



White Paper

# 10 Steps to Developing a Culture of Health for Hospital and Health System Employers

Michael Taylor, MD, FACP  
William Bithoney, MD, FAAP

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## INTRODUCTION

The high cost of healthcare in the United States has been well documented. In 2010, healthcare spending was nearly \$2.6 trillion, accounting for more than 17 percent of the Gross Domestic Product (GDP). With the recent health reform legislation, healthcare spending is projected to increase at an average rate of 5.8 percent annually. According to estimates from the Centers for Medicare & Medicaid Services (CMS), healthcare costs will reach \$4.5 trillion by 2019.<sup>1</sup>

Hospitals and health systems, as large employers, are feeling the burden of rising healthcare costs. In fact, hospital employee use of plan services is greater than that of the average U.S. employee. Hospital workers, on average, have higher utilization rates and carry a higher burden of chronic illness than employees in other market segments.

Finding better ways to manage the risk level of employees, in particular those with chronic conditions, is critical to reducing costs and increasing profitability for hospitals and health systems. This white paper offers a framework for population health management in the hospital setting and outlines 10 best practices for implementing a successful initiative. It also provides a foundation for understanding how these concepts could apply to the broader development of an Accountable Care Organization (ACO).

*“Healthcare costs for hospital workers are 9 percent higher than costs incurred by the general U.S. workforce.”*

## The Health of Hospital Employees

To define the challenge facing hospital and health system employers, researchers at Truven Health Analytics<sup>SM</sup> analyzed the healthcare spend among hospital workers compared to the U.S. workforce at large. Using the Truven Health MarketScan<sup>®</sup> database, a repository of healthcare claims representing the real-world healthcare experience of millions of Americans, we reviewed the healthcare costs of 350,000 hospital employees and their dependents from more than 200 hospitals and compared the results to 12 million covered lives from other industries. In addition, we analyzed disease severity and population risk using a Diagnostic Cost Group (DCG) methodology based on ICD-9 diagnosis, age, and sex.

The study found that hospital employees were less healthy, consumed more medical services, and accrued higher healthcare costs than the U.S. workforce at large. The major findings included:

- Healthcare costs (medical care and prescription drugs) for hospital employees and their dependents were 9 percent higher than the general MarketScan population; employee-only costs were also 9 percent higher on an age- and sex-adjusted basis
- Hospital employee groups exhibited a skew toward a younger female population relative to the U.S. workforce; the average health system worker is two years younger than the average worker in the U.S. workforce
- Hospital employees and their dependents were more likely to be diagnosed with asthma, obesity, and depression; admission rates for asthma, obesity, and depression were 12 percent, 46 percent, and 20 percent higher, respectively, for hospital employees compared to the U.S. workforce
- Hospital employees had higher utilization of the emergency department and higher hospital admission rates for chronic conditions such as depression, asthma, obesity, diabetes, coronary artery disease, congestive heart failure, hypertension, and back and spine disorders
- Hospital workers and their dependents were hospitalized 5 percent more than U.S. employees overall
- Compliance with common preventive service measures (lipid testing; breast, cervical, and colorectal cancer screening) were consistently lower among hospital employees and their dependents
- On a DCG-adjusted severity basis, hospital employees with chronic conditions had a higher burden of disease, particularly in the “at risk” and “struggling” categories (Figure 1)

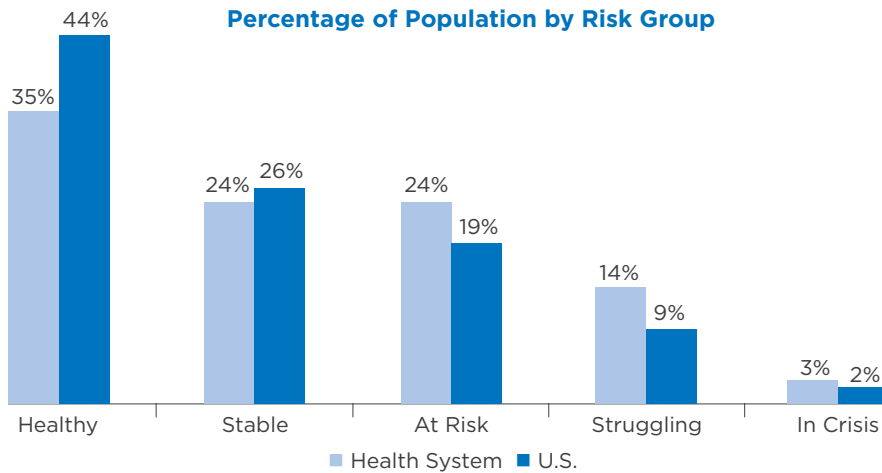
The study concluded that a health system with 16,000 eligible employees would save \$1.5 million annually for each 1 percent reduction in health risk.

Additional Truven Health research has shown that health benefit costs consume 4 percent of hospital operating revenue, and this has been a fairly stable trend over the last 2 years. However, looking through the lens of hospital profits highlights the enormous impact of healthcare costs to hospitals. For the average medium-sized community hospital, 68 percent of operating profit is consumed by healthcare benefits for employees and their families. This equates to all operating profit generated from January 1 until the end of August each year.

These findings illustrate the need for hospitals and health systems to better understand the health risk of their employee populations. While hospital employees have similar rates of many chronic diseases as employees in other industries, hospitals lag behind in managing appropriate utilization of services.

*“Hospital employees with chronic conditions are more likely to be at risk, struggling, or in crisis when compared to the U.S. workforce overall.”*

**Figure 1: Burden of Illness for Hospital Employees Compared to the U.S. Workforce**



Source: Truven Health MarketScan data, 2012.

## The Need for a Comprehensive Population Health Strategy

### Historical Perspective From U.S. Employers

Employers have been actively attempting to manage their healthcare costs for years, initially by trying to control the price of healthcare services (supply) through health maintenance organizations (HMOs), aggressive price contracting, and, more recently, by finding ways to lessen the need for healthcare services (demand). The concept that healthier employees have less need for medical care and its associated costs has been a dominant theme in recent years.

Attempts to reduce the need for services have come at a time when a growing percentage of healthcare spending is from chronic diseases, many of which are due to poor lifestyle choices. The medical literature is replete with studies showing the connection between health risk factors and medical costs. Three of these studies are referenced later in the paper under the section Build a Business Case (pgs 8-11). As a result of findings such as these, employers are focusing on encouraging healthier lifestyle choices as a way to reduce medical spending.

However, minimizing costs is just one benefit of implementing a comprehensive population health strategy. It's important for organizational leadership to understand that a healthy workforce is also more productive and, as a result, provides a competitive advantage. Therefore, it is a business imperative that requires adequate investment.

*“One study found that achieving ‘best-practice’ levels of performance would result in a savings of \$2,562 per employee.”*

In 2001, Ron Goetzel, PhD, vice president of health and productivity research at Truven Health, co-authored a landmark paper emphasizing the connection between employee health and organizational success. After studying information from 43 employers with 950,000 employees, the authors found that achieving “best-practice” levels of performance (operationally defined as the 25th percentile for program expenditures in areas such as absenteeism, employee turnover, and the use of medical, disability, and workers’ compensation programs) would result in a savings of \$2,562 per employee, or a 26-percent reduction in costs. The paper also identified 10 best practices around health and productivity management (HPM).<sup>2</sup> The key elements outlined were:

- Alignment between HPM and overall business strategy
- Interdisciplinary team focus
- An identified champion
- Senior management as key leaders of the team
- Heavily engaged staff members dedicated to prevention, health promotion, and wellness
- An emphasis on quality of life improvement, not cost cutting
- Systematic employment of measurement and ROI evaluation
- Continuous communication throughout the organization
- Constant improvement by learning from others
- Having fun

These 10 best practices, emphasizing the connection between employee health and company success, illustrate the need for a comprehensive wellness strategy and leadership involvement at the highest level in an organization. More recently, the American College of Occupational and Environmental Medicine (ACOEM) summarized the principles of employer-sponsored health improvement efforts.<sup>3</sup>

The four key tenets cited as fundamental to employer efforts included the following:

1. Keeping the workforce healthy and productive is essential to keeping the economy strong
2. Public investment in “better health,” as well as “better healthcare,” should advance beneficial societal outcomes, particularly workforce health and productivity
3. The workforce will become healthier through prioritized investment in evidence-based primary, secondary, and tertiary prevention strategies
4. These strategies will succeed only if we consider spending on prevention as a priority rather than discretionary and only if incentives are realigned

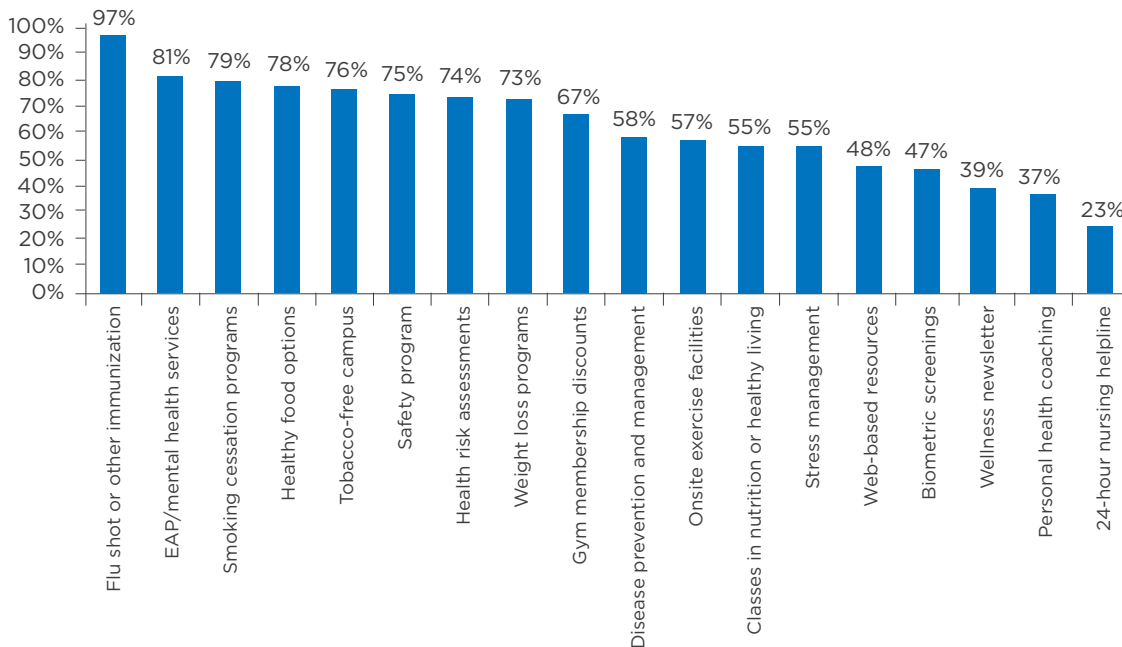
These tenets acknowledge the importance of a healthy workforce as a competitive business advantage, not just a “nice thing to do.”

## Health Improvement in the Hospital Setting

While the concept of health and productivity management is now fairly well established in much of the employer community, it has not been adopted as quickly in the hospital setting. In January 2011, the American Hospital Association (AHA) published, “A Call to Action: Creating a Culture of Health,” that issued “a bold call to action for hospitals to be leaders in creating a culture of health.”<sup>4</sup> The report found that while most hospitals offer some form of employee wellness program, intensive one-on-one activities such as health coaching were rare (Figure 2). In addition, employee participation was generally low (Figure 3).

**Figure 2: Percentage of Hospitals Offering Various Wellness Programs**

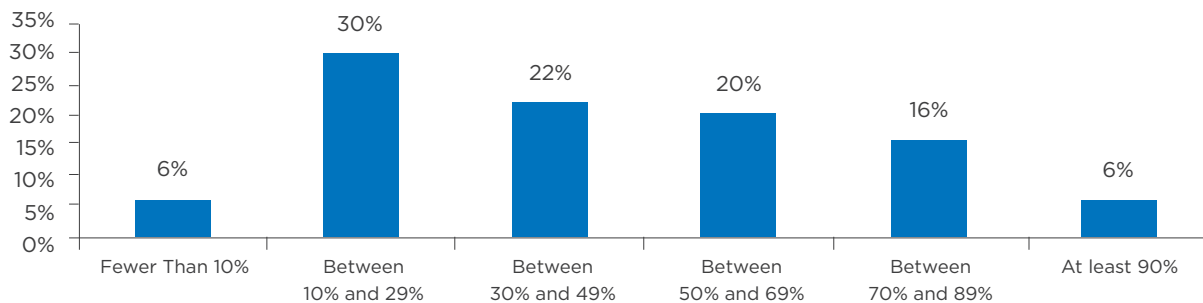
**Which of the following wellness programs does your hospital/system offer to at least some employees?**



Source: A Call to Action: Creating a Culture of Health. Chicago: American Hospital Association, January 2011.

**Figure 3: Percentage of Hospital Employees Participating in at Least One Wellness Program**

**What percentage of your hospital/system employees participate in at least one health and wellness program?**



Source: A Call to Action: Creating a Culture of Health. Chicago: American Hospital Association, January 2011.

## Unique Challenges Facing Hospitals and Health Systems

Hospitals and health systems have a compelling opportunity to improve the health of their workforce. However, they face some unique challenges in implementing programs to improve employee health and wellness. The very nature of many hospital workers is to care for others, sometimes at the expense of themselves. In addition, hospital workers may feel that they possess the knowledge needed to improve their own health and don't require outside assistance.

The way hospital workers utilize healthcare, with easy, on-the-job access to services, is also a consideration for hospitals when structuring their benefit programs. Health system administrators will want to structure benefit plans to strongly encourage their employees to use their own physicians and home hospital system for all their care. Many systems have begun to introduce high-deductible insurance plans to their employees based on the site of service. For example, some organizations have chosen to levy a \$3,000 to \$4,000 per-admission deductible for employees who seek care at a competing hospital for services that can be provided in their own system, while no deductibles are charged for employees who are admitted to their home institution.

## 10 Steps to Developing a Culture of Health

While there are several approaches hospitals can take to overcome these challenges and create a culture of health, we've identified 10 key steps that are at the core of every successful implementation. Each step is described in more detail on the following pages, and it is important to note that they are not always sequential.

1. Analyze the health risk of your specific population
2. Define goals, quantify objectives, and identify gaps based on your population's health risk
3. Build a business case based on your specific health benefit plan design
4. Get buy-in from senior management
5. Establish a measurement strategy
6. Review, revise, and align policies and procedures to support a healthy workplace
7. Design or modify programs and incentives to fit your overall goals
8. Develop an ongoing communications strategy using multiple channels
9. Measure your progress and adjust your programs accordingly
10. Ensure a sustainable culture of health

Comprehensive data is critical for best-in-class wellness programs and is integral to many of the steps. Before starting on the path to developing a culture of health, several types of data should be collected:

- Administrative claims data, including diagnosis and procedure information, and the associated costs
- Demographic information
- Health risk assessment data that captures lifestyle risk factors
- Biometric data such as blood pressure, cholesterol, and body mass index (BMI)
- Disability data (both short- and long-term), if available
- Absence data, if available



## Case Study: Scott & White Program

Many of the principles of health promotion in the hospital setting are exemplified by Scott & White Healthcare, based in Temple, Texas. The team at Scott & White developed a rigorous program to improve the health of its workforce. The program is data-driven, with health risk assessment (HRA) data used as an important source of information. The system reports a 90-percent HRA completion rate among employees. The incentive offered for HRA completion is significant, but high participation rates can also be credited to extensive communication plans, C-level support, and a general culture of wellness. The HRA gives information about lifestyle behaviors such as tobacco use, physical activity, alcohol use, and biometric data including lipid levels, blood pressure control, and overweight/obesity issues. Each HRA participant is given a plan based on their top health risks and their motivation to change. Additionally, participants are contacted and given information on employee programs that are aimed at improving their particular risks.

The HRA is also used to assess the health of Scott & White at the population level on a yearly basis. After evaluating the data, programs have been created to target tobacco use, weight management, physical activity, and nutrition education, and often include competitions to engage workers in activities. On top of its efforts to improve the health of its own employees, Scott & White Healthcare is committed to improving the health of the community. It offers programs including wellness seminars, group classes for chronic disease management, tobacco cessation classes, weight management programs, healthy cooking demonstrations, and corporate wellness consulting. The system has “branded” the wellness programs to coincide with the hospital identity for community recognition.

A key to the program is the measurement effort; the system tracks participation in all the programs and follows cost trends yearly. The future of health promotion at Scott & White will provide more in-depth outcomes tracking and reporting, as well as expanded programming for the community.

### Step 1: Analyze the Health Risk of Your Specific Population

The first step in creating a culture of health is to understand the risk level and chronic disease burden of your specific population. There are several options to consider when defining the included population. You may choose to evaluate only active employees enrolled in your health plans, or you may decide to include dependents and/or retirees, as well. Additionally, you may want to include employees who are not enrolled in any of your health plans, although some data will not be available if this group is included. Recognizing that different organizations will choose to include or exclude various groups, the steps described here will use the generic term “employees” to denote those eligible for wellness programs.

Once you define your population, you will need to understand the risk levels of the group. Again, you have several options. You may choose to include only modifiable lifestyle risks such as blood pressure, BMI, cholesterol levels (LDL and HDL cholesterol and triglycerides), nutritional parameters, physical activity levels, and smoking status. This approach is well-suited if the programs are focused on reduction of medical risk. A more comprehensive approach is to include other health indicators in the risk analysis (see [Creating a Comprehensive Risk Analysis](#) at right). This approach is predictive of future medical costs and incorporates productivity measures.

A population health risk analysis should also include assessments of the cost and prevalence of the most common chronic diseases, along with a metric to show pharmacy costs and utilization. Understanding how your medical spend varies by level of risk can be very revealing. Figure 4 is an example of this type of analysis, using a medical episode grouper methodology to study an actual population.

### Creating a Comprehensive Risk Analysis

One example of a more comprehensive risk analysis is the Truven Health Analytics Healthscore. The Healthscore provides a single number that is calculated based on lifestyle measures, as well as other risk factors such as age and sex, evidence-based screening metrics, and measures for certain chronic diseases. By including these factors, the Healthscore becomes a population-based health metric that the organization can use to follow trends and progress over time.

The data show that chronic disease and catastrophic illness affect only 24 percent of the total population but cause nearly 62 percent of the total medical spend. In contrast, a high percentage of employees accounts for a relatively small amount of the medical costs; more than 70 percent of the population consumes less than 40 percent of the medical spend.

**Figure 4: Medical Spend Variation by Health Risk**

Population Segment	Prevalence	Total Healthcare Spend
Non-users	6.3%	0%
Well, but at risk	3.2%	0.9%
Presence of an acute condition	66.7%	37.8%
Living with a chronic disease	23.6%	49.0%
Living with a catastrophic illness	0.2%	12.4%

*Note: Data have been rounded to the nearest tenth.  
Source: Truven Health MarketScan data, 2012.*

This pattern is common in large populations and underscores the need to develop programs to minimize the burden of chronic disease. It also shows the importance of keeping the healthy population from progressing into the more severe disease states. Comprehensive wellness programs need to address employees in all segments. Additional indicators of productivity, such as short- and long-term disability, days missed from work due to illness, and family medical leave absences, can be compared to the lifestyle risks of the population to better understand the associations and give a complete picture of the full impact of various risk factors on the organization.

### Step 2: Define Goals, Quantify Objectives, and Identify Gaps

The second step in our 10-step process is to define your program goals based on the analysis of the health and risk levels of your specific population. Older populations tend to benefit more from diabetes prevention and management programs. Cancer screenings, physical activity incentives, and nutritional goals may also be important. Tobacco cessation programs may or may not be a priority. For younger populations, programs designed to manage high-risk pregnancy, migraine headaches, and lower-back pain may be more important. You will need to set goals and understand gaps in care specific to your population.

Reviewing your medical and pharmacy spend may also lead to re-evaluation of the medical benefits and pharmacy coverage offered by your health plans. Gaps between the actual and desired prescription rate for generic drugs and lower-than-optimal cancer screening rates are just two areas that may be important to analyze. You'll also want to examine your plan design for barriers to preventive or evidence-based care.

### Step 3: Build a Business Case

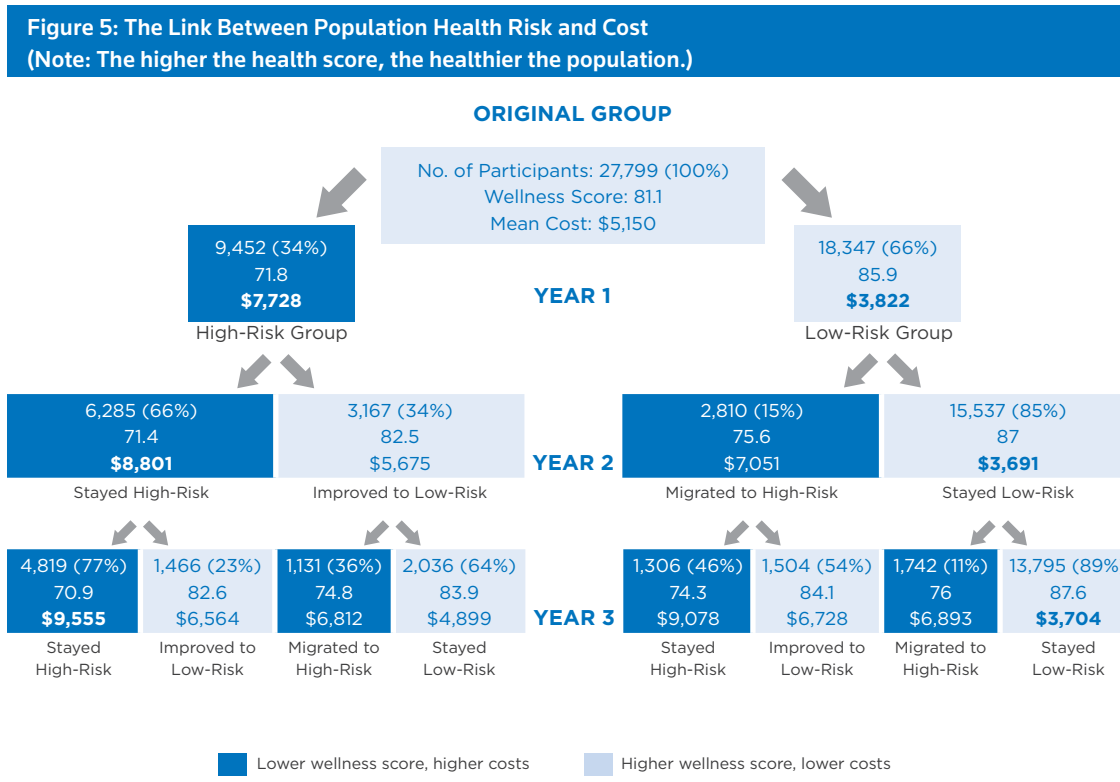
Wellness programs will compete with other hospital initiatives for funding, so the business case needs to make the value clear by outlining both the benefits and the costs. In the past, studies of corporate programs have been faulted for lack of rigor. In most companies, randomly controlled trials are not possible. Most wellness program evaluations are either cohort observational trials or a “pre- and post-” analysis.

Dee Edington, PhD, from the University of Michigan has done extensive studies to understand risk profiles within populations and the correlation between risk and cost. In his book, “Zero Trends: Health as a Serious Economic Strategy,” Dr. Edington reported his findings from a population study of nearly 28,000 workers (Figure 5).<sup>5</sup>

In the first year of measurement, the original group of 27,799 workers had a wellness score of 81.1 with an average medical cost of \$5,150. He then separated the population into two groups based on their health risks (low risk and high risk). By following these groups over a 3-year period, he was able to assess changes in the level of risk and associated medical cost trends. While some participants stayed at the same level of risk, others changed levels over the 3-year period. In all cases, as employees migrated to higher levels of risk, their costs went up. Those who migrated to lower levels of risk generally saw a decline in medical costs.

This research demonstrates that cost follows the level of risk. While the percentage of employees in various risk groups may not have changed much over the 3-year period, there was significant movement by employees between the groups. By reviewing your own data and understanding how your employees’ risks migrate over time, you will be able to design programs to address and lower your specific population’s risk.

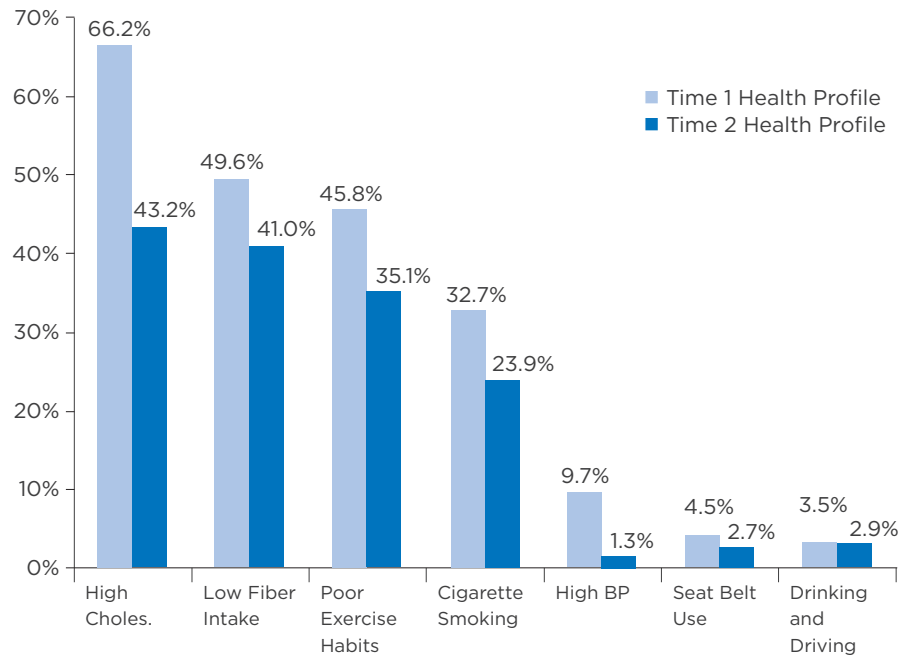
*“As employees migrated to higher levels of risk, their costs went up. Those who migrated to lower levels of risk generally saw a decline in medical costs.”*



Source: Adapted from “Zero Trends: Health as a Serious Economic Strategy” by Dr. Dee Edington, 2009.

In addition to establishing the link between risk and cost, a business case should consider whether risk-reduction programs are effective. What is the evidence that program interventions actually decrease risk and are, therefore, worth the investment? To answer this question, Johnson & Johnson published a study detailing the outcomes of its wellness program.<sup>6</sup> The company was able to show improved levels of risk in several important areas, as illustrated in Figure 6. In every lifestyle category, the participant's risk improved after the implementation of a wellness program.

**Figure 6: Risk Reduction due to Johnson & Johnson's Wellness Programs**

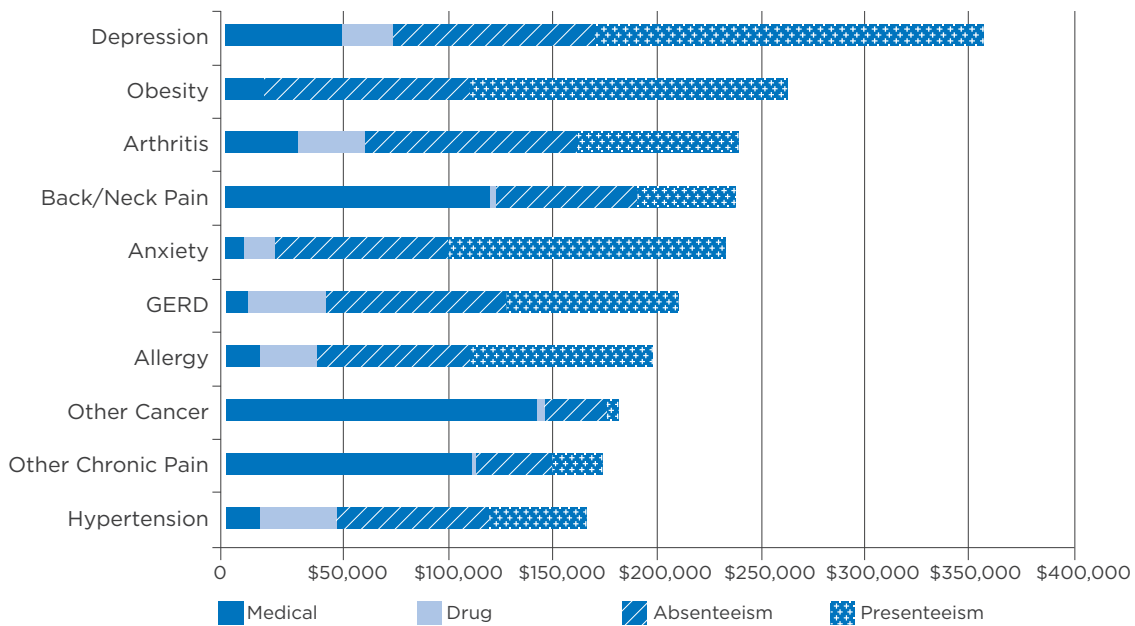


Source: *The long-term impact of Johnson & Johnson's health and wellness program on employee health risks. Journal of Occupational and Environmental Medicine, 2002.*

Another comprehensive business case analysis was published in the *Journal of Occupational and Environmental Medicine* by Ronald Loeppke, MD, et al.<sup>7</sup> This study looked at direct medical and pharmacy costs among 10 employers insuring more than 50,000 lives. The study also calculated the indirect costs due to absenteeism and presenteeism. (Presenteeism attempts to calculate the lost productivity when a person is on the job but not functioning fully due to a medical problem.) Based on this approach, the three most costly diseases were depression, obesity, and arthritis (Figure 7).

These three studies illustrate how a team might proceed in developing a business case for the return on investment in health promotion programs. A variety of data elements should be considered, including program and communication costs. Analyses may vary from basic risk reduction to detailed population health studies, but the core element of the business case rests on the concept that health risk reduction saves money and is a good investment.

Figure 7: The Direct and Indirect Cost of Illness



Source: Health and productivity as a business strategy: A multiemployer study. *Journal of Occupational and Environmental Medicine*, 2009.

#### Step 4: Get Buy-In From Senior Management

It is critical that senior management understands the value of creating a culture of health before you begin to implement any health and productivity initiative. Senior management drives the culture of the organization, ensuring that mid-level managers are also advocates for health and wellness. Once you've presented the business case, we suggest that you answer these key questions before moving forward:

1. Does senior management view the provision of medical coverage for employees as a cost to be minimized or as an investment in the workforce?
2. Does senior management understand the connection between the health of their hospital employees and employees' productivity?
3. Does senior management understand that healthy employees are a competitive advantage compared to a workforce with a high burden of chronic disease?

Ensuring that senior managers understand the link between a healthy workforce and a high performance organization — and regularly communicate this as part of their overall strategy — is a continuous process. One way to keep the subject top of mind is to recruit a senior manager to champion the effort to change the organizational culture from one of viewing healthcare as an expense to one of valuing health as a business necessity. Many hospitals focus on safety and include safety messages in executive communications to employees; a health champion should take a similar approach to wellness initiatives. Ideally, the champion would be visible at health-related events such as wellness fairs, serve as an advocate for various wellness programs, and be a role model for healthy behaviors.

### Key Metrics for a Comprehensive Measurement Strategy

- Most common and most costly diseases
- Most common and most costly medications
- Medical cost trends over time
- Outcome metrics of the intervention programs in place
- Metrics around disease prevention and health screening efforts

### Step 5: Establish a Measurement Strategy

A comprehensive measurement strategy should include an evaluation of every program or intervention using valid research methods. A comparison of participants to non-participants with adjustments for age, sex, and risk level is a key component. Evaluations should also include measures of return on investment (weighing program costs against savings) and value on investment (accounting for outcomes without quantifiable benefits, such as increased adherence to evidence-based medicine guidelines).

In addition to defining the metrics, your strategy should outline how frequently each will be measured. Many of the relevant metrics are suited to annual reporting, but some program evaluations may be done monthly or quarterly. It is important for program metrics to include both measures of participation (process measures) and clinical results (outcome measures). Employee satisfaction with intervention programs should also be evaluated regularly.

Defining which metrics to share with which stakeholders is also important. Many companies develop “dashboards” comprising a few key metrics to share with different groups of stakeholders. The dashboards may include the most common and most costly diseases (costly diseases may not be the most common), most common and most costly medications, medical cost trends over time, outcome metrics of the intervention programs in place, and metrics around disease prevention and health screening efforts. Comparisons to standards and benchmarks should also be included.

Senior management may want a higher level “dashboard” style of reporting, while program managers need much more detail. Department heads should receive overall metrics in addition to more in-depth reporting by department. Ideally, the reports should reflect the population group or business unit for which a manager has responsibility. Reports that are specific to a manager’s span of control are more meaningful than companywide reports.

The medical benefits group may also consider developing metrics to assess the quality of physician services in the outpatient offices. Metrics to compare physician performance in the areas of managing chronic disease, cancer screening, vaccination rates, and others are all available. These measures can become the basis for improved clinical outcomes for hospital employees and their families through high performance networks or a tiered benefits strategy based on performance.

### Step 6: Review, Revise, and Align Policies and Procedures to Support a Healthy Workplace

Part of a cultural shift in the work environment includes reviewing existing health and pharmacy benefit plans, as well as organizational policies. Benefit plans should be aligned to remove barriers to effective care. This concept has been termed “value-based insurance design.” Evidence-based cancer screenings (breast, colorectal, and cervical) should be covered at no cost to the employee. Similarly, plans should cover proven, high-value medical services at minimal employee cost; care management

programs should direct employees toward these services. In addition, pharmacy plans should encourage the use of generic medication, offer medically proven therapies at lower cost to the employee, and measure adherence to prescribed medications.

Health system employers should also review their organizational policies to ensure they are aligned with a culture of health. Increasingly, health system campuses and other locations are implementing tobacco-free policies. Food services should promote healthy nutrition choices and adjust portion sizes as needed. Foods higher in nutritional value can also be priced more competitively. For example, low-fat options in vending machines should be available, clearly marked, and priced lower than high-fat options.

A health system employer can also ensure that the campus is friendly for physical activity. Safe and well-lit indoor and outdoor walking areas, along with break time for employees to take brisk walks, can create an environment where exercise is easy and convenient. Some hospitals have also implemented onsite fitness centers to encourage exercise. These are just a few examples of changing policies and procedures to enhance employee health.

#### Step 7: Design or Modify Programs and Incentives to Fit Your Overall Goals

As previously discussed, program design depends on the risk profile of your population. You should not consider interventions until there is a clear understanding of the health problems of your workforce. As you review the data, it is important to keep in mind that interventions should address employees at all points in the care continuum: those who are generally healthy, those who have established risk factors for disease, and those living with chronic conditions.

The majority of employees tend to be healthy, although they may be at risk for future disease. The opportunity with this group is in education and awareness activities regarding risk factors for future disease and interventions designed to decrease those risk factors. These activities have been termed, “keep the healthy, healthy,” and may include nutrition, physical activity, and weight management education. Employees at lower risk should routinely be surveyed using a health assessment to ensure they remain at low risk. Blood pressure, BMI, and lipid screenings as part of a “know your numbers” campaign can be a fun, nonthreatening way to help this group become engaged in proactively managing their health.

Some employees have established risk factors for disease. With this group, the strategy is to identify modifiable risk factors and develop a targeted approach to help them decrease their level of risk. In a centralized setting, onsite coaches can be deployed to engage these employees in making lifestyle changes. In a decentralized setting, telephone-based programs may be useful. Risk-reduction programs in this setting should incorporate motivational interviewing to help employees change lifestyle behaviors such as smoking, lack of physical activity, and poor eating patterns. It’s important to keep the initiatives focused on a few key issues; broad attempts to “overhaul” a person’s daily life are less likely to be successful.

*“It is important to keep in mind that interventions should address employees at all points in the care continuum: those who are generally healthy, those who have established risk factors for disease, and those living with chronic conditions.”*

A third group of employees are those who are already living with a chronic condition. It's important to focus your disease management efforts on a small number of chronic conditions that have the most impact on your organization. Although the value of disease management programs can be hard to demonstrate, rigorously run programs should be able to show improved clinical outcomes. For example, when establishing a diabetes program, the eligible group should not include everyone with a diagnosis of diabetes, but rather a subset of those with diabetes who are having difficulty controlling their HbA1c, LDL cholesterol, or blood pressure, as these are risk factors for diabetic complications. Tracking process measures, such as the percentage of those receiving eye examinations, urine tests for microalbuminuria, or foot examinations, are also important, but should not be the sole basis for evaluation of the program.

A subset of those employees living with chronic conditions may have potential (or actual) catastrophic consequences. Some of these employees will benefit from a case management approach, although not all catastrophic cases will show benefit from case management. For both disease management and case management programs, the first challenge is targeting the right segment of the population for intervention. The second challenge is engaging the appropriate population segments by using the right messages and media for outreach. This needs to be as personal and relevant to the individual as possible. The third challenge is to be sure the interventions are focused on parameters that are clinically valid.

Although the literature is still unclear as to whether incentives will improve outcomes, more and more employers are looking to implement financial rewards or incentives as part of their wellness programs. Incentives can be offered in the form of cash, insurance cost rebates or forgiveness, days off, or trips. Incentives were initially structured as an incentive for participation in programs, but the current trend is to offer incentives for achieving certain measures of health. Employers are now offering incentives for getting blood pressure or lipids under control, stopping tobacco use, or reaching a certain level of weight loss. Incentives can take the form of rewards (“carrots”) or punishment (“sticks”), but however structured, it is now fairly common to see some financial inducement to change lifestyle behaviors. Ultimately the individual employee needs to be self-motivated to make lifestyle changes, but financial incentives may be a way to encourage initial efforts at self-improvement. In designing these types of incentive programs, be aware of the many legal restrictions. Your legal representatives should thoroughly review all incentive programs for compliance with regulations.

### Step 8: Develop an Ongoing Communications Strategy Using Multiple Channels

Ongoing, frequent communications about population health programs are an important, but often overlooked, component of creating a culture of health. When developing a communications strategy, consider these issues:

- Different levels of the organization need different messages
- Different employees will need different methods of communication
- The frequency and timing of messaging may vary for different stakeholders



Senior leadership is focused on strategy and overall policy decisions, and health promotion communications at this level also need to be strategic in nature. When communicating to your executives, be sure to highlight the major health issues being addressed by your wellness programs and the overall goals of the intervention programs. The leadership team should also receive quarterly or annual reports about the wellness programs, including outcomes and financial analyses. Additionally, senior leadership needs to help communicate the message to employees throughout the organization. Optimally, an executive will champion the wellness efforts, but all members of the senior leadership team need to regularly communicate their commitment to a healthy workforce. Wellness messaging should be embedded into their regular communication channels.

Managers at the operations level should also receive regular reports, but they benefit from information specific to their part of the organization. Managers need to understand how the programs are benefitting them and their workers specifically. They should receive productivity information such as lost work days and short- and long-term disability data to help them understand the impact of programs on their employee group. They should also receive employee satisfaction data concerning the wellness programs. Providing a summary report of progress for all departments may also be helpful to stimulate inter-group competition. Program and medical cost information may not be as relevant to this group.

Finally, individual employees should receive information about how the programs are helping their fellow employees improve their health. Testimonials from coworkers can be motivating to this group. These messages should inform employees about all aspects of the program and convey the message that their organization cares about their health and well-being. Health messages should also be specific and relevant to the employee's health issues. When communicating with employees, all available media should be used, including direct mail, email, and social media.

### Step 9: Measure Your Progress and Adjust Your Programs Accordingly

We've already discussed the importance of defining the data to be collected for your measurement strategy, but perhaps the most important metric is to answer the question, "Are my employees becoming healthier?" Program managers should measure and report participation levels in the various programs. However, a challenge for many wellness programs is to have high enough participation levels to measurably improve the health of the workforce.

Measuring outcomes is even more important. If a program is not meeting the specified goals, the program should be changed. For example, in a cardiovascular risk-reduction program, one would expect to see improved metrics for blood pressure and cholesterol within the first year. Diabetes metrics should also improve quickly. Financial metrics generally take more time to stabilize and improve, but a return should be generated in the first few years.

### Targeted Solutions Achieve Results

Truven Health Consumer Advantage solutions help people evolve from passive participants to active healthcare consumers. People respond best to information that is personal and relevant to the issues they face. Using simple, persuasive, and easy-to-understand communications, clients using Consumer Advantage solutions have seen results such as a 7-percent increase in adherence to breast cancer screenings and a 22-percent increase in colorectal cancer screenings.

## Step 10: Ensure a Sustainable Culture of Health

Once an organization has implemented a health promotion program, all aspects of the program need to be continuously monitored for quality improvement opportunities. Successes should be communicated and the achievement of specific goals should be celebrated. New programs and incentives should be offered to keep employees engaged as their needs evolve. As employees recognize that health and wellness is not just a once-a-year event and senior leadership is dedicated to creating a continued culture of health, they will embrace the importance of making healthy lifestyle choices. As the culture continues to evolve, health risk levels will improve, healthcare cost trends will stabilize, and employee engagement and productivity will increase.

### Expanding the Culture of Health to ACOs

By applying the concepts of health and productivity management, hospitals and health systems can improve the health of their workforce, which is a prerequisite to becoming a high-performance organization. Once a hospital is able to successfully manage its own population, applying that knowledge to improve the health of the broader community is a natural progression.

According to *Becker's Hospital Review*, "Employee health management is an opportunity for hospitals to put their money where their mouths are. When a large employer asks how a hospital plans to manage population health, a successful organization should be able to illustrate that answer by referring to its own workforce."<sup>8</sup>

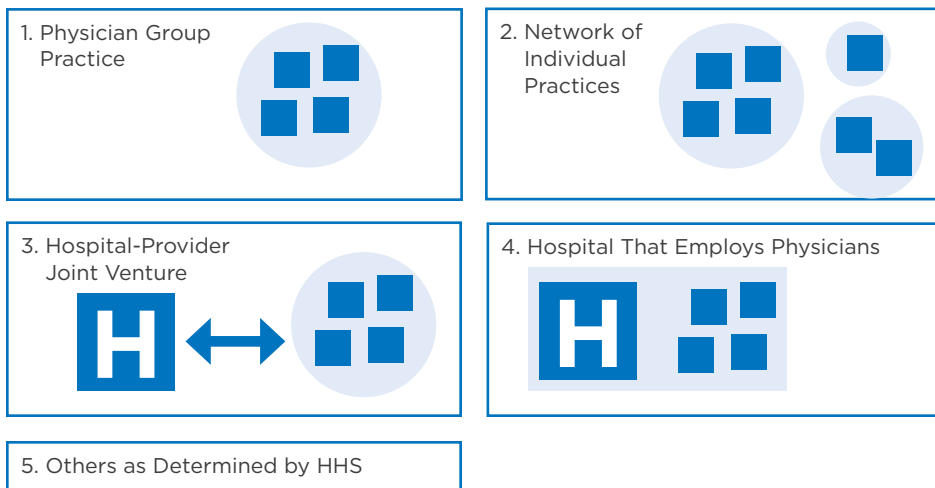
Accountable care organizations (ACOs) have gained national attention as a result of the Patient Protection and Affordable Care Act (PPACA). Touted as a model to improve population health and reduce healthcare costs, ACOs are defined by the Urban Institute as "a local healthcare organization and a related set of providers that can be held responsible for the cost and quality of care delivered to a defined patient population."

The Centers for Medicare & Medicaid Services (CMS) has designated that ACOs can be formed by hospitals that employ physicians or hospital-provider joint ventures. Physician group practices or networks of individual practices can also form ACOs (Figure 8). As of September 2011, the Commonwealth Fund found that 18 percent of ACOs in development were hospital-led, while 51 percent were formed as a joint venture between hospitals and providers.<sup>9</sup>

CMS has also outlined several requirements for organizations to function as an ACO, including:

- The ability to manage at least 5,000 covered lives
- Accountability for the quality and cost of the assigned beneficiaries overall care
- Processes for promoting evidence-based medicine and coordination of care, with the ability to report on quality and cost outcomes
- A structure that includes clinical and administrative information technology (IT) systems

**Figure 8: Entities Eligible to Form an ACO**



Source: *A Successful Micro Accountable Care Program as a Model for Healthcare Reform*, Dr. William Bithoney, et al, 2012.<sup>10</sup> Adapted from *The Centers for Medicare & Medicaid Services (CMS)*.

Hospitals are a natural fit to lead the charge toward improving care coordination, outcomes, and costs for a larger community. Many already offer the framework of a vertically integrated health system. In addition, many of the components used to create a culture of health for hospital employees are relevant to the success of an ACO. These include the implementation of disease management programs, emphasis on early detection and preventive care through a model such as the patient-centered medical home (PCMH), and employment of appropriate IT systems.

## Conclusion

With the PPACA and the American Recovery and Reinvestment Act calling for quality improvement initiatives, more robust and interoperable IT systems, and improved care processes, the U.S. healthcare system is poised to transition to a better model. The current approach of paying for volume of services delivered, not health outcomes, is unsustainable. New models of care, such as ACOs, are designed to improve the health of entire populations rather than care only for sick patients who come through the doors of a facility. These models offer a tremendous challenge and a tremendous opportunity for hospitals and health systems.

Hospitals and health systems have a historic opportunity to lead the change in healthcare, beginning with their own employees. Today, the average hospital worker has higher utilization and a higher burden of illness than individuals in the U.S. workforce at large. According to Raymond Fabius, MD, chief medical officer for Truven Health, “Ideally, the healthcare workforce would be a model for healthy behaviors and the appropriate use of medical resources. Hospitals that tackle this issue can strengthen their business performance and community service.”

To successfully manage the risk level of their employees, hospitals and health systems must embrace a culture of health, beginning at the highest levels of the organization. Comprehensive data and analytics are central to the development of best-in-class wellness programs. In addition, the 10 steps outlined in this paper are at the core of every successful implementation.

This paper echoes the AHA call for hospitals to create a culture of health within their communities. Now is the time to embrace former CMS administrator, Dr. Donald Berwick's "triple aim" of better care for individuals, better health for populations, and lower cost growth through improvements in care.

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## About the Authors



Michael Taylor, MD, FACP

Dr. Taylor currently serves as vice president and national business medical leader for Truven Health Analytics. In this role, he offers clinical expertise and consultation to the employer and health plan markets, helping them with population health issues. This includes developing, evaluating, and maintaining health and wellness efforts as well as thought leadership, strategy, and expertise in innovation and product development. Most recently, Dr. Taylor served as the Medical Director for health promotion and disease management at Caterpillar, Inc. He was directly responsible for Caterpillar's wellness program, with more than 100,000 participants in the U.S. A board-certified internist, Dr. Taylor graduated from the University of Illinois College of Medicine, where he also did his residency.



William G. Bithoney, MD, FAAP

Dr. Bithoney brings considerable experience in health delivery to his role as national business medical leader for Truven Health Analytics. Most recently, he served as interim president and chief executive officer, chief operating officer, and chief medical officer at Sisters of Providence Health System in Springfield, MA. While there, he led a team in developing a model Accountable Care Organization (ACO), which received the American College of Healthcare Executives (ACHE) 2010 Award for Most Outstanding Innovation in Health Care. A board-certified pediatrician, Dr. Bithoney earned his medical degree at Yale University School of Medicine, where he also did his residency.

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