SECOND EDITION

Population Health Creating a Culture of Wellness

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To Es, Leah, Rachel, and Jake—you make it all worthwhile.
—DBN
To all of my family, friends, colleagues, and mentors who have supported, encouraged, and taught me along my journey. In particular I want to dedicate this book to my wife, Sara, and my two sons, Michael and Daniel, and their wives, Laurie and Katie. Additionally I want to thank my dear friend David Nash for inviting me to collaborate with him on many projects over the years, including this effort.
—RJF
To Tom, for his unfailing support and love.
—AS
With love to Bill and our combined family, and thanks to Noah Webster.
—JLC
To Josh, Alex, David, and Sammy—your support and love mean the world to me. You inspire me every day.
—MRH
To our alumni and current and future students, who challenge us to address the ever-changing demands of health care.
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From volume to value, the spectrum of care, healthcare reform—these words have entered the everyday lexicon of patients, physicians, nurses, and hospital and health system CEOs. But philosophy and good intentions will not get us through the difficulties that currently exist in this twilight zone of health care, whereby we are undergoing a paradigm shift from a hospital-dominated, disease-driven economic model to one that rewards everyone in the system for helping the patients they serve become and remain healthy. The Patient Protection and Affordable Care Act (whatever your politics) serves as a clarion call to all of us who serve in or need the American healthcare system. The time to act is now; we can no longer afford the luxury of philosophical debate.

That call to action is answered by Dr. Nash and his colleagues in the second edition of a book that could not have come at a better time. Both the academic and street credentials of the authors should be motivating for anyone who cares about moving from healthcare reform to health transformation. The must-read aspect of this edition, however, is in its ability to translate complex principles of population health into a field manual that can serve as a guide for the difficult cultural transformation that will be necessary during this tumultuous time of both uncertainty and opportunity for all of us involved in providing health care.

As the president and CEO of an almost 200-year-old academic medical center (one that was smart enough to create the first school of population health), I recognize that what got us here won’t get us there. The next few years will serve as a type of natural selection for those systems that begin the journey and create a road map for a culture of
health. It’s not what we were taught in medical school or business school, so for now the second edition of Population Health: Creating a Culture of Wellness will serve as a much-needed resource and reference on my desk and that of my trustees. I invite you to begin the journey with Dr. Nash and his colleagues of changing the DNA of health care—one population at a time.

Stephen K. Klasko, MD, MBA
President and CEO
Thomas Jefferson University and Jefferson Health System
In July of 2008, the Board of Trustees of Thomas Jefferson University in Philadelphia, Pennsylvania, voted unanimously to approve the creation of the first School of Population Health in the United States, aptly named the Jefferson School of Population Health (JSPH). As part of a strategy to become a recognized national leader in health sciences education, the university has made an important public commitment to improving the health of its citizenry. As the first school of population health in the nation, we have a particular responsibility and burden. Our challenge is to train leaders for the future from across the healthcare spectrum who will go forward and improve the health of the population. This book provides a strong foundation for helping us meet that challenge.

A number of important questions needed to be answered as we began to develop a population health agenda, beginning with “What exactly is population health, and how does it differ from public health? Why create a multiauthored text on the subject? Who is the intended audience?” We tackled these issues in turn.

Population health is a term that has gained considerable traction in our everyday lexicon. Most thought leaders agree that population health refers to “the distribution of health outcomes within a population, the health determinants that influence distribution and the policies and interventions that impact the determinants.” Population health may also be viewed as “the aggregate health outcome of health adjusted life expectancy of a group of individuals, in an economic framework that balances the relative marginal returns from the multiple determinants of health. This definition proposes a specific unit of measure of population health and considers the relative cost-effectiveness of resource allocation to multiple determinants.” When applying the population health concept across the continuum, it is important to consider five essential goals: (1) keeping the well, well; (2) reducing health risks; (3) providing quick access to care for acute illness so that
health does not deteriorate; (4) managing chronic illness to prevent complications; and (5) getting those with complex or catastrophic illnesses to centers of excellence or compassionate care settings. To accomplish these goals effectively, health informatics and organizational approaches to care must be leveraged and institutionalized, and progress must be regularly assessed across the spectrum of care.

As our school marks its sixth birthday, the leadership and faculty have coalesced around a deeper understanding of the differences between population health and public health (i.e., population health connects prevention, wellness, and behavioral health science with healthcare quality and safety, disease prevention, and management and economic issues of value and risk—all in the service of the specific population). Like public health, population health builds on epidemiology and biostatistics, but population health takes these disciplines in new directions by means of applied metrics and analytics.

Underlying the differentiation between population health and public health are some other critical aspects of our system. Historically, our healthcare system rewarded reactive care rather than proactive care and financially encouraged doctors to focus on treating acute episodes of illness and disease rather than managing those illness or diseases to avert future crises. In most cases, doctors were paid for “piecework” (i.e., they were paid more for providing higher volume and higher-intensity acute care services). At the same time, doctors were underpaid—or not paid—to coordinate effective preventive health care to keep their patients out of hospitals. This resulted in a “toxic payment system that undermines fiscal incentives for promoting wellness” and placed doctors in “the ‘disease business’ not the ‘wellness business.’”

Driven principally by the same payment system, hospitals have long been in the business of treating acute episodes that are the end result of preventable diseases. Although the mission statements of most hospitals read something like this, “Our mission is to improve the health of our community,” the financial realities of the traditional payment system generated conflicts of interest. If hospitals were incentivized to succeed in their missions (e.g., payment for patient education, care coordination, and other efforts to reduce admissions for diabetes, smoking, asthma, and coronary disease), they and their patients would benefit. Population health represents the paradigm shift that has already begun to tackle the aforementioned challenges faced by doctors and hospitals.

Much has happened since the publication of the first edition of this book, principally, the continued implementation of the Patient Protection and Affordable Care Act (ACA), signed into law by President Obama on March 23, 2010. This book is not about red states or blue states. It is not about the troubled implementation of the insurance exchanges. It is not meant to be a treatise on healthcare reform. Rather this book is the lever with which we may begin to implement a new type of medicine—population health medicine—with a focus on changing the very nature of clinical practice so that it evolves into a “no outcome, no income” system, a system that is characterized by the following:
practicing medicine based on the evidence and tying payments to those outcomes, (2) reducing unexplained clinical variation, (3) continually measuring and closing the feedback loop between physicians and the supply chain that supports them, (4) trading professional autonomy for clinical collaboration, and (5) engaging with patients across the continuum. The ACA makes this five-point plan a strategic imperative, and it offers a road map toward the creation of a more responsive and effective health system for the future.

Subsequent to the publication of the first edition, we’ve learned as a nation that our diet of unbridled access to high technology, a focus on illness, and an inequitable distribution of societal resources have led us to an unenviable spot (i.e., a nation that ranks 17th in the world with regard to the quality of life of our citizenry). In a stunning Institute of Medicine report, widely cited in the past several years, the United States ranks last, right behind Slovenia, of the world’s wealthiest nations. This ranking is particularly disappointing in light of the fact that we spend more on health care than any other country. Certainly, if there ever was a time for us to embrace the concept of population health, it is now!

Population health is at the core of the Jefferson School of Population Health. Population health impels us to take a broader perspective to truly improve the health of the public. We must explicitly recognize the nature of care in our system. We must strive for better understanding of the evidentiary basis of what we do every day at the bedside and across every care setting—in ensuring wellness, preventing and treating illness, and supporting populations across the life-span. Finally, we must be responsible stewards of the vast public resources for which we are accountable to our citizens. Perhaps then our nation will become a world leader in providing a healthcare system characterized by the original Institute of Medicine’s six domains of safety, effectiveness, efficiency, patient centeredness, timeliness, and equity.

**WHY A SECOND EDITION OF THIS BOOK?**

When we launched the Jefferson School of Population Health, there was no single unifying treatise that captured the philosophy and mission of our school. Although there were many contributors to the science of population health, no one had brought forth a single volume as an overview of the field. No one had previously articulated the scope of the field and the need for innovative approaches, strategies, and practices. This text continues to break new ground, and in so doing, it suggests new solutions and raises many vexing questions.

One lingering question remains unanswered: how will health systems deliver on the true mission of population health? There are promising reports of efforts that are already under way (e.g., some hospitals in the Midwest are growing crops to feed the poor in zip
codes they serve, and others are interacting with local school systems and social institutions that help to determine the health of the population). As editors, we recognize that 85% of a society’s well-being is driven by activities outside the four walls of any hospital or medical facility. The launch of our school, contiguous with one of the nation’s oldest and largest private medical schools and health delivery systems, affords us a unique platform and a much-needed voice to meet the challenges at hand.

**HOW IS THIS BOOK ORGANIZED?**

This second edition brings the reader up to speed on the expanding role of population health and its importance in bringing about a nationwide culture of wellness. The entire text has been updated to incorporate considerable changes in the healthcare system and population health brought about by innovation as well as the implementation of the ACA. For example, a new opening chapter explains how the response of the healthcare system to the population health mandate has paved the way for the ultimate goal—a culture of health and wellness.

In this edition, chapters are regrouped under updated section headings to improve the flow and make the text more reader friendly. A number of chapters were added that recognize the new emphasis on emerging fields such as patient engagement, behavioral economics, and comparative effectiveness research. Several new and engaging case studies were added to the book as well (e.g., a case study focused on assessing the organizational readiness for population health in a national, not-for-profit hospital chain). The book is organized into five key sections:

- Section 1 provides an overview and a policy synthesis.
- Section 2 focuses on the consumer and his or her new role in a system characterized by population health.
- Section 3 recognizes the importance of the continuum of care, moving us beyond the hospital walls.
- Section 4 describes the connection between population health and the business case for achieving a “no outcome, no income” value-based delivery system.
- Section 5 discusses the key research questions for the future.

**WHO SHOULD READ THIS BOOK?**

The editors are grateful for the participation of a large number of nationally recognized experts from across the spectrum of population health practitioners. Principally organized for graduate work in population health, this edition could serve as the foundation for courses in schools of public health, health administration, medicine, nursing care, and
pharmaceutical sciences. Every section contains important information for anyone who cares about how we might more effectively improve the health of our country. Practitioners in the field may benefit from the broad perspective and comprehensive approach of this book. Undergraduates in colleges and universities across the country may be moved to answer the call laid out by the Institute of Medicine to improve the public’s understanding of these themes. We also hope that as they face the challenge of educating the physicians of tomorrow, many schools of medicine will adopt this book.

Many people played a role in the genesis of this edition. As the senior editor, I would particularly like to thank our new university president, Stephen Klasko, MD, MBA, for his visionary leadership and his ongoing support of the Jefferson School of Population Health. I also want to recognize other campus leaders, including Michael Vergare, MD, chairman of the Department of Psychiatry, who was a steadfast supporter of our school in his previous role as senior vice president for academic affairs, and the new provost, Mark Tykocinski, MD.

As the senior editor, I also am very appreciative of the hard work of Drs. Ray Fabius and Alexis Skoufalos, our coeditors, and Janice Clarke, a nurse and senior medical writer in our school. Finally, special thanks go to Melissa Horowitz as managing editor for all of her work in keeping the entire project on track and on time.

I am grateful to the faculty and the staff of the Jefferson School of Population Health who have traveled this unmarked path with us in the successful launch and early growth of our school. As authors, we would like to thank others who have built the foundation that has led to the development of this new discipline and our school. Without the pioneers in utilization management, case management, disease management, health informatics, public health, and health and productivity at the workplace, we would not be able to realize, measure, or improve the health status of the population. We also would like to mention our gratitude to friends and family who have supported us as we pursue our passion for improving the health and well-being of the population.

Of course, we are grateful to our current and future students, who challenge us with their complex questions and whose quest for solutions will bring about much-needed improvements in population health in the future. As dean, I am confident that our students will go forth and make a world of difference.

As editors, we take responsibility for any errors of omission or commission. Most importantly, we greatly value feedback from readers and fellow pioneers in population health. We are particularly interested in the value of the text as a pedagogic tool as well.

One of the hallmarks of good leadership is to help prepare those that will take the mantle tomorrow. I am confident that the content of *Population Health: Creating a Culture of Wellness* will provide the foundation for training the future healthcare leaders that our nation so desperately needs to help nurture a healthier, happier, and more productive nation.

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Executive Summary

Creating a culture of wellness can sustain population health initiatives.

In many respects, population health is contingent upon the existence of a culture of health and wellness. Organizations and companies have demonstrated the ability to build a sustainable culture of health and wellness that produces improvements in **health status** and lowers healthcare costs for a target population. When legislators and politicians speak about bending the healthcare cost curve, those who have built cultures of health and wellness have done it. This chapter presents a clear picture of what it takes to achieve these best practices and informs readers who might one day embark on similar journeys within their organizations.

Learning Objectives

1. Define a culture of health and wellness.
2. Identify benchmark performance of a culture of health and wellness.
3. Explain how to create a road map for achieving a culture of health and wellness.
4. Analyze how a culture of health and wellness can contribute to solving the healthcare crisis in America.
5. Understand the connection between health and wealth.
**Key Terms**

alignment of constituencies  |  integrated data warehouse  
behavioral economics  |  medically homeless  
benchmark performance  |  risk reduction  
best practice  |  road map  
centers of excellence  |  value-based benefit design  
culture of health  |  wellness champions  
health status  |  workplace environment

**INTRODUCTION**

The population health movement has been gaining momentum over the past decade, particularly since the passage of the Patient Protection and Affordable Care Act (ACA) and the subsequent implementation of programs aimed at improving the health of the population. In terms of national statistics, population health remains a daunting challenge; however, some practical applications of its tenets by companies and organizations across the country show great promise. By enveloping population health in an environment that supports its delivery and sustainability, benchmark cultures of health and wellness are appearing throughout the country in large and small companies, in manufacturing and service-oriented organizations, in for-profit and not-for-profit entities, and even in governmental agencies. Since the previous edition of this text, the population health mandate has expanded to focus on building cultures of health and wellness.

**WHAT IS A CULTURE OF HEALTH AND WELLNESS?**

A culture of health and wellness is defined by its outcomes. Participants in a culture of health and wellness pursue and achieve higher levels of health and wellness than the general population does. The expected outcomes are comparatively better quality of life and reduced incidence of morbidity. Cultures of health and wellness surround participants with an environment, policies, and cues that lead regularly to healthy choices on both a conscious and unconscious basis. To appreciate the all-encompassing nature of a culture of health and wellness, consider the following attributes:

A culture of health and wellness makes it easier and more rewarding to select lifestyles that foster health. Studies show that eating right, not smoking, exercising regularly, managing stress, and drinking alcohol only in moderation can markedly reduce chronic illness over time. In fact, the World Health Organization estimates that 80% of cardiovascular disease and type 2 diabetes and 40% of cancer could be eliminated by engaging in these activities.
A culture of health and wellness cultivates the appropriate use of healthcare services. Studies by Barbara Starfield et al. at Johns Hopkins University have demonstrated the importance of having a relationship with a trusted primary care provider within a medical home. Despite this, it is estimated that as many as half of all Americans have no satisfactory connection to primary care. Of perhaps even greater concern, most Americans access healthcare randomly. In retrospect, the Healthcare Maintenance Organization model that required members to declare an affiliation with a primary care provider was a good policy for cultivating health and wellness. Because a culture of health and wellness educates and helps its participants become better health consumers, there are fewer medical misadventures and a greater chance that critical medical concerns are treated within centers of excellence.

A culture of health and wellness leverages all population health strategies. The range of available options includes:

- Opportunities for physical activity (e.g., walking trails, intermural competitions, fitness centers, yoga, meditation, sponsored events)
- Policies forbidding the use of tobacco products
- Promoting and perhaps subsidizing healthy choices in cafeterias, restaurants, and vending machines or taxing unhealthy ones

The best marketing tactics—including a branded, coordinated campaign—must be deployed to effectively promote healthy choices. While I was the global medical leader of General Electric, we developed the “Health by Numbers 0 5 10 25” program. Offered in eight core languages, this program taught that one should always use 0 tobacco products, eat 5 fruits and vegetables daily, take 10 thousand steps a day (we distributed pedometers), and maintain a body mass index of 25. All efforts to promote the program were branded with a Health by Numbers logo.

A culture of health and wellness provides and tracks the progress of risk reduction programs. All culture of health and wellness participants must know their health risks and develop action plans to mitigate them with the help of health coaches. Risks such as high cholesterol or high blood pressure are easily controlled by adherence to a regimen that includes a healthy diet, exercise, and medications. Obesity is a greater challenge, but participants are more likely to tackle it with social encouragement (e.g., Weight Watchers program), and they are more likely to maintain a lower weight in an environment that promotes healthy eating and exercise.

A culture of health and wellness assures that its participants have easy access to healthcare services. Access to prompt medical treatment for acute illnesses and to screening programs to identify chronic and potentially fatal conditions is essential to a culture of health and wellness program (e.g., breast and colon cancer deaths would be much rarer if mammographies and colonoscopies were conducted when recommended in all cases).

Vaccines are arguably man’s greatest achievement. Within a culture of health and wellness, all participants receive age- and gender-appropriate immunizations. The
availability of influenza and other vaccines at local pharmacies is a great step forward for population health and for promoting health and wellness.

_A culture of health and wellness fosters the use of evidence-based clinical guidelines._ Despite the availability of national guidelines for the treatment of many common chronic illnesses (e.g., heart disease, diabetes, asthma, chronic obstructive pulmonary disease, depression), only half of Americans with these conditions receive recommended care. A culture of health and wellness implements policies and programs that significantly improve the level of individual compliance.

_A culture of health and wellness promotes health throughout the workplace environment._ Social and environmental pressures influence behavior (e.g., a person placed in an environment where the majority of individuals are obese is more likely to become obese). In addition to leveraging wellness champions and leaders to promote healthy options, a culture of health and wellness has rituals and places symbols of health promotion throughout the environment (e.g., water bottles, T-shirts, wallet cards, pedometers, tracking bracelets, poster boards). The Internet and social media are utilized as well with messaging on dedicated websites, mobile devices applications, video screens, and telemedicine.

_A culture of health and wellness assesses and improves its programs regularly._ Things that are measured can be improved. Today, integrated warehouses of data track medical claims, laboratory values, pharmaceuticals, disability events, workers’ compensation cases, durable medical equipment use, and even absence from work or work performance. A culture of health and wellness analyzes these data streams to identify healthcare trends and determine whether its population is experiencing better health, less illness, and in the case of a work environment, improved performance.

Many corporations, universities, and healthcare systems have been recognized as benchmark examples of cultures of health and wellness and much can be learned from studying them. One review of benchmark programs identified seven common elements:

1. Employ health and wellness program features and incentives that are consistent with the organization’s core mission, goals, operations, and administrative structures
2. Operate at multiple levels, simultaneously addressing individual, environmental, policy, and cultural factors in the organization
3. Target the most important healthcare issues among the employee population
4. Tailor diverse components to the unique needs and concerns of individuals
5. Achieve high rates of engagement and participation, both in the short and long term
6. Achieve successful health outcomes, cost savings, and additional organizational objectives
7. Are evaluated based on clear definitions of success, as reflected in scorecards and metrics agreed upon by all relevant constituencies

My research suggests that benchmark employers have deployed over 200 elements that are available to organizations seeking to build a culture of health and wellness and that a critical mass of these elements (approximately two-thirds) is required for success. It is now
possible to measure any organization’s pursuit of a culture of health and wellness against these elements and also to generate a score that can be tracked over time.

Experts suggest that both of the foregoing approaches to measuring a culture of health and wellness are helpful; the former quantifies a reduction of illness over time while the latter provides guidance on narrowing the gaps when compared with benchmark organizations.6

**WHAT IS A CULTURE OF HEALTH AND WELLNESS BENCHMARK ORGANIZATION?**

The literature is a good source of information on benchmark organizations (e.g., peer-reviewed articles, a book by Pitney Bowes about its journey).7 Conferences are conducted throughout the year highlighting best practices (e.g., the National Business Group on Health, the National Business Coalition on Health, the Institute of Health and Productivity Management, the Population Health Alliance, and the Population Health Colloquium). Among the many award programs recognizing best efforts are the Wellness Council of America, the Health Education Resource Organization, the American College of Occupational and Environmental Medicine, and the National Business Group on Health.8–12

Because benchmark cultures of health and wellness demonstrate significant reductions in healthcare expenditures and trends, many employers are pursuing benchmark performance to address their escalating healthcare costs. A benchmark culture of health and wellness documents high screening rates, high compliance with nationally recommended guidelines for care and low levels of unhealthy lifestyles. For example, after targeting smoking cessation over many years, Johnson & Johnson has decreased the number of smokers in its workforce to 7%.13 Compared to the national incidence of over 20%, this is a remarkable achievement. An IBM initiative encouraging the use of primary care and medical homes has markedly reduced the number of employees who are “medically homeless.”14

Research shows that benchmark culture of health and wellness organizations start with a strong commitment from leadership. The state of Delaware’s DelaWELL program is supported by the governor’s declaration.15 The Dow Chemical Company’s benchmark effort is led by its CEO.16 All benchmark organizations have data warehouses, and many have developed scorecards, dashboards, and cockpits to drive improvement at the department, business, and organizational levels. Most have physician executives whose jobs are dedicated to promoting health and wellness within the population. Trained in medicine and population management, these professionals are given adequate resources to identify and address opportunities for improvement on a population basis. They monitor and integrate all of the health-related programs from a clinical perspective (e.g., health risk assessments, biometric screenings, disease management services, disability management, and worker’s compensation).
As previously mentioned, many culture of health and wellness benchmark programs have sophisticated branding, marketing, and communication strategies. Most leverage the workplace to create an environment conducive to health and wellness. Some have built comprehensive primary care centers and pharmacies on their campuses. Most of these organizations provide health benefits, at least for their workforce and dependents. They have leveraged the science of evidence-based benefit design to foster the appropriate use of health services and healthy lifestyles. A few benchmark employers enable workers to earn higher levels of coverage by taking better care of themselves and family members. Increasingly, they are utilizing behavioral economics and in some cases, reducing their contribution to healthcare coverage when recommendations are not met. All are involved in multiyear strategies and following detailed road maps to achieving or maintaining benchmark performance.

**HOW DOES AN ORGANIZATION GET STARTED?**

There are a number of resources from credible sources that can help to create an organizational road map (e.g., the Change Agent Workgroup, the American Hospital Association, the Centers for Disease Control and Prevention, and the American College of Occupational and Environmental Medicine). The Change Agent Workgroup (a diverse group of experts in this space) published the following seven-step process to achieve a culture of health and wellness:

1. Establish a vision for health
2. Engage senior leadership and align management
3. Develop supporting workplace environment changes and implement workplace policies
4. Construct a comprehensive integrated data warehouse to analyze what ails the employee population and their families
5. Determine the measurements and goals for success
6. Utilize value-based benefit design and behavioral economics
7. Implement broad population health activities

**ESTABLISH A VISION FOR HEALTH**

Nearly every organization of significant size has developed vision and mission statements along with values and objectives. Benchmark culture of health and wellness companies embrace an organizational mission and vision that incorporates the value of a healthy workforce. Because these organizations strongly believe that a healthy workforce is a competitive advantage in the marketplace, they require employees to be responsible for maintaining their health as part of the job function. Employees may even be encouraged to assist coworkers in their quests for health and wellness. To begin building a culture of
health and wellness, a company's vision, mission, and values statements may need to be amended to clearly state the individual and collective responsibility of all people in the organization to maintain their health and foster well-being among all members of the company.

ENGAGE SENIOR LEADERSHIP AND ALIGN MANAGEMENT

Once the vision for health has been established, it must be promoted by the leadership and the management of the organization. Under the best of circumstances, the CEO provides periodic messages to the workforce to reinforce the importance of maintaining health and well-being. One way to communicate this is by videotaping a senior leader “walking the talk” (e.g., exercising) with a tag line such as “If I can find time to do it, so should you.” Many organizations do not actively support taking the time necessary to exercise; stating this as part of every job description goes a long way to building a culture of health and wellness.

A consequence of health benefits being paid through a corporate function is that management is removed from any oversight, understanding, or need to monitor the health of the workforce. Benchmark companies are changing this (e.g., some management compensation and bonuses are being calculated in part by the trend in medical costs and the health status of their employee bases).

DEVELOP SUPPORTING WORKPLACE ENVIRONMENTAL CHANGES AND IMPLEMENT WORKPLACE POLICIES

To establish a foundation for a culture of health and wellness, an organization must provide environmental cues. For instance, most companies have addressed smoking cessation through a series of incremental steps, from designated smoking areas, to no smoking in facilities, to no smoking on campus. This initiative is often accompanied by expanded health benefits to cover all treatments and services to support smoking cessation. Some cutting-edge organizations have gone further (i.e., testing new applicants for nicotine in their urine and not hiring smokers).

To promote exercise in the workplace, benchmark organizations ensure that the stairwells are safe and inviting (i.e., clean, carpeted, heated and air-conditioned, with paintings on the walls and music piped in to increase their use). Signage at elevators promotes stairwell use as well.

Cafeterias and vending machines in benchmark organizations offer healthy options that are marketed by means of prominent placement and labeling—unhealthy options are discouraged by making them more difficult to find or reach. Entrée choices are identified as being healthy or not. Best practice includes subsidizing the healthy choices and taxing the unhealthy ones. Progressive organizations work with nutritionists to eliminate unhealthy options from cafeterias, vending machines, and catering policies.
CONSTRUCT A COMPREHENSIVE INTEGRATED DATA WAREHOUSE TO ANALYZE THE EMPLOYEE POPULATION AND THEIR FAMILIES AND TO TRACK PROGRESS OVER TIME

Managing the health of a population requires understanding the key health risks, conditions, and diseases. Benchmark organizations integrate medical, pharmacy, disability, and workers’ compensation claims along with laboratory values, biometrics, health risk appraisal survey results, and absence data. Highly enlightened companies include presenteeism data in their analyses and use validated tools such as the Work Limitations Questionnaire24 or the Health and Work Performance Questionnaire.25 With these integrated inputs, world-class culture of health and wellness organizations can determine the financial effect of specific health risks, conditions, and diseases and prioritize programs and approaches in the best interest of the organization and the employees.26

UTILIZE VALUE-BASED BENEFIT DESIGN AND BEHAVIORAL ECONOMICS

Companies and organizations whose employees receive compensation and benefits may take advantage of additional methods to promote a healthy culture (i.e., they can manipulate compensation and benefits to reward healthy choices and behaviors). State-of-the-art culture of health and wellness organizations offer different benefit packages that employees and dependents earn by taking better care of themselves and making healthy choices. Those that meet a full panel of required healthy activities can earn the highest level of coverage. These companies work closely with consultants and third-party administrators to deliver a health benefit package that is evidence based (i.e., covers proven treatments at a high level and either provides no coverage or charges a steep copayment for unproven or low-value therapies). Benchmark companies understand the nuances of behavioral economics (e.g., recognizing that loss avoidance has a three times greater influence on behavior than do rewards), and they utilize health savings and health spending accounts to adjust coverage and apply the most influential approaches to rewards and penalties.27

IMPLEMENT BROAD POPULATION HEALTH ACTIVITIES INCLUDING PATIENT-CENTERED MEDICAL HOMES AND CHRONIC CARE MANAGEMENT

Whether it be a single company or a national initiative, a benchmark culture of health and wellness must take a comprehensive approach that addresses five key population cohorts across the continuum:

1. Those who are well
2. Those who are at risk
3. The acutely ill
4. The chronically ill
5. Those with catastrophic conditions
Programs must be established to keep well people well using a holistic approach that includes support for social, physical, emotional, career, intellectual environmental, and spiritual wellness, or SPECIES. People who are well have social connections, are physically fit and emotionally stable, have a purposeful stimulating occupation with potential for advancement, and live in a safe setting that supports physical activity and healthy eating. To keep its population well, a benchmark culture of health and wellness must employ a broad-based, systematic effort to help reduce risks for chronic illness (e.g., attacking obesity, smoking, drug and alcohol abuse, and sedentary lifestyles).

Access to health services must be ensured so that acute illnesses are treated promptly and potentially serious medical issues are addressed early. People with chronic illnesses must be provided condition management support to mitigate potential complications (e.g., people with diabetes must receive an annual eye exam to reduce a leading cause of blindness in America).

Lastly, a comprehensive population management platform must provide centers of excellence and compassionate care for those with catastrophic illness. This most seriously ill population segment benefits greatly from intensive and expensive medical management and coordinated social services. When properly managed, there is a significant return on the dollars spent and great value delivered to the patient and his or her loved ones. With advance directives in place, efforts to eliminate futile care will benefit families and society alike.

**ALIGNING KEY CONSTITUENCIES**

Organizations intent on building a culture of health and wellness should leverage constituency partners, with strong consideration given to collaborating with other like-minded organizations in the community through business coalitions and local chambers of commerce. Increasingly, payer organizations, health plans, insurance companies, and consolidated health delivery systems are positioning themselves to be allies in this pursuit. With better alignment of constituencies such as among employers, providers, payers, and the citizens, great progress can be made.

**COMPARISON TO BENCHMARKS**

Today, there are many benchmark efforts worth studying. Johnson & Johnson and Dow Chemical have published their respective outcomes and presented their successful programs in many forums. The previous leadership at Pitney Bowes published a book on their approach. The state of Delaware’s DelaWELL program is an excellent governmental effort directed at state employees. The University of Michigan publishes an annual report on its program. As mentioned earlier, several institutions confer awards on
organizations that have built a culture of health and wellness (e.g., the National Business Group on Health, the Health Education Resource Organization, and the American College of Occupational and Environmental Medicine). By studying the scoring systems deployed by these organizations, any organization can determine where it stands in relation to a benchmark performance. To use benchmark program information effectively, an organization should first identify gaps between its efforts and the cultivated culture of health programs. Once identified, the gaps can be prioritized, and the organization can build a multiyear strategic plan to achieve benchmark organization outcomes (i.e., lower healthcare costs and engender greater employee engagement and higher performance).

**A MARKET-BASED SOLUTION TO THE HEALTHCARE CRISIS**

When a critical mass of organizations in a community or region achieves a culture of health and wellness, the problems of rising healthcare costs and the increasing prevalence of chronic illness are likely to be slowed. Social pressures are likely to shift from consumption to promoting wellness. The healthcare industry, especially providers and payers, will begin to direct their attention to economic models that support the elevation of health status rather than delivering more health services. Employers will recognize that focusing on the well-being of their workforces is more than a nice thing to do—it is good business.

**JUSTIFICATION AND BUSINESS CASE: THE CONNECTION BETWEEN HEALTH AND WEALTH**

For many years, the prevailing belief was that nations had to attain wealth before they could become healthy. The recent experience in Africa, where the AIDS epidemic has markedly affected the potential workforce, has reshaped our collective thinking on this. Without a healthy working-age population, a country faces insurmountable challenges with respect to productivity and growth in its gross national product (e.g., Japan has a stagnant economy largely due to an aging demographic). This situation will begin to burden the United States as baby boomers retire and are not replaced by a comparable number of healthy young workers to maintain and advance productivity. When life expectancy is used as a proxy for health, there is a correlation between it and income at the state and national levels. Hans Rosling demonstrated this phenomenon in a powerful short film that looks at 200 countries over a span of 200 years.36

The relationship between health and wealth plays out at an individual level. Recently, Fidelity Investments estimated that a couple retiring at 65 in average health will need over $220,000 to pay for their out-of-pocket medical costs. If the couple reaches retirement in poor health, the figure could easily double or triple.37 Correlating income to health status, health informatics specialists Wendy Lynch and Hank Gardner38 suggest that higher income earners are more engaged in health and wellness activities. Healthy
individuals also are more likely to be higher performers as demonstrated by the Lamp-lighter Program at Unilever.\textsuperscript{39}

Published articles also support the notion that companies emphasizing the pursuit of a culture of health and wellness experience less escalation in healthcare costs\textsuperscript{40} and outperform in the marketplace.\textsuperscript{41} Whether one examines the issue from an individual, company, state, national, or global basis, there is compelling evidence confirming the connection between health and wealth.

**CONCLUSION**

Studying the achievement of organizations and communities who have successfully built a culture of health and wellness can provide great insights for us as a nation. Replicating these best practices on a broader scale can improve the health status of large populations and enhance the quality of life and performance of individuals at work and at home. Healthier citizens are more productive. The positive outcomes may include more prosperous communities, more involved family members, and more willing civic contributors. As we gradually move toward a national culture of health and wellness, fewer financial resources will be consumed treating illness and more can be directed to keeping well people well.

**STUDY AND DISCUSSION QUESTIONS**

1. What is a culture of health and wellness?
2. How can you build a culture of health and wellness?
3. Why does it make sense to pursue a culture of health and wellness?
4. Is there a connection between health and wealth?
5. What does it mean to bend the healthcare cost curve?

**SUGGESTED READINGS AND WEBSITES**

**READINGS**


**WEBSITES**

National Business Group on Health: https://www.businessgrouphealth.org/
National Business Coalition on Health: http://www.nbch.org/
Health Enhancement Resource Organization: http://www.the-hero.org/
Institute for Health and Productivity Management: http://www.ihpm.org/
Centers for Disease Control and Prevention: http://www.cdc.gov/
Integrated Benefits Institute: http://www.ibiweb.org/

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