Employer Health and Productivity Roadmap™ Strategy

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The National Institute for Occupational Safety and Health Total Worker Health™ Program defines essential elements of an integrated health protection and health promotion model to improve the health, safety, and performance of employers and employees. The lack of a clear strategy to address the core drivers of poor health, excessive medical costs, and lost productivity has deterred a comprehensive, integrated, and proactive approach to meet these challenges. The Employer Health and Productivity Roadmap™, comprising six interrelated and integrated core elements, creates a framework of shared accountability for both employers and their health and productivity partners to implement and monitor actionable measures that improve health, maximize productivity, and reduce excessive costs. The strategy is most effective when linked to a financially incentivized health management program or consumer-directed health plan insurance benefit design.

Employers, organizations, and the US economy generally are under increasing global pressure to improve performance, optimize efficiency, and deliver value. The National Institute for Occupational Safety and Health Total Worker Health™ program acknowledges the unprecedented issues that employers face and the role that an integrated approach to "occupational safety and health protection with health promotion" can play in creating healthier, high-performing workforces.

Over the past 30 years, the body of evidence supporting the need for an integrated approach to employee health has grown. Beginning with the work of Edington,[1] numerous researchers and business leaders have explored the relationship between health behaviors and health care risks and total worker productivity costs.[1–6] Similarly, studies of major corporations' culture, total compensation, and benefits-related policies and practices have shown that alignment of financial and other incentives from the "C-suite" to the employee level in the workplace is key to optimal organizational and financial performance.[7] Total health management to produce maximal vitality, productivity, and even corporate survival is increasingly recognized as a business imperative—not a "nice to do."[8] A definitive literature review of 28 studies concluded that well-designed worksite wellness programs can be cost-effective, generating $3.27 in medical cost savings and $2.73 in absenteeism reductions on average for every dollar spent on employer-based health promotion activities.[9] A more recent analysis of workplace wellness programs mandated by the Patient Protection and Affordable Care Act demonstrated the widespread employer use of health assessments, biometric screenings, coaching programs, and disease management interventions and concluded that resulting behavior change (particularly longer term) and return-on-investment results were mixed.[10] The distinction between "direct" health care cost savings and so-called "indirect" productivity-related costs (absenteeism, disability, workers' compensation, presenteeism, etc) is increasingly being blurred, because employers realize that unhealthy and distracted employees working in suboptimal or unsafe worksites are a risk to themselves and to the economic competitiveness of their company.

The earliest effort to define a unifying approach to integrated employee health that "bridged" the traditional "siloed" approach to health protection and health promotion was embodied in the Institute of Medicine report "Integrating Employee Health: A Model Program for NASA."[11] This framework was translated into more generalizable approach for all employers and organizations by the National Institute for Occupational Safety and Health[12] and the American College of Occupational and Environmental Medicine.[13] Critical to the Institute of Medicine report was the definition of a "healthy workforce" in practical and measurable terms (Table 1). These characteristics can assist employers to define goals, implement strategies, and execute policies, programs, and tactics to improve the health and performance of their employees.

As good as these models are, however, they lack a comprehensive strategy to incorporate and address (1) the epidemiology or true "determinants" of what causes poor or good health, disease, and disability; (2) the financing of health care through emerging insurance and benefit designs; and (3) innovations in the delivery of medical care. In short, how can employers "put it all together" to proactively address the core drivers of poor health, excessive medical costs, and lost productivity, leveraging best practices in aligned incentives, integrated employee-centric worksite programs, and emerging innovations in how care is paid for and delivered?

Employers, employees, and family members are not aware of the major impact that health behaviors have in improving health and preventing and even reversing chronic disease. Employers also do not realize how they can impact employee and family behaviors through the broadly defined "work environment" by using multiple levers they either control or influence. Canadian researchers Evans et al[14] created a "Determinants of Health and Disease Model," which demonstrated the multifactorial—and predominantly "nonmedical"—root causes of health, disease, and premature death. "Well-being," "prosperity," as well as social, physical, and genetic environments are interrelated and impact health and function, disease, and the need for health care. Employers can have a major impact on most of these determinants. More recently, the Robert Wood Johnson Foundation[15] echoed the findings of this predominantly nonmedical model by succinctly summarizing the determinants of health as "where and how we live, learn, work, and play."

Seventy percent of premature mortality has been attributed to behavioral and environmental causes, with only 10% being impacted by medical care.[16] Furthermore, it is estimated that 75% of health care costs are related to chronic diseases that are largely preventable through healthy eating, moderate physical activity, no tobacco use, and moderate (if any) alcohol consumption.[17] If US employees and their families adopted the successful preventive health behaviors, documented in health studies in other geographic regions and in American subpopulations (eg, 7th Day Adventists, Harvard physician and nurse studies), heart disease could be reduced by up to 83%, diabetes by 91%, and cancer by 60%.[17–19]

Compounding the burden of preventable disease that employers and employees bear is the realization that, conservatively, 30% of health care spending is wasteful, ineffective, or inefficient (Table 2).[20] Employers who purchase health insurance coverage for 60% of Americans struggle to address unnecessary services (overuse and misuse of visits, tests, and procedures), inefficient care practices, excessive prices, excessive administrative costs, missed prevention

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DOI: 10.1097/JOM.0000000000000049

TABLE 1. Characteristics of a Healthy Workforce*

Healthy
Demonstrating optimal health status as defined by positive health behaviors; minimal modifiable risk factors; and minimal illnesses, diseases, and injuries
Productive
Functioning to produce the maximum contribution to achievement of personal goals and the organizational mission
Ready
Possessing an ability to respond to changing demands, given the increasing pace and unpredictable nature of work
Resilient
Adjusting to setbacks, increased demands, or unusual challenges by bouncing back to optimal "well-being" and performance without incurring severe functional decrement

*Adapted from Institute of Medicine.[11]

TABLE 2. Excess Cost, Waste, and Inefficiency in US Health Care Spending[20]

Unnecessary services	Excessive prices
Overuse, misuse, defensive medicine, higher cost but no value	Prescription drugs, medical devices, physician and hospital services
Inefficient delivery	Missed prevention
Fragmentation, lack of coordination	Primary, secondary, tertiary
Excess administrative costs	Fraud

[20]Adapted from IOM 2011: The Healthcare Imperative: Lowering Costs and Improving Outcomes. http://www.iom.edu/Reports/2011/The-Healthcare-Imperative-Lowering-Costs-and-Improving-Outcomes.aspx.

opportunities, or fraud. Most of these known causes of excessive health care and productivity costs (stress and mental health, short- and long-term disability, workers' compensation, occupation-related illness and injuries, and presenteeism) can be addressed by an employer using a comprehensive and integrated strategy supported by targeted tactics, programs, and practices. By improving the health status of employees (and their families) and by directly targeting specific ineffective and inefficient medical practices and delivery methods, both the employer and employee can improve health and produce savings.

Within the past decade, in response to the challenges of rising costs, lack of prevention focus, underutilized preventive care, and lack of engagement in chronic care management, employers have increasingly deployed consumer-directed health plans (CDHPs).[21,22] Consumer-directed health plans typically include coverage for preventive care at 100% with no copayment or cost to the member; an account (either health reimbursement arrangement or health savings account) that pays for medical care and prescriptions; a higher deductible than traditional health plans; and above the deductible, coinsurance for medical services up to an annual out-of-pocket maximum amount. Account balances can be "rolled over" into the next year(s) to offset future health care expenses. Numerous studies have now documented the improvement in consumer and patient engagement, lowering of utilization, reduction in cost, and equal or improved quality compared with traditional insurance plan designs.[23]

Innovations in delivery of medical care have dramatically increased in recent years in response to rising costs, higher deductibles, and lack of convenience and timely access to traditional sources of care. Electronic records with enhanced patient–provider connectivity provide exchange of information and "electronic" or virtual visits.[24,25] Urgent or retail store–based clinics and employer on-site care[26] have created more convenient, accessible, and lower-cost options for preventive, urgent, and chronic care. On-site and "near-site" care options for employees (and in some cases their families) are growing and create an opportunity to better coordinate wellness, primary care, and disease management through linked electronic medical records.

THE NEED FOR AN INTEGRATED STRATEGY: AN EMPLOYER HEALTH AND PRODUCTIVITY ROADMAP™

The primary determinants of health and disease are related to our homes, schools, worksites, and communities. Similarly, health care needs are predominantly attributable to personal health behaviors in unhealthy environments. Employers, therefore, have a major role to play in both improving health and reducing total health-related costs. Integration of all health-, productivity- and safety-related efforts can create value to both the employer and employee. Specifically, creating simple, reinforcing messages in corporate vision, compensation and promotion and benefit alignment sends the message that employee and family health is core to the success of the organization. Healthier employees are safer employees. Properly designed workplaces and safety policies are reinforced by healthy, alert employees. Data from multiple vendors in silos (viz "health and wellness," medical claims, disability, absenteeism, etc) are rarely integrated to show new and actionable associations for intervention. Most often, the same employees and their family members have multiple but common challenges. For example, stress/depression and musculoskeletal injuries, often the most common causes for lost work time and disability cost, are related to obesity, physical inactivity, and tobacco use. Yet, in many cases, the root cause of the acute clinical issue is not addressed or even acknowledged because of disparate vendors or data sources. On-site services may be limited to traditional preemployment screening or occupational medicine, yet the employee has poor or delayed access to needed primary care services. Excessive but uncoordinated services, redundant cost, and nonprioritized interventions create employee confusion and wasteful expense for both the employer and employee. An *integrated*, employee-centric strategy is needed to create a maximally healthy and productive workforce in efficient and cost-effective manner by using best evidence and practices.

The University of Pittsburgh Medical Center (UPMC) Health Plan and WorkPartners have developed an integrated strategy, called the Employer Health and Productivity Roadmap™, to address the core drivers of poor health, excessive medical costs, and lost productivity (Fig. 1). Because UPMC is an integrated financing and delivery health care system, we have been able to define and coordinate interrelated insurance, benefits, and medical care delivery approaches to address the needs of an entire group of employees and their families. The use of the term "Roadmap" is deliberate, implying a journey and destination—toward a healthy and productive workforce. This roadmap strategy should not be exclusive to UPMC or even to only integrated delivery and financing health care systems. The approach can be used by all employers, working with their respective health plan and other benefits and medical care partners, to achieve maximal efficiency, effectiveness, and employee-centeredness for their workforce and dependents.

The Health and Productivity Roadmap™ defines the major elements or "milestones" understood by employers and their benefit-, medical- and occupation-related vendor partners to measure progress toward addressing unhealthy behaviors, excessive medical costs, and lost productivity. Each of the roadmap elements is tied to key metrics that will establish a shared action plan with milestones to leverage and implement best practices in policies, programs, and innovative

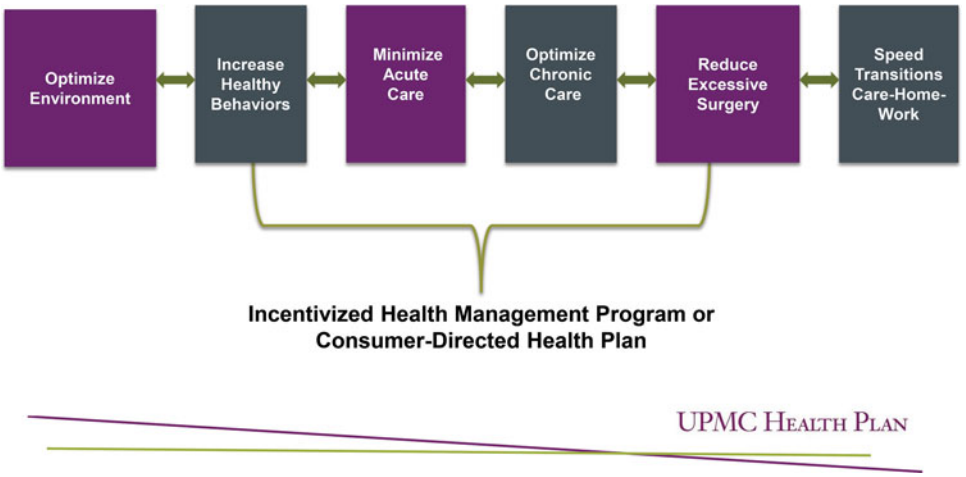

FIGURE 1. Employer Health and Productivity Roadmap™—understand, improve, and partner with your doctor. Copyright 2013 UPMC Health Plan. All rights reserved.

care delivery models. Each roadmap element represents an accountable and measured partnership with the employer, which is tracked quarterly to ensure progress to improved health, greater engagement, lower medical costs, and improved productivity.

From the perspective of the employees and their family, the goals and action steps are simple, incentivized, and tailored to their health and care needs, viz "understand your health, improve your health and care, and partner with your doctor." Each element and its associated metrics (Fig. 2) are reported quarterly to the employer to generate an action plan throughout the year, not just at benefits enrollment time as is most often the current practice.

ELEMENT 1: OPTIMIZE ENVIRONMENT

Building a culture of health, performance, and productivity has been shown to be a critical determinant of the health and competitiveness of any business. Studies further have demonstrated an association between health behaviors, physical health risks, work-related factors, social and emotional factors, and financial stress and employer absenteeism, presenteeism, and self-reported job performance.[6] A comprehensive assessment of environmental drivers of health and productivity is an essential first step to determine organizational strengths and needs. Environment is broadly defined to include not only the traditional safety-related physical characteristics and practices of the workplace but also attitudes, behaviors, policies, and even compensation schedules and promotion opportunities. Major domains include the following: leadership and culture; employee roles, responsibilities, and rewards alignment; absence management; wellness programs and resources, including health assessments and biometric screenings, cafeteria/vending machine options, physical activity, stress and resiliency, tobacco cessation, and weight management; engagement and communication channels; ergonomics, including a workplace environment assessment; and safety and wellness infrastructure. The assessment "gap analysis" identifies key areas for potential improvement and provides the basis for an action plan to move the organization toward best practices.

Typically, employers benchmark their products, services, and overall financial performance (eg, projected improvement in "earnings per share" if publicly traded) against peer competitor companies or "margin" in not-for-profit organizations. An employer-specific "Health and Performance Total Economic Opportunity" model is under development to estimate the aggregate financial impact of optimizing the roadmap elements. In other words, "What would be the total 'top line' and 'bottom line' financial performance if we instituted best practices shown to produce the highest performance from a healthy and productive workforce?" Similarly, where possible, select other roadmap element metrics (eg, alternative, less-expensive care delivery options) are calculated in potential cost savings to the employer.

Assisting employers to create the infrastructure to sustain health, wellness, and productivity is a key responsibility of the health plan and other vendor partner. Providing consultation, educational support, and skills acquisition through a "wellness committee" provides the infrastructure within the company to initiate and sustain improvement efforts. The wellness committee curriculum includes the culture of health, behavior change, population health management, and successful program evaluation. The employer's wellness committee becomes a group of representational, organizational team leaders both "vertically" and "horizontally" within the company to increase buy-in and successful implementation.

ELEMENT 2: INCREASE HEALTHY BEHAVIORS

The optimal health care and productivity-related cost reduction strategy is to improve the overall health of the population. Employees with healthy behaviors—healthy eating, physical activity, nonsmoking, moderate (or no) alcohol use—have been associated with the lowest possible total costs.[1,27] Measuring and rewarding healthy "champion" employees and stating clearly and frequently that assisting employees and their families to achieve health goals are key leadership messages. Typically based on self-reported periodic health assessments, employees and adult family members are classified into "low risk" (0 to 2 risks), "moderate risk" (3 to 4 risks), and "high risk" (5 or more risks) groups.[1] The risks and health behaviors typically include obesity, stress, existing medical condition, tobacco usage, seat belt usage, high cholesterol, elevated blood pressure, physical inactivity, poor self-perception of health, high-density lipoprotein, poor life satisfaction, excessive alcohol usage, and illness days. Keeping the low-risk group low and moving medium- and high-risk individuals to lower risk is essential to reducing total medical and productivity-related costs. Biometric measurements (height/weight, body mass index, blood pressure, and cholesterol levels) should be obtained and tracked over time to further motivate behavior change and self-care. Lifestyle coaching using multiple methods (on-line, telephonic, groups, or on-site) is monitored for both enrollment ("How many who should improve are enrolled?") and graduation ("How many of those enrolled have

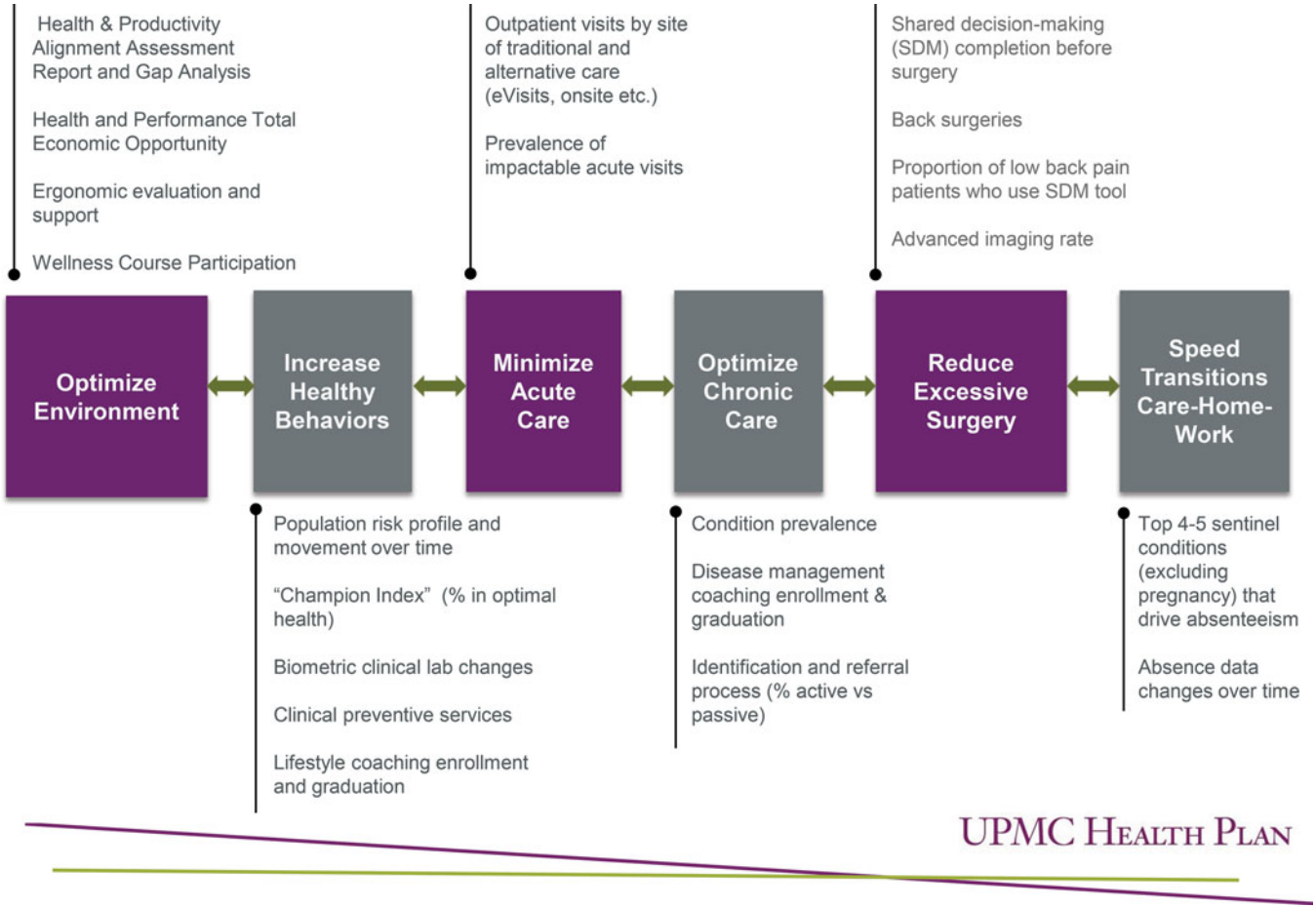

FIGURE 2. Employer Health and Productivity Roadmap™. Elements and metrics. Copyright 2013 UPMC Health Plan. All rights reserved.

acquired the knowledge, skills, and motivation to improve?"). Age- and gender-appropriate, evidence-based preventive services are incentivized with no cost to the employee in benefit designs. Additional financial incentives are offered for completion of periodic health examinations, screening tests, and immunizations.

ELEMENT 3: MINIMIZE AVOIDABLE OR INEFFICIENT ACUTE CARE

Avoidable illness, or inefficient and inconvenient access to health care, causes significant disruptions in an employee's life and that of his or her family—and result in unnecessary and avoidable medical and productivity costs for the employer. By improving health behaviors, employers reduce the prevalence of acute care and chronic conditions that drive medical care utilization.

When medical services are required, these are too often delivered at traditional sites of care and in ways that require excessive cost and absence time from the workplace. It is not uncommon for a 10- to 15-minute routine primary care visit to involve 4 to 8 hours of lost work time, given commuting and delays in being seen even when scheduled. The emergence of bilateral communication between patients and providers via electronic medical/health records, employer on-site or near-site clinics, and new virtual technologies to provide care creates more efficient, convenient, and less costly options compared with a traditional face-to-face provider visit.[24–26] Expanding existing traditional occupational medicine services can also provide more accessible and cost-effective care options. On-site health coaches (as opposed to telephonically-based) have been shown to be more effective in creating impactful employee relationships and to increase engagement in healthy behavior and care management programs.[28]

Confidentiality of employee health and medical information is always a concern. As collection of information and delivery of services expand at the worksite, the employer must take particular care to communicate clearly and frequently how personal information is securely protected to prevent individual identification of health conditions.

ELEMENT 4: OPTIMIZE CHRONIC CARE

Reducing the incidence and prevalence of the most common and costly chronic diseases is a major longer-term goal for employers. Self-reporting, claims, and pharmacy data are used to report the overall prevalence and annual incidence of hypertension, diabetes, asthma, depression/anxiety, and other conditions. *Patient activation*, defined and measured as actively being involved in one's health care decisions for chronic disease, has been associated with lower health care costs and better outcomes.[29] Competency-based "graduation criteria" can be defined for major chronic conditions, which include the following: education and engagement skills to improve health behaviors to prevent, treat, and even reverse the disease condition; self-monitoring for the disease; adherence to prescribed medications; and learning how to take a more active role in partnership with their provider in shared decision-making. As in all engagement programs,

both enrollment into and graduation from the health-coaching program are financially incentivized.

ELEMENT 5: REDUCE EXCESSIVE SURGERY

The increasing prevalence of chronic disease, rapid emergence and adoption of new technologies, and a largely fee-for-service payment system that "overvalues" diagnostic and therapeutic interventions as opposed to evaluation and management services have all led to an excess of "preference-sensitive" surgeries and more generally, capital-intensive procedure-driven medicine. Major categories include spinal and cardiac procedures, hip and knee replacements, and advanced imaging in absence of clinical "red flags."[30] Studies have consistently demonstrated a 25% to 30% reduction of preference-sensitive surgeries when a patient understands the full range of care options, the benefits and harms of each, expresses their value and preferences, and in turn, has those values and choices considered in dialogue with their physicians.[31–33] Given the prevalence of low back pain among all employers and its medical and productivity-related costs, the condition is a logical first target for a comprehensive approach using shared decision-making. An integrated patient, provider, plan, and employer program attempts to optimize patient shared decision-making for low back pain and maximize behavior change (nutrition, physical activity, weight loss, and smoking) and conservative therapies (medication and physical therapy).[34] Specific policies in certain programs (eg, workers' compensation state regulations) may be limiting and prescriptive, restricting employer leeway in proactively addressing misuse and overuse. Nevertheless, patient-centric shared decision-making should be the foundation for all health care decisions, particularly for high-cost discretionary procedures and diagnostic tests, regardless of type of benefit-related program.

ELEMENT 6: SPEED TRANSITIONS FROM CARE TO HOME AND WORK

Mental health, social concerns, and musculoskeletal conditions typically comprise the leading causes of absenteeism, disability, and workers' compensation. Monitoring the leading mental, physical, environmental, and medical conditions that drive time away from work is a necessary first step to reducing absenteeism and total productivity-related costs. Eliminating unnecessary, uncoordinated, and costly "gaps" in employee and family care or miscommunication among multiple providers can produce savings and contribute directly to the employer's "bottom line."[35] Isolated or "siloed" programs create underuse or confusion among employees, leading to excessive employer cost as well as lost income and emotional stress. Integrating primary, secondary, and tertiary prevention strategies in an "employee-centric" fashion can create better care coordination, leveraging worksite and community care models that produce earlier return to work, full functioning, and savings.

"POWERING" THE ROADMAP: INCENTIVIZED HEALTH MANAGEMENT PROGRAM, CDHP, OR BOTH

The roadmap is optimally "powered" (ie, produces the most rapid behavior change, care engagement, and cost savings) by incentivized comprehensive health management programs, consumer-directed health benefit designs, or both.[36] Improving elements 2 to 5—healthy behaviors, reducing acute care, optimizing long-term care, and reducing unnecessary surgery—are in large part the domain of group health insurance coverage purchased by employer. An articulated, targeted approach to each element has not been the focus of health plans. Medical and pharmacy costs alone, the traditional reporting metrics used by health insurers, do not capture the data necessary to monitor and improve these critical roadmap elements. Over the past decade, however, both incentivized comprehensive health management programs and "next generation" CDHPs have grown to promote the collection of relevant data and increase the engagement of employees.

Increasingly, employers, led by the experience of large employers, realize that the alignment of healthy behaviors and care engagement with transparency of cost and financial incentives can accelerate health improvement, more appropriate utilization, and economic savings. The growing awareness of the effectiveness of appropriately designed and communicated incentives and the emerging field of behavioral economics provide an evidence-based approach to improve behavior change and engagement.[36–39] Nationally, 73% of large employers (generally more than 1000 employees) offer CDHPs, and nearly 20% are "full replacement" CDHP account-based plans (health reimbursement arrangements or health savings accounts), meaning that they no longer offer traditional health maintenance organization or preferred provider organization options.[18] These employers offer on average $300 per individual employee and up to $700 per family for health and care engagement incentives.[40] Recent studies using premium cost reductions as opposed to cash incentives[41] (similar to UPMC's employee benefit plan) have shown that the structuring of the incentive is very important to both employee engagement and the potential for health care costs savings. In addition, creating transparency of cost (and increasingly quality) to the employee and employer and providing lower cost and more convenient care options drive more effective and efficient care delivery, consumer engagement, and significant savings.

SUMMARY

Employers and leaders of all organizations are increasingly challenged by growing competitive and economic forces. A core asset of any organization is the health and productivity of its workforce or its "human capital." Employers can have a major influence on the health and care behaviors of employees, their family members, and the community through both their direct impact and their role as visible leaders. The Employer Health and Productivity Roadmap™ provides an integrated and incentivized strategy for employers to address the core drivers of poor health, excessive medical costs, and lost productivity.

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