholesterol level (high density and low density lipoproteins), blood pressure, and or glucose level.
<b>Long term disability (LTD)</b>	Long term disability is an income replacement program that protects a worker and his/her family in the event that the worker becomes disabled and is unable to perform the material and substantial duties of their job.
<b>Lost Productivity</b>	Health-related lost productivity exceeds the classic economic definition of lost time multiplied by wages. In addition, incidental lost time requires the costs of replacing the worker or bearing the consequences of not making the widget for which the worker was responsible. Factors affecting the opportunity costs of this “multiplier” include the ease with which the employer can replace employees, the time sensitivity of their output and the degree to which employees work in teams. See: Nicholson, S., Pauly, M., and Polsky, D. (2006). “Measuring the Effects of Work Loss on Productivity with Team Production.” <i>Health Economics</i> 15: 111-123 and Nicholson, S., Pauly, M., Polsky, D., et al. “How to Present the Business Case for Health Quality to Employers.” <i>Applied Economic Health Policy</i> 4(4): 209-218.
<b>Mail-Order Drug Program</b>	A method of dispensing medication directly to the patient through the mail by means of a mail-order drug distribution company. Offers greatly reduced costs for prescriptions, especially for long-term therapy. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Measurements</b>	There are a variety of measurements employers should consider in administering their health programs. General demographics on employee population are valuable. Metrics related to claims may be obtained through health partners. It is also important to get metrics related to program participation, changes in the population health status, risk and costs tracking on the total value of health. Organization measures are needed to make the business case for health and productivity, to establish a baseline, to focus efforts on the right conditions and to monitor interventions results. See “Measurement” in Appendix C.
<b>Mental Healthcare, Access To</b>	Whether we have a mental illness such as depression, know someone who has experienced such a problem, or neither, we need to care about the issue of mental health. After all, we all have ‘mental health.’ We may not think much about our ‘mental health’ or even use that phrase, but it’s a common element in all our lives. Some people define it as a “state of mind”. Others view it as “being content with life” or “feeling good about yourself”. Mental health is perhaps best explained as how well we cope with daily life and the challenges it brings. When our mental health is good, we can deal better with what comes our way --- at home, at work, in life. When our mental health is poor, it can be difficult to function in our daily lives. It is a fluid state with disability and untreated illness at one end, and recovery and complete wellness at the other end. Most of us live and move within the middle range of the spectrum.
<b>Non-Sedating Antihistamines</b>	Drugs that combat the histamine released during an allergic reaction by blocking the action of the histamine on the tissue. Antihistamines do not stop the formation of histamine nor do they stop the conflict between the IgE and antigen. Therefore, antihistamines do not stop the allergic reaction but protect tissues from some of its effects. Antihistamines frequently cause mouth dryness and sleepiness. Newer “non-sedating” antihistamines are generally thought to be somewhat less effective. Antihistamine side effects that very occasionally occur include urine retention in males and fast heart rate. Available from: <a href="http://www.medterms.com">www.medterms.com</a> (accessed 23 September 2008).



<b>Non-Smoker Premium Credit</b>	Employee must not have used any tobacco products, including smokeless, for one year to qualify for non-smoker discount. Nicotine shows up in blood tests for up to one year. A non-smoker discount is a reduction in the health insurance premium amount for our policyholders who lead a healthier lifestyle by not using tobacco products. Tobacco versus non-tobacco use (includes chewing tobacco).
<b>No Smoking Areas On-Site</b>	Smoke-free campus policy (no smoking on campus grounds). There are designated smoking areas away from building doorways and ventilation areas. Buildings are non-smoking and the non-smoking zone around the building expanded. Enforce no smoking policy and post signs stating the policy.
<b>Nutritional Food Offerings</b>	A supportive environment where participants have access to healthy food choices that support and encourage healthy eating patterns. Post healthy eating messages in cafeterias, break rooms, and vending areas. Encourage workers to make informed and beneficial use of worksite facilities (such as the cafeteria and vending machines). For those whose lunches depend on “brown bags” or lunch boxes, worksite arrangements for storing the lunch bags or boxes are part of a supportive environment.
<b>On-Site Clinics</b>	On-site program to fit employer location, precisely matching needs with personnel. The health clinics can be as simple as an equipped medical exam room and office staffed by an occupational health nurse, or as comprehensive as full service clinics. On-site staff can include any combination of the following: physicians, nurse practitioners (NP), physician assistants (PA), registered nurses (RN), and RN health coaches specializing in primary care and occupational health, health technicians, including laboratory and radiology technologists, medical records specialists, information technology specialists, workers’ compensation case managers. Employer matches health services to the needs of workforce. Services include a broad range of treatment and prevention programs focused on acute and chronic health conditions.
<b>On-Site Fitness Center</b>	Operates an on-site fitness center/gym which provides 24-hour-a-day, seven-day-a-week access to weight, exercise, aerobic, and training equipment to its members. The facility includes exercise, locker and changing rooms, and showers. A number of membership options and rates are offered including rates for spouses. Classes in aerobics, karate, and tai chi are offered.
<b>On-Site Walking Paths</b>	Educate participants about trails and pathways that are safe and near worksites that promote exercise. Organize walking activities at work. It is helpful to have on-site shower and changing facility available.
<b>Osteoporosis Testing</b>	Bone density measurement at least every year beginning at age 65, sooner depending on risk factors (Reference: NBGH “Purchaser’s Guide to Clinical Preventive Services).
<b>Patient Centered Medical Home</b>	The principles of the PCMH are that each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous, and comprehensive care. The personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients. The personal physician is responsible for providing for the entire patient’s healthcare needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of life; acute care, chronic care, preventive services; and end of life care. The care is coordinated and/or integrated across all elements of the complex healthcare system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient’s community (e.g., family, public and private community-based services). Practices advocate for their patients to support the attainment of optimal, patient-centered outcomes that are guided by evidence-based medicine and clinical decision support tools. From: Patient Centered Primary Care Collaborative, Purchasers Guide to PCMH Available from: <a href="http://www.pcpc.net">www.pcpc.net</a> (accessed 2 September 2008).
<b>Payer</b>	In healthcare, generally refers to entities, other than the patient, that finance or reimburse the cost of health services. In most cases, refers to insurance carriers, other third-party payers and/or health plan sponsors (employers or unions). Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Pay for Performance (P4P)</b>	It is an emerging movement in health insurance (initially in Britain and United States). Providers under this arrangement are rewarded for meeting pre-established targets for delivery of healthcare services. This is a fundamental change from fee for service payment. Also known as "P4P", this payment model rewards physicians, hospitals, medical groups, and other healthcare providers for meeting certain performance measures for quality and efficiency. Disincentives, such as eliminating payments for negative consequences of care (medical errors) or increased costs, have also been proposed.



<b>Pharmacy Benefit Design/Access to Pharmaceuticals</b>	The process health insurance payers use to control prescription drug expenditures and balance the health needs of their consumers. The output of the process is a benefit package that specifies who (consumer vs. payer) pays what, incentives, and what drugs are included in the formulary. The tools used to develop the benefit design include: multi-tiered formularies linked to cost sharing structures that encourage use of the lowest-net-cost drug, incentives for dispensing generics, negotiated discounts off of drug ingredient costs and pharmacy services, coverage of over-the-counter drugs, and a broad range of approaches to utilization management. Adapted from Pharmacy Benefit Management Institute. Available from: <a href="http://www.pbmi.com/2007report/">www.pbmi.com/2007report/</a> (accessed 23 September 2008).
<b>Physical Activity</b>	Physical activity is a key element in weight management, disease prevention, self-esteem, and mental health. The goal is not simply weight loss or rigorous exercise, but to assist in making physical activity part of daily life. Opportunities for regular, moderate physical activity are incorporated into the work week and accommodate individuals of varying fitness levels. Motivational techniques to encourage physical activity are apparent throughout the agency. Signs are posted to encourage people to take the stairs instead of the elevators.
<b>Plan Participant</b>	Any employee or former employee of an employer, member, or former member of an employee organization, sole proprietor or partner in a partnership who is, or may become, eligible to receive a benefit of any type from an employee benefit plan, or whose beneficiaries may be eligible to receive any such benefit. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Practice Guideline</b>	A statement concerning the known cost, benefits and risks of using a certain medical intervention to bring about a given medical income. Practice guidelines are intended to assist in healthcare decision making by practitioners, patients, and others about appropriate healthcare in a particular situation. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Presenteeism</b>	A decrease in job performance due to the presence of the health problems. Organizations want absenteeism to go down, similarly, organizations want presenteeism to decrease – organizations do not want on-the-job work performance impacted by the presence of health problems.
<b>Primary Care</b>	Basic or general healthcare, as opposed to specialist or sub specialty care. Primary care providers often oversee the total care of patients, referring the patient to other professionals as appropriate. Physicians whose practices are predominately primary care include general or family practitioners, internists and pediatricians. Primary care also may be provided by nurse practitioners, physicians' assistants or other midlevel practitioners. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Primary Care Physician (PCP)</b>	The physician in a managed care plan who is responsible for coordinating all care for an individual patient, from providing direct care services to referring the patient to specialist and hospital care. Can be a physician specializing in family practice, general practice, obstetrics/gynecology or pediatrics. (Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Productivity</b>	See <i>Lost Productivity</i> .
<b>Prostate Cancer Screening</b>	Cancer screening tests, including PSA tests to look for signs of prostate cancer, can be a good idea. They can help identify cancer early on, when treatment is most effective. A normal PSA test, combined with a digital rectal exam, can help reassure the patient that it's unlikely there is prostate cancer. But, getting a PSA test for prostate cancer may not be necessary for some men, especially men 75 and older. Professional organizations vary in their recommendations about who should, and who shouldn't, get a PSA screening test. While some have definitive guidelines, others leave the decision up to men and their doctors. The organizations that do make recommendations generally encourage PSA testing in men between the ages of 50 and 75, and in men with an increased risk of prostate cancer. Ultimately, whether men should have a PSA test is something men will have to decide after discussing it with a doctor, considering risk factors and weighing personal preferences." Available from: <a href="http://www.mayoclinic.com/health/prostate-cancer/HQ01273">www.mayoclinic.com/health/prostate-cancer/HQ01273</a> (accessed 23 September 2008).
<b>Purchaser</b>	Program sponsor, often an employer or union, that contract with a benefits organization to provide benefits to an enrolled population. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).



<b>Referral</b>	A formal request within managed care plans by the primary care doctor, to specialist, hospital, or other services for additional care. Also, an informal suggestion from one provider for the patient to see another provider. When used in a formal environment, having a qualified referral has a direct impact on who pays for the service and how much. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Secondary Care, Access To</b>	The term “secondary care” is a service provided by medical specialists who generally do not have first contact with patients, for example, cardiologists, urologists and dermatologists.
<b>Self-Help Guides</b>	The term self-help can refer to any case or practice whereby an individual or a group attempts self-guided improvement, economically, intellectually, or emotionally. The basis for self-help is often self-reliance, publicly available information, or support groups where people with similar problems join together.
<b>Self Report Survey Tools</b>	An employee completed survey or questionnaire used to gain insight into an employee’s workplace productivity.
<b>Short term disability (STD)</b>	Short term disability coverage provides wage replacement to individuals who experience wage loss due to a disability. STD coverage is determined by the organization and can last for up to one year.
<b>Social Activities</b>	Like a night at a baseball/football game, they are organized allowing employees to socialize. The organization may participate in events such as “Bring your child to work day”. Employees with family members serving overseas in the military can post this information on the intranet and cards or other items from employees are sent to the soldiers periodically. Organize sports activities at work (walking, ultimate Frisbee, basketball, etc.). Sponsor on-site aerobics or yoga classes. Hold annual golf tournament.
<b>Spread Agent</b>	A person that works with a senior leader that has the authority and responsibility to manage day to day ‘spread’ activities. Communication is key in building awareness across the organization.
<b>Stairwell Enhancements</b>	Promote the use of stairs as a way to get more daily physical activity. Enhancements may include carpeting, increased lighting and music. Available from: CDC StairWELL <a href="http://www.cdc.gov/nccdphp/dnpa/hwi/toolkits/stairwell/index.htm">www.cdc.gov/nccdphp/dnpa/hwi/toolkits/stairwell/index.htm</a> (accessed 23 September 2008).
<b>Stanford Presenteeism Scale</b>	Stanford Presenteeism Scale-6, or SPS-6, is a scale which assesses the relationship between presenteeism, health problems and productivity for working populations. SPS-6 measures a worker's perception of his or her ability to overcome the distraction of current physical and/or psychological problems in order to handle job stress, complete tasks, achieve goals and maintain sufficient focus and energy levels. The scale was designed with physical conditions in mind, but in all three of the developmental studies, the most frequent condition spontaneously written into the responses was, in fact, depression. Available from: <a href="http://managedhealthcareexecutive.modernmedicine.com/mhe/article/articleDetail.jsp?id=134250#1#1">http://managedhealthcareexecutive.modernmedicine.com/mhe/article/articleDetail.jsp?id=134250#1#1</a> , (accessed 28 October 2008).
<b>Stress Management Programs</b>	Stress caused from problems at work or personal issues can impact job performance and can even lead to serious health issues like depression. Appropriate coping mechanisms and outlets for stress should be made available and continually marketed to eligible individuals so that these services can be accessed as needed.
<b>Taft-Hartley Act (Labor-Management Relations Act of 1947)</b>	An amendment to the National Labor Relations Act of 1935 based on the theory of equalizing the bargaining power of management with that of labor. Principal provisions: 1) specification of unfair labor practices by labor, 2) granting individual workers the right to prosecute for unfair labor practices by union or company officials, 3) anti-Communist provisions, 4) restriction of the closed shop, 5) prohibition of secondary boycott. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Taft-Hartley Plans</b>	Benefit plans that have an equal number of trustees who are employer representatives and trustees who are union representatives. The plans are governed by federal law. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Tobacco Cessation Programs</b>	Telephone, local, and online supports are available for participants looking to quit smoking or get more information. All FDA-approved nicotine replacement products and tobacco cessation medications are covered. There are also classes which offer information about tobacco use, nicotine replacement, stress management, and group support. Employers may use incentives and competitions to increase smoking cessation.



<b>Trust</b>	A legal entity that is created when a person or organization transfers assets to a trustee for the benefit of designated persons. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Trust Fund</b>	A fund whose assets are managed by a trustee or a board of trustees for the benefit of another party or parties. Restrictions as to what the trustee may invest in the assets of the trust fund in are usually found in the trust instrument and in applicable state and federal laws. In the case of ERISA-controlled employee benefit plan trust funds, there are specific requirements that should be referred to. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Trustee</b>	A person, bank or trust company that has responsibility over financial aspects (receipt, disbursement and investment) of funds. Where the responsibility is not exercised by a bank or trust company, it is usually exercised by a board of trustees in which the individual trustee has but one vote. Also, one who acts in a capacity of trust as a fiduciary and to whom property has been conveyed for the benefit of another party. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>Value</b>	From a health perspective, value is defined as the full health-related benefit achieved for the worker and the employer (including savings in health-related lost time and lost productivity as well as any possible medical savings) for the money spent.
<b>Web-Based Health Tools/Site</b>	Consumers are using the internet to get information about health. Employers may have a variety of web-based health tools or sites specific to a disease to assist employees in self management.
<b>Weight Management Programs</b>	The goal is not simply weight loss or rigorous exercise, but to assist in making physical activity part of daily life. Opportunities for regular, moderate physical activity are incorporated into the work week and accommodate individuals of varying fitness levels. Motivational techniques to encourage physical activity are apparent throughout the organization. Signs are posted to encourage people to take the stairs instead of the elevators. As an incentive for participating, each walker is entered into a drawing to win a healthy breakfast. Employees can receive discounts at fitness centers. Regular fitness sessions are held allowing individuals to do yoga, Pilates, stretching, aerobics, etc. to a fitness video or with a live instructor, when available. There is an organization softball team open to all employees and the team competes against other employers. The organization has a bowling league open to all employees. The employer supports national Bike to Work Day by encouraging employees to participate and offering bike storage. Lockers and shower facilities are available. Advertise community walks/runs and provide incentives for participation. Promote exercise buddies. Change the “Take the Stairs” signs often so people do not become desensitized to them and provide better directions to the staircases. Maximize the effect of weight loss programs with daily support from co-workers and weekly on-site meetings including office visits from weight watcher consultants. Physical activity is a key element in weight management, disease prevention, self-esteem, and mental health. Point-of-decision prompts to increase stair use; enhancing access to places for physical activity (e.g., providing venues, classes, or information).
<b>Wellness (Health Promotion) Programs</b>	A broad range of employer or union-sponsored facilities and activities designed to promote safety and good health among employees. The purpose is to increase worker morale and reduce the costs of accidents and ill health such as absenteeism, lower productivity, and healthcare costs. May include physical fitness programs, smoking cessation, health risk appraisals, diet information and weight loss, stress management, and high blood pressuring screening. Reference: Benefits and Compensation Glossary, 11th Edition, copyright 2005, International Foundation of Employee Benefit Plans, Brookfield, WI ( <a href="http://www.ifebp.org">www.ifebp.org</a> ).
<b>WLQ – Work Limitations Questionnaire</b>	The WLQ is an easy to use questionnaire, measuring the degree to which employed individuals are experiencing limitations on-the-job due to their health problems, and health-related productivity loss (Presenteeism). The WLQ has 25 items that ask respondents to rate their level of difficulty or ability to perform specific job demands. Work Limitations Questionnaire, 1998. The Health Institute, Tufts Medical Center, 800 Washington Street, Ncmc #345, Boston, MA 02111.
<b>Workplace Health Programs</b>	Can include things like on-site fitness centers, health presentations, and health newsletters. Access to health coaching, tobacco cessation programs and training related to nutrition, weight and stress management. Other programs may include health risk assessments, health screenings and body mass index monitoring.



<b>Work Productivity and Activity Impairment Questionnaire (WPAI)</b>	<p>Developed in 1993 for assessing productivity losses by measuring the effect of general health and symptom severity on work productivity. There are several versions of the questionnaire available including the WPAI-general health (GH), WPAI-specific health problem (SHP), combination WPAI (GH-SHP) and WPAI-allergy specific (AS). The WPAI-GH instrument consists of six questions that ask the patient the number of hours missed from work activities (i.e., absenteeism) as well as the degree of impairment (i.e., presenteeism) over the past seven days. The scores of the questionnaire are expressed as impairment percentages with higher numbers reflecting greater impairment and decreased productivity. The four scores are 1) percent work time missed due to health, 2) percent impairment while working due to health, 3) an overall percent work impairment score due to health, and 4) a percent activity impairment due to health.” (Taken from: Health and Productivity Management Center , Health-Related Workplace Productivity Measurement: General and Migraine-Specific Recommendations from the ACOEM Expert Panel, Journal of Occupational and Environment Medicine, April 2003, Ronald Loeppke, MD, et al. available at: <a href="http://www.acoem.org/health_right.aspx?id=1312">http://www.acoem.org/health_right.aspx?id=1312</a> (accessed 30 October 2008).</p>
<b>Worksite Relaxation Center</b>	<p>An area set aside for employees to relax, may include services such as massage or relaxation techniques or may be an area for employees to take a break in a quiet relaxing environment.</p>
<b>Worksite Classes</b>	<p>The many topics to be addressed in the worksite health promotion reviews focus on interventions that can be offered at the worksite (e.g., on-site health education classes or posting signs to encourage stair use), made available to employees at work or at other locations (e.g., reducing out-of-pocket costs for gym memberships or flu shots), or incorporated into employees’ benefits plans (e.g., vouchers for nicotine patches or to participate in exercise classes).</p>



## Employer Health Asset Management Roadmap

“The Change Agent Work Group (CAWG) is an unprecedented collaboration of industry thought leaders and influencers working to accelerate improvement in American workforce health and productivity. Although CAWG members come from many of the industry’s organizations, foundations and institutions their work product is a result of collaboration of the individuals and does not necessarily represent the view of their respective organizations. The ongoing process of the working group is assisted by an independent organization with experience and expertise in group process facilitation and is funded by Pfizer Inc. as an independent voice working to accelerate improvement in the American health care system”.