

Why Employers Shouldn't Ignore Diabetes

The Economic Tsunami

The number of people with diabetes is expected to more than triple in a matter of decades according to the Centers for Disease Control (CDC). By 2030, the total cost of diabetes is predicted to be \$622 billion – a 53% increase from today. An estimated 1 in 3 adults currently have prediabetes and of those with prediabetes, 80% don't know they have it.

Consider these statistics:

- **\$327 billion:** Total cost of people diagnosed with diabetes in the U.S.
- **\$237 billion:** Direct medical costs of diabetes
- **\$90 billion:** Indirect costs of diabetes
- **\$16,750:** Average annual medical cost for people with diabetes (\$9,600 of which is **DIRECTLY** attributed to diabetes)
- **2.3 times greater:** Average medical expenditure for those with diabetes versus those without
- **57 million:** Total number of additional unplanned missed workdays each year by workers who have diabetes

It's easy to see why health care costs for this chronic condition will continue to skyrocket and how productivity is impacted for employers across the country.



The success of our diabetes management program is three-fold. It's personalized to the member, we make it super convenient to participate and we take a multi-disciplinary approach to education, offered through both face-to-face and telehealth channels.

- Brandy Grovich, MS, RN, Manager Health & Safety, Levi Strauss & Co.

While advances in the treatment of diabetes have prolonged both the quality and length of life, the number of people with prediabetes and type 2 diabetes continues to grow rapidly.

Even with significant advancements in drugs and treatment, growth in the U.S. will likely continue due to an aging population and unhealthy lifestyles. The good news is that prediabetes is a reversible condition and type 2 diabetes can be prevented or delayed through lifestyle interventions including modest weight loss, physical activity and healthy eating.

Call to Action: Employers Can't Afford to Wait to Address this Costly Disease

Diabetes has an enormous economic impact on millions of individuals and their families, on employers, and on the U.S. health care system. It is a growing epidemic that has resulted in a devastating physical, emotional and financial toll on our country, killing more Americans each year than AIDS and breast cancer combined. Employers, health plans, providers and community organizations must be proactive in reversing prediabetes and preventing the onset of type 2 diabetes. With stakeholders working together, we can change the face of this disease.

The non-profit [Midwest Business Group on Health](#) (MBGH) created a no-cost [Diabetes Management in the Workplace Toolkit](#) that has the tools and resources employers need to put a comprehensive program in place. (Learn more on page 7)

Diabetes and Comorbidities

In addition to the dramatic costs linked to diabetes management, employers must address the cost of treating the comorbid chronic conditions that are often associated with the disease. [Cardiovascular disease has a substantial impact on the direct medical costs of type 2 diabetes treatment.](#) Not only does cardiovascular disease contribute between 20- 49% of the total direct costs of treating type 2 diabetes, the cost of treating those with BOTH diabetes and cardiovascular disease is significantly higher than treating those with diabetes alone.

Most adults with diabetes have one comorbid condition, and approximately 40% have at least three, including [depression,](#)

[hypertension, hyperlipidemia and obesity.](#) Diabetes and heart disease go hand in hand. Heart attacks strike people with diabetes twice as often and cardiovascular disease is the most common cause of death among adults with diabetes. Comorbid conditions can profoundly affect diabetes care, particularly self-care (e.g., self-injection of medications, self-monitoring of blood glucose and lifestyle management, such as diet and exercise), which is essential for successful treatment and positive health outcomes. Comorbidities can also complicate treatment, increase costs and result in poorer outcomes. Failing to effectively manage comorbid conditions in people with diabetes can affect daily functioning and quality of life and may even increase mortality risk.

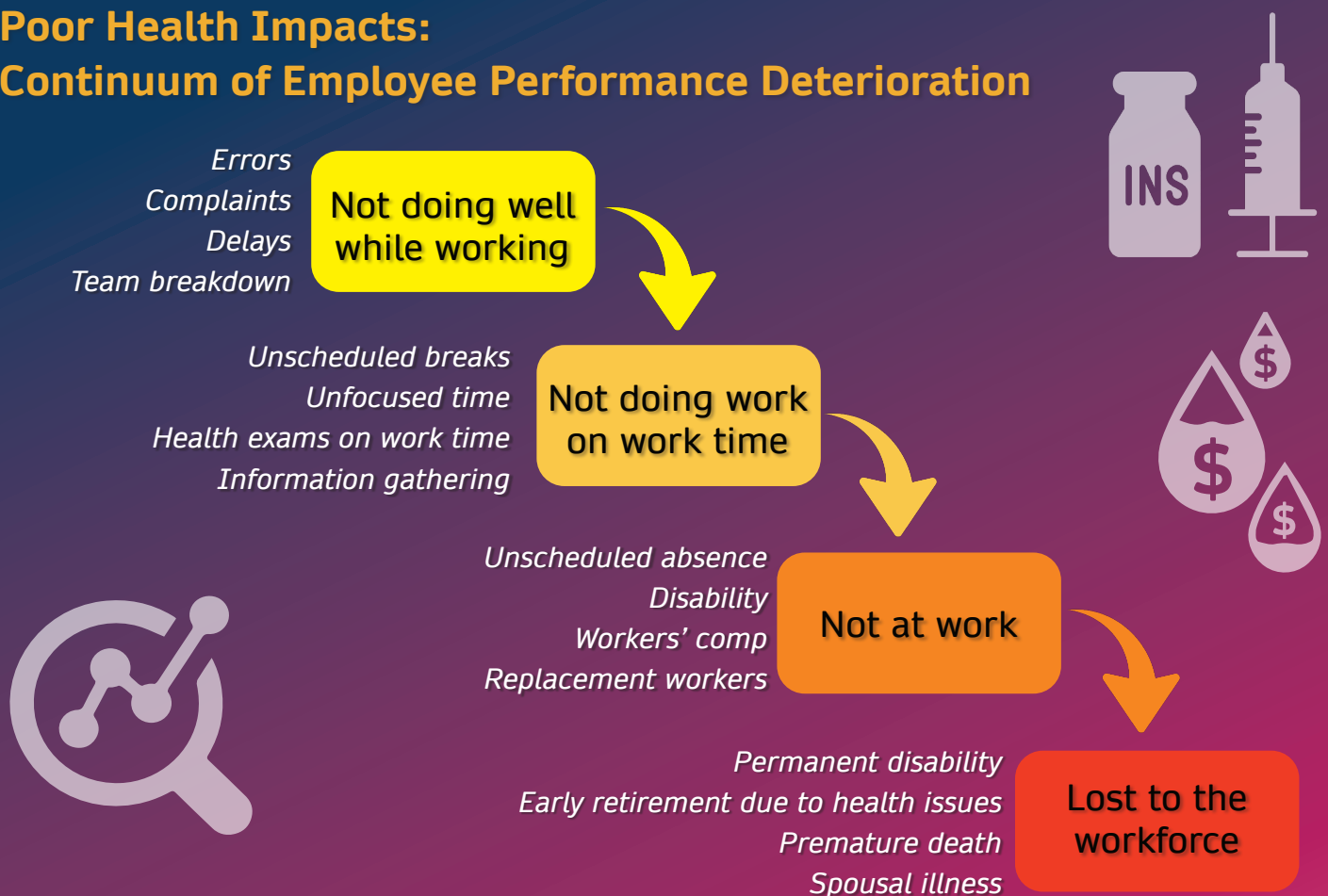
Indirect Costs and Impact on Worker Productivity

The impact of diabetes and related comorbid conditions on direct health care costs is just the tip of the iceberg for employers. There are also many indirect costs associated with this disease. For example, [full-time workers with diabetes account for an estimated 5.5 additional missed workdays per year.](#) Other indirect costs include:

- Presenteeism or reduced productivity while at work
- Inability to work due to diabetes-related disability
- Lost productivity due to long-term illness or mortality

The impact of missed work time can have a significant impact on a company's bottom-line while adding an additional layer of costs.

Poor Health Impacts: Continuum of Employee Performance Deterioration



Source: *J Occup Environ Med.* 2018 Jun; 60(6): 507–514

The Calm Before the Tsunami

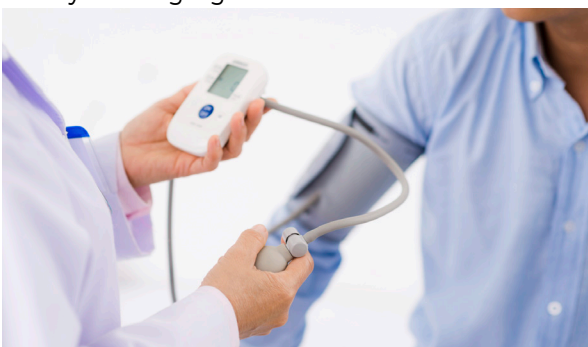
Unlike a tsunami that often hits without warning, there are typically multiple warning signs that an individual is heading toward diabetes. Metabolic syndrome – a cluster of conditions that occur together, increasing risk of heart disease, stroke and type 2 diabetes – is one such red flag.

[Metabolic syndrome is increasingly common – it has been estimated to affect up to one-third of the U.S. adult population](#). An individual is considered to have metabolic syndrome if they have at least three of the five risk factors listed below:

- high blood pressure
- high blood sugar levels
- excess fat around the waist (measured by Body Mass Index – BMI)
- high triglyceride levels
- low levels of high-density lipoproteins – the good cholesterol, or HDL

A tsunami doesn't typically change course, but an individual with metabolic syndrome can. Aggressive lifestyle changes can delay or even prevent the development of serious health problems. However, without intervention, those with metabolic syndrome are twice as likely to develop heart disease and five times as likely to develop diabetes as those who don't have this grouping of risk factors.

Many employers struggle to effectively manage the incidence of prediabetes, diabetes and related chronic conditions with their employees and family members. They are looking for low or no cost tools to support their efforts, especially if their health plan or vendors are not offering effective solutions for which they are often paying. While the average working adult spends thousands of hours every year at work, 1 in 3 do not take time for an annual preventive exam. This creates a unique opportunity for employers to use the workplace to engage employees in more effectively managing their health.



Actionable Steps Employers of Any Size Can Take

- **Choose the right program** – consider demographics, age, gender and ethnicity. What is your workplace culture? Do you need to add diabetes management to an existing wellness program or begin from scratch?
- **Develop program strategies** – this will help you plan, build, promote and get the right fit for your organization.
- **Identify your target population** – request claims data from your health plan and pharmacy benefit manager (PBM) to understand the prevalence of diabetes, prediabetes and related health conditions.
- **Enhance screening and education efforts** – use strategies focused on delaying or preventing the onset of diabetes. Offer biometric screenings that include measuring risk factors for diabetes and cardiovascular disease such as glucose or A1C, LDL cholesterol and blood pressure.
- **Ensure high-value services are offered under your preventive health plan benefit.** This may include annual comprehensive eye examinations, foot exams, and periodic A1C blood tests, which are relatively inexpensive and provide insights into disease progression; early detection is key to avoiding costly complications.
- **Provide a culture that encourages employees to adopt a physically active lifestyle and make healthy food choices.** Adopting lifestyle improvements will reduce the likelihood of prediabetes developing into type 2 diabetes for those at risk and will assist those with diabetes in managing their condition.
- **Consider the role your vendors can play in your diabetes management strategy** – find out what programs and resources are available through your medical, pharmacy, disease management and wellness vendors. Hold a vendor summit to ensure your vendors are working in collaboration.
- **Consider value-based plan designs and incentives** – which can help engage those at risk, create positive health outcomes and reduce barriers to staying healthy.



To Screen or Not to Screen

In 2021, the [U.S. Preventive Services Task Force \(USPSTF\)](#) updated its recommendation for measuring [blood glucose](#) in adults who are at increased risk for diabetes. The USPSTF recommends blood glucose screening as part of a cardiovascular risk assessment in adults aged 35 to 70 years who are overweight or obese and who do not have obvious symptoms of diabetes. They recommend clinicians should offer or refer patients with prediabetes to effective preventive interventions.



Employer Spotlight:

Leverage vendor partners to provide your employees with innovative tools and support... and keep them accountable!

A global manufacturer partnered with a vendor who specializes in combatting metabolic syndrome and insulin resistance to tackle the rise of prediabetes and diabetes in their population. Before rolling out the program to their population at large, they conducted a pilot program with a small group of employees with confirmed metabolic syndrome. The pilot resulted in clinically significant outcomes and at least \$1,466 per member per year (PMPY) clinical cost savings. Out of 112 pilot participants, more than 90% completed the program and of those who completed a second biometric screening, the majority (77%) normalized at least one high-risk factor.

As a result of the successful pilot, the program was rolled out to the entire population with an expansion to include those with even just one metabolic syndrome risk factor. This 120-day intervention includes receipt of a scale and a Fitbit with cellular functionality, transmitting information to a coach. Based on information received, the coach works one-on-one with individuals on nutrition, physical activity, sleep and stress management. Interaction with the coach is telephonic or through video.

Success is driven by keeping the vendor accountable as they are compensated only if members are successful, as defined by normalizing at least one risk factor. To date, 80% of employees have met this success metric.

(see [Role of Stakeholders](#))

Persons who have a family history of diabetes, have a history of certain conditions (i.e. gestational diabetes), or are members of specific racial/ethnic groups may be at increased risk for diabetes. For persons with one or more of these characteristics, earlier screenings may be warranted. Evidence on optimal rescreening intervals is limited but studies suggest screening every three years may be a reasonable approach for adults with normal blood glucose levels.

The USPSTF isn't the only organization with published screening guidelines for early diabetes and pre-diabetes detection. The American Diabetes Association recommends screening for diabetes in adults aged 45 years or older and screening in persons with multiple risk factors regardless of age. Other reputable organizations include the American Academy of Family Physicians and the American Association of Clinical Endocrinologists which recommend screening for diabetes in persons with risk factors only.



There are many factors to consider when deciding which screening test is best.

- A fasting plasma glucose (FPG) test measures circulating blood glucose at a single point in time. This test is easy to administer, convenient and is a low cost screening method for testing an employee population. Since fasting is required in order to achieve reliable results, it can be more cumbersome for employers to administer, especially in organizations with shift work. FPG can be measured by a fingerstick screening or through a venipuncture blood draw.
- Hemoglobin A1c, known as HbA1c or A1c, provides a glimpse of average blood glucose over a three-month period. An A1c test is measured through a venipuncture screening, does not require fasting and the screening results are not impacted by acute changes in glucose levels due to recent food consumption, stress or illness. This test is typically more costly for employers to administer.

Employer Considerations for Determining the Scope and Frequency of Diabetes Screenings:

- Published guidelines including those from the USPSTF and the American Diabetes Association
- Workforce demographics – consider the age and ethnicity of your workforce; higher risk populations should be screened more frequently
- Screening flexibility – check your screening vendor's capabilities to modify screening frequency and/or type of screening test (fasting glucose and A1c) based on individual risk factors and health history
- Budget – your available funds will play a role in determining the type of screening (glucose or A1c) as well as the timing and frequency of diabetes screenings



Employer Spotlight:

Be proactive in modifying your plan design to get desired results

Over the past six years, a multi-state life and investment company has evolved its value-based benefit design with a laser focus on achieving measurable outcomes and favorable results. Their strategy started as a diabetes medication therapy management program including pharmacist consults and drug co-pay discounts. It has progressed to include a comprehensive health plan design for people with type 1 and type 2 diabetes with waived or reduced out-of-pocket member costs for eligible diabetes-related medical services, testing supplies, drugs and medication therapy management. Success is measured by the increased use of high value medical services, improved drug adherence, favorable cost trends and reduced adverse events including emergency room visits and admissions from diabetic complications. (see [Value Based Benefit Plan Design](#))



A1c Testing

Glucose binds to hemoglobin continuously throughout the lifespan of a red blood cell. Since the lifespan of a red blood cell is approximately 120 days, A1C is an index of average blood glucose control over approximately three months.

Fingerstick analyzers ARE NOT approved to measure A1c for the purpose of alerting individuals to diabetes risk. The Food and Drug Administration (FDA) has approved some point-of-care testing devices to be waived under the Clinical Laboratory Improvement Amendments (CLIA) as a means of monitoring those who have already been diagnosed with diabetes; however, no fingerstick analyzers have been approved for population level screening programs.

The Impact of Social Determinants of Health

Social determinants of health are the conditions in which individuals are born, live, work and age. Increasingly, they are being recognized for their relationship to the soaring incidence of type 2 diabetes in the U.S. Many current type 2 diabetes interventions focus on self-monitoring and lifestyle behavior change interventions including modifications to diet and physical activity. However, it is equally important to address the influence of physical and social environments on health outcomes, which may include poor access to health care services, low health literacy and lack of affordable healthy foods. Not all communities are created equal. Employers have a unique opportunity to create a social and physical environment at work that promotes good health, but they must not overlook the influence of the external environment. **The communities where employees spend their non-working hours are a powerful force that have a tremendous impact on lifestyle choices.**

Education and Benefits Literacy is Key

Providing employees with education and awareness about adopting a healthy lifestyle and reducing risk factors, while helping them learn what programs and health benefits are offered, go a long way in engaging them to participate in programs, go to the doctor and seek the right treatment. But many employees don't fully understand how their benefit plan works or how to access valuable tools and resources. As part of a comprehensive diabetes management strategy, it's important for employers to address health and benefits literacy.

A [2022 Forbes Advisory survey](#) of ~2,000 Americans indicated many are confused by basic health insurance terms, in fact:

- More than three-quarters (77%) did not understand the term “coinsurance”
- Nearly half (46%) did not know of the meaning of “copayment”
- Almost half (45%) couldn't identify what a health insurance deductible is
- Just 43% understood how a Health Savings Account (HSA) can be used

Don't assume employees understand “benefits lingo” and be strategic when developing a diabetes awareness [communications plan](#). A solid plan is built on trust, attention, affinity, need, solutions and action.

No-Cost Toolkit for Diabetes Management in the Workplace

To help employers address the critical and costly issues around diabetes, MBGH created a no-cost, online Diabetes Management in the Workplace Toolkit which offers national best practices and vetted industry resources, along with materials for employers to use wherever they are in supporting people with diabetes.

Initially developed for small- and mid-sized employers with limited resources, the toolkit has grown to be a comprehensive resource for any size employer and offers recommendations on:

- Building a business case and action plan
- Program strategies
- Benefit plan design approaches, including employer case studies
- Strategies and tactics for reaching out to employees and family members
- Evaluation and measurement strategies
- Tools and resources for diabetes management in the workplace



Employer Spotlight:

How addressing the social aspects of diabetes can have an impact

A mid-size manufacturer with a diverse, predominantly male employee population partnered with a local ethnic grocer to counter the negative social determinants of health plaguing their employees including accessibility to affordable nutritious foods. As part of a total population health approach, they launched their very own “Green Apron” program, a healthy meal preparation service that provides a once-a-week healthy meal that serves a family of four for under \$20. Employees can choose from three healthy meal options – they receive the meal fixings and recipes, all packaged and ready to take home at the end of the workday. The employer works with their onsite wellness provider to develop weekly menus/recipes and the onsite cafeteria features a Green Apron meal once per week. Participation in the program continues to grow as a result of word of mouth, a comprehensive communications campaign and weekly raffle prizes for participants.

MYTH: Diabetes is not a serious disease.



FACT: Diabetes is a growing epidemic with a devastating physical, emotional and financial toll on our country.

It kills more Americans each year
than AIDS and breast cancer
COMBINED.



We aren't winning the war on diabetes. At a minimum, we need to prevent this epidemic from getting worse. But we can do better than that – it's important for employers to offer diabetes prevention and management programs. As a self-insured employer, you can ensure high value preventive services as well as generic and low-no cost diabetic drugs are covered under your plan. Offering programs to encourage an active lifestyle and good nutrition can go a long way in helping your covered population reduce their risk for diabetes and for those with diabetes, a healthy lifestyle can be life changing. The MBGH Diabetes Management in the Workplace Toolkit is a free resource that can help you have a meaningful impact on reversing the trend of this prevalent and costly disease."

*– Cheryl Larson, President & CEO
Midwest Business Group on Health*

Feedback on the MBGH Toolkit from employer members:

"This is an excellent and comprehensive toolkit! Navigation is simple to use and the linked reference materials provide a deeper dive into relevant and timely resources."



"This can really help small to mid-sized employers get a handle on managing workers with diabetes, while giving them the tools and right questions to ask to ensure health plans and vendors are doing the right thing."

Learn more: [MBGH Diabetes Management in the Workplace Toolkit](#)

For more information on any aspect of this report, contact info@mbgh.org.

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About MBGH

MBGH is one of the nation's leading and largest non-profit employer coalitions. Members are represented by human resources and health benefit professionals for over 145 mid, large and jumbo self-insured public and private companies who provide health benefits for more than 4 million lives. Employer members spend over \$15 billion annually on healthcare. Since 1980, members have used their collective voice to serve as catalysts to improve the cost, quality and safety of health benefits.

