



Employers Are Asking: What is the Value on Investment for Diabetes and Hypertension Programs at the Workplace?

White Paper

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WE ARE IN A CRISIS – AND IT EXTENDS BEYOND COVID-19

At the time this white paper was being prepared, the world was in the midst of a global pandemic. In the U.S., tens of millions of Americans had been infected by the novel coronavirus (COVID-19) and more than half million had died. Even with several vaccines available, the pandemic continues to threaten the health and well-being of Americans and many more across the world.

The immediate health consequences of the pandemic are further compounded by the significant financial toll that COVID-19 has had on the economies of countries most acutely affected, with livelihoods and even survival threatened due to lockdowns and business closures. The long-term consequences of the virus are still unknown.

What we do know is that individuals with chronic conditions, including obesity, type 2 diabetes, hypertension, and heart disease, are at increased risk of severe complications and death from COVID-19.^{1,2,3} Even more disturbing, and highlighted by the pandemic, are the severe health disparities that exist in the U.S., with African American and Hispanic adults being disproportionately impacted by the virus because of the higher prevalence of chronic health conditions among minority groups.⁴ The pandemic has brought to the forefront the importance of instituting long-term prevention efforts aimed at reducing the risk factors for prevalent chronic diseases, including diabetes and hypertension.

WHAT ROLE CAN EMPLOYERS PLAY?

With the pandemic as backdrop, the question of the employer's role has become more salient: What can employers do to reduce workers' risk of developing chronic disease conditions, which worsen outcomes from COVID-19?

In recent years, many employers have introduced or expanded workplace health promotion programs (also known as wellness or health and well-being programs) as preventive complements to disease management.⁴ These programs aim to reduce modifiable risk factors that often lead to increases in

disease conditions such as diabetes and hypertension. There is growing evidence that when health promotion programs are properly designed, implemented, and evaluated, workers' health and well-being improves, which then stabilizes healthcare spending and improves performance.⁵ While a growing number of employers have adopted these programs, and reported notable business results, some executives are still skeptical about outcomes. That may be because many of the programs currently in place are poorly designed, have limited scope, are under-resourced, and lack an evidence-based framework.⁶ Consequently, some employers view health promotion as ineffective or even a waste of money.⁷

For all employers seeking guidance on how to best spend their scarce resources to put in place effective programs that achieve positive health results at a reasonable cost, this guide offers practical advice by answering the question "Where can I get the biggest 'bang for the buck'?"

WHAT ABOUT COST SAVINGS?

There has always been an expectation by employers that prevention and health promotion programs will save money, and further yet, that they will return more money than originally spent, thus achieving a positive return-on-investment (ROI). Asking health promotion interventions to deliver cost savings is a tall order, especially when one compares that investment to the cost of treating a disease that may have been prevented by those adopting good lifestyle habits (for example, not smoking, eating healthy diets, exercising regularly, and getting a good night's sleep). With the exception of certain medical procedures, such as childhood and adult immunizations, there is little evidence that health care services save money.⁹

While employers keep asking for an ROI, this expectation may be unrealistic.⁹ The rationale for a health-related intervention should be the net value gained from the intervention measured in terms of quality of life improvement; simply stated, being able to go about one's normal daily activities unhindered by disease and disability. Instead of continuing the debate about whether prevention can save money, the conversation should turn to the most cost-effective ways of achieving improved health, and, for workers, how improved health can produce a spillover effect on productivity, safety, morale, retention, or other business outcomes.

WHAT ABOUT COST-EFFECTIVENESS?

First off, employers want to know what the price tag is for a health promotion program so they can decide about its affordability and feasibility. Second, employers need to know whether the program provides sufficient value relative to its costs; that is, is it cost-effective?

In the health economics literature, health value is usually measured in quality-adjusted life-years (QALYs) saved. A QALY represents a year of life gained because of a health intervention. If the net cost per QALY is below a certain threshold, usually between \$50,000 and \$100,000, then the intervention is considered a good value for the money spent.¹⁰

For employers, adding QALYs for their workers is not the main goal. Employers want their workers to be free of disease and disability during their most productive years of life. A 2019 survey by Transamerica Center for Health Studies®, a division of Transamerica Institute®, found that among employers offering a workplace wellness program, more than four in five reported it had positively impacted performance and productivity (84%), workers' health (83%), and job satisfaction (81%).⁹

Other valued outcomes from an employer's perspective include higher engagement in one's job; increased loyalty to the organization; lower absenteeism and presenteeism; fewer safety incidents; improved attraction and retention of talent; building a market brand; and establishing a reputation of being the employer-of-choice in a community or industry.¹¹

FOCUSING ON VALUE ON INVESTMENT

It ultimately boils down to a newly emerging trend among employers: delivering programs with the greatest value on investment (VOI). With that in mind, we set out to identify workplace diabetes and hypertension programs that deliver good value.¹² We chose hypertension and diabetes because of these conditions' high prevalence and cost to employers, and because they often lead to heart disease and stroke.¹³ Also, and relevant to our time, diabetes and hypertension increase the severity of viral infections, including COVID-19.

Valued Outcomes and Impacts of Workplace Wellness Programs:

- ✓ Improved worker health
- ✓ Improved performance & productivity
- ✓ Increased job satisfaction
- ✓ Higher engagement
- ✓ Increased worker loyalty to organization
- ✓ Lower absenteeism & presenteeism
- ✓ Fewer safety incidents
- ✓ Improved attraction and retention of talent
- ✓ Improved market brand
- ✓ Established reputation as an employer of choice in community or industry



This predisposition to the virus disproportionately affects essential workers who are more likely to be members of racial and ethnic minorities, immigrants, low wage earners, and at jobs where physical distancing is nearly impossible.^{14,15}

In preparing the guide, we first needed to identify effective workplace interventions targeting diabetes and hypertension. To do so, we conducted a review of the scientific literature, held roundtable discussions with subject matter experts (SMEs), and requested case studies of successful programs.

We relied heavily on the peer-reviewed literature assembled by the Centers for Disease Control and Prevention (CDC).¹⁶ The CDC review was conducted by the Community Preventive Services Task Force and led to development of an employer-friendly organizational assessment tool called the CDC Worksite Health ScoreCard.^{17,18}

SCORING VOI

To score health promotion initiatives in terms of their value for achieving improved health, we rated them as “good,” “better,” or “best” based on a previously developed rating system that considered both expected health outcomes and the strength of the scientific evidence. Where available, we also referenced the cost-effectiveness literature for the interventions.

We then asked our SMEs (see Figure 1 for the list of experts drawn from academia, government, private businesses, and consulting firms) to review and comment on the recommended interventions. Our main question to the SME panel was: *“Where would you invest scarce organizational resources to achieve the greatest overall health impact at a reasonable cost?”*

Figure 1. List of Subject Matter Experts

Name	Title	Affiliation
David Anderson, PhD	President and Founder	VisioNEXT LLC
Chris Calitz, MPP	Director, Center for Workplace Health	American Heart Association
Karen Costello	Lead Product Manager	WebMD
Robert Goldsmith, MD	Executive Director of Corporate Employee Health	Novartis Services Inc.
Roshi Fisher, MPH	VP, Senior Consultant, Health Risk Solutions	Lockton
Pam Hymel, MD	Chief Medical Officer	Walt Disney Parks & Resorts
Verughese Jacob, PhD, MPH, MS	Senior Service Fellow	Centers for Disease Control and Prevention (CDC) / Center for Surveillance, Epidemiology, and Laboratory Services
Rebecca Kelly, PhD, RDN, FAND	President and Founder	Element Health, Inc.
Jason Lang, MPH, MS	Team Lead for Workplace Health Programs	CDC / National Center for Chronic Disease Prevention and Health Promotion
Joseph Leutzinger, PhD	Founder and Principal	Health Improvement Solutions
Ron Loeppke, MD, MPH, FACOEM, FACPM	Vice Chairman, USPM Board of Directors	US Preventive Medicine
Mary Marzec, PhD	Senior Scientist	Virgin Pulse Institute
Tre' McCalister, MA, EdD	President and Founder	McCalister and Associates, LLC
Ryan Picarella, MS	President	Wellness Council of America (WELCOA)
Sara Martin Rauch, MS	Chief Operations Officer	WELCOA
Seth Serxner, PhD, MPH	Chief Health Officer, Senior VP of Population Health	Optum
Stewart Sill, MS	Former Senior Health Advisor, Strategic Solutions	IBM Watson Health
Peter Wald, MD	Chief Medical Officer	USAA



OUR FINDINGS

We organized evidence-based initiatives into three categories: 1) awareness building, 2) interactive engagement, and 3) healthy company culture.

In terms of awareness building, employers are advised to increase knowledge and awareness of health risks for hypertension and diabetes by offering a computerized confidential health risk assessment (HRA) to help workers evaluate their health status, identify needs, and become better educated and motivated to take action. Instantaneous feedback following the assessment includes advice on how to improve eating habits, establish a good exercise regimen, get a good night’s sleep, quit smoking, monitor weight and blood pressure, reduce excessive alcohol consumption, and take prescribed medications.¹⁹ Table 1 below summarizes top awareness building initiatives and their VOI scores.

Table 1. Awareness Building

Intervention	Health Impact	Cost*	Value on Investment (VOI)
Health Risk Assessments (HRAs) with feedback and referral	♥♥	\$ to \$\$	✓✓✓
Biometric screening with feedback and referral	♥♥	\$ to \$\$ per participant	✓✓✓
Free onsite blood pressure monitoring	♥♥♥	\$ to \$\$	✓✓✓
Educational materials	♥	\$	✓
Key: Health Impact: ♥ = small ♥♥ = sufficient ♥♥♥ = large Cost: \$ = < \$50 \$\$ = \$51-100 \$\$\$ = \$101-400 \$\$\$\$ = \$401+ VOI: ✓ = good ✓✓ = better ✓✓✓ = best			
* Cost is per eligible per year unless otherwise noted.			



Next, to actively engage workers in health improvement efforts, employers can provide interactive smartphone apps, virtual education programs, and self-management sessions with coaches. These initiatives are typically offered as part of a comprehensive medical benefits package that includes ready access to low-cost, high-quality providers, along with needed treatment services, medications, and supplies. Table 2 summarizes engagement initiatives and their VOI ratings.

Table 2. Interactive Engagement

Intervention	Health Impact	Cost*	Value on Investment (VOI)
Interactive educational programming	♥♥♥	\$ to \$\$\$ per participant	✓✓✓
Targeted intensive lifestyle coaching/counseling	♥♥♥	\$\$\$ to \$\$\$\$ per participant	✓✓✓
Targeted self-management programs for diabetes and hypertension control	♥♥♥	\$\$\$ to \$\$\$\$ per participant	✓✓✓
Pharmacy-based intervention	♥♥♥	\$ to \$\$\$\$ per participant	✓✓✓
Benefits plan coverage	♥♥ (diabetes)	\$ to \$\$\$\$	✓✓
	♥♥♥ (hypertension)		
Key: Health Impact: ♥ = small ♥♥ = sufficient ♥♥♥ = large Cost: \$ = < \$50 \$\$ = \$51-100 \$\$\$ = \$101-400 \$\$\$\$ = \$401+ VOI: ✓ = good ✓✓ = better ✓✓✓ = best			
* Cost is per eligible per year unless otherwise noted.			



Finally, for the above initiatives to work, they need to be grounded in a culture of health. That culture is supported by having health promoting polices (like flextime and time off for employees to participate in programs), physical supports (including on-site fitness facilities, marked walking trails, healthy choices in cafeterias and vending machines, and onsite pharmacies), and social supports (such as health-focused affinity groups, fun team building exercises, supervisor encouragement, and co-worker involvement). Table 3 lists a variety of cultural initiatives and their VOI ranking.

Table 3. Healthy Company Culture

Intervention	Health Impact	Cost*	Value on Investment (VOI)	
Environmental and social support	♥♥	\$ to \$\$\$	✓✓✓	
Flextime	♥♥	\$	✓✓	
Access to places for physical activity	♥♥♥	\$ to \$\$\$\$	✓ to ✓✓✓	
Encouraging stairwell use	♥♥♥	\$	✓✓✓	
Managing stress in the workplace	♥♥ - ♥♥♥♥	\$ to \$\$\$\$	✓ to ✓✓✓	
Workplace availability of healthy foods	♥♥ - ♥♥♥♥	\$ to \$\$\$	✓✓✓	
Key: Health Impact:	♥ = small	♥♥ = sufficient	♥♥♥ = large	
Cost:	\$ = < \$50	\$\$ = \$51-100	\$\$\$ = \$101-400	\$\$\$\$ = \$401+
VOI:	✓ = good	✓✓ = better	✓✓✓ = best	
* Cost is per eligible per year unless otherwise noted.				

THE WHOLE IS GREATER THAN THE SUM OF ITS PARTS

What became clear from our discussions with SMEs was that workplace health promotion initiatives work best when delivered as part of a holistic framework rather than by addressing one disease or risk factor at a time. The experts agreed that while providing information about individual interventions is helpful, no single program, activity, or policy is effective by itself. This even applies when an employer is laser-focused on particular health concerns such as hypertension or diabetes. An effective program addresses the whole person because other risk factors, existing illnesses, and underlying social determinants of health all play a decisive role in population health.

NOW WHAT?

Even if all the initiatives listed in this guide do not save money, they still provide worthwhile health benefits to employees, and consequently to the employer. Given the low threshold for achieving cost-effectiveness, it can be argued that all the initiatives listed offer good value for the dollars spent.

With COVID-19 as backdrop, this guide can help employers address two common chronic disease conditions that put workers at greater risk for the virus: hypertension and diabetes, along with their underlying risk factors: obesity, poor diet, and too much sitting. While the tables in the guide highlight the VOI of specific interventions, the main message is that a comprehensive approach, encompassing complementary initiatives, yields the best results.

While the threat from COVID-19 may be subsiding, employers are encouraged to reflect on what comes next. At the same time, the future of work is likely to change dramatically, with more people teleworking and many of the interventions listed in the guide needing to be delivered virtually. That said, there will always be a need for recruiting and retaining employees that produce real products and services, and these employees must be kept healthy and safe.

Selecting the “right” combination of interventions is not easy, and like all other organizational decisions, it requires thoughtful and context-specific analysis. In making these decisions, employers are wise to consult with their workers, health plan vendors, researchers, and consultants to decide what works best in delivering value, both dollar-wise and human-wise.

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