A TARGETED APPROACH TO CUT TYPE 2 DIABETES RISK IN HALF

The why and how behind the National Diabetes Prevention Program
The facts about prediabetes and type 2 diabetes

In the average workplace, approximately one out of every three employees may have prediabetes,¹ and most are unaware of their condition.

Prediabetes occurs when blood glucose (sugar) levels are higher than normal, but not high enough to be diagnosed as diabetes.

Without intervention, prediabetes could progress to type 2 diabetes within five years.

Type 2 diabetes, the most common form of diabetes, is a serious medical condition in which the body cannot keep blood glucose at normal levels. Diabetes cases are increasing every year as are treatment costs. Complications include:

- Vision problems or blindness
- Nerve damage, poor circulation and amputation
- Kidney damage, the need for dialysis or transplant
- Heart disease, heart attack or stroke
- Disability and even death

Diagnosed diabetes costs the United States $245 billion² a year; this figure rises to $322 billion when including undiagnosed diabetes and prediabetes. Total costs of diabetes are projected to increase to $366 billion by 2034.³

Of the money lost to diabetes:

- $176 billion was spent on medical expenditures
- $69 billion was lost due to reduced productivity²
Why it matters to employers

Increased medical costs

• Prediabetes results in an estimated medical cost increase of $443 per person, per year.4

• Health care spending is roughly $2,700 more per year for employees who have recently transitioned from prediabetes to type 2 diabetes.5

• People with diabetes have medical expenses that are approximately 2.3 times higher than those without diabetes.2

• The average medical expense incurred by people with diabetes is $13,700 per year, of which $7,900 is attributed to diabetes.2

Productivity

Employers experience lost productivity in many forms, including:

• **Time off**. Employees with type 2 diabetes may need to take time off work to manage their condition.

• **Higher turnover rates**. Employees with type 2 diabetes may need to stop working due to serious health complications and disability.

• **Reduced morale**. A sick workforce is not as energized and productive as a healthy workforce.

The good news: Type 2 diabetes can be prevented

With the right changes to diet and physical activity, prediabetes can be reversed before it develops into type 2 diabetes.
How employers can help

With prediabetes and type 2 diabetes already so prevalent and presenting a growing risk, a type 2 diabetes prevention program is an essential piece in an organization’s overall wellness program. While diabetes prevention is the focus, a diabetes prevention program also supports broader wellness initiatives.

The Centers for Disease Control and Prevention (CDC) National Diabetes Prevention Program (National DPP) supports an evidence-based lifestyle change program designed to prevent the onset of type 2 diabetes. To achieve CDC recognition, organizations must use a CDC-approved curriculum and meet national quality standards. There are many CDC-recognized organizations delivering the National DPP lifestyle change program across the nation, with demonstrated results.

During this year-long program, participants work with a trained coach to learn skills necessary to sustain lasting lifestyle changes. The National DPP lifestyle change program has been proven to reduce type 2 diabetes risk, and typically produces savings for employers within a few years as the onset of type 2 diabetes is prevented or delayed.

KEY CONSIDERATIONS TO OFFER A NATIONAL DPP LIFESTYLE CHANGE PROGRAM TO YOUR EMPLOYEES:

1. **Evaluate the business case and present your findings to key stakeholders within your organization.** To customize your presentation, consider using these tools:
   - Business case PowerPoint template
   - Assessing prediabetes risk for employees sheet

2. **Determine how program delivery would work best at your organization.**
   - Would on-site, off-site or online coaching sessions work best?
   - Or, will you use a combination of delivery methods?
   - Will you offer sessions during the work day, after hours or both?
   - Does it make sense to offer different options to different shifts?
   - How does the program fit with and support your existing wellness initiatives?
   - Will you deploy the program using community partners, your in-house team, a virtual provider, or a combination?
   - Is your health insurance carrier amenable to making the National DPP a covered health benefit for qualifying individuals?
   - Do you want to make your program available for spouses and adult children?
   - Will you incentivize screening and/or program participation?
   - How will you name and promote the program?
   - Should you promote the program with a focus on type 2 diabetes prevention or a more general wellness goal like weight loss or physical activity?
   - How will you track program results while being mindful of employee privacy issues?
3. **Work with your program partners to plan and execute your prediabetes screening.** Screening will likely involve participation in a short survey as well as a blood test. Per CDC program guidelines, an individual qualifies for the National DPP if he or she has not had a previous diagnosis of diabetes, and meets these criteria:

- At least 18 years old AND Body Mass Index (BMI) ≥24 (≥22 if Asian)
- Blood test result in the prediabetes range:
  - Hemoglobin A1C: 5.7%-6.4% or
  - Fasting plasma glucose: 100-125 mg/dL or
  - Two-hour plasma glucose (after a 75 cm glucose load): 140-199 mg/dL
- Is ≥18 years old and BMI ≥24 (≥22 Asian)
- History of gestational diabetes

Individuals could also qualify based on their score on a prediabetes risk test.

4. **Launch your program as a covered benefit.** After screening, people who are diagnosed with prediabetes can participate. The National DPP lifestyle change program lasts for approximately one year. During the program, participants learn how to:

- Make healthy eating decisions
- Incorporate physical activity into their lifestyles
- Manage stress that leads to health issues

The average cost per participant is $450. This small investment is all that’s needed to reduce the occurrence of type 2 diabetes. It is particularly affordable when you consider that the medical cost of diabetes is $13,700 per person, per year, with $7,900 of those expenses attributable to diabetes.

![Cost Comparison Diagram]
Results are real

The National DPP is modeled off of the DPP research trial. Participants in the original study:

- Reduced the risk of developing type 2 diabetes by 58 percent through moderate weight loss and increased physical activity\(^7\)
- Delayed the onset of type 2 diabetes by 11 years and reduced absolute incidence by 20 percent over a participant’s lifetime due to lifestyle interventions\(^8\)

Over three years, employers can expect to see:

- A one to two percent decrease in absenteeism and lost productivity\(^9\)
- A possible savings of $8,000 per participant that does not progress to type 2 diabetes\(^5\)

Good value for the money spent:

- Subsequent research on the original DPP study has shown that the lifestyle intervention “provides good value for the money spent” among high risk adults\(^10\)
- The National DPP has the potential to generate cost savings and provide a positive return on investment
- A systematic review of 56 studies found intensive lifestyle interventions to be “very cost effective”\(^11\)
Join the movement

Program participation is gaining popularity around the country. Companies ranging from small family-operated businesses to large Fortune 100 firms are joining the movement. Several states and many private insurers are also choosing to offer coverage.

By offering the National DPP lifestyle change program, your company can enhance its benefits package, drive a healthier workforce and decrease medical costs associated with prediabetes and diabetes.

Take the next step

- **Look around your team.** Based on the national average, you can estimate that one of three people you see has prediabetes. If you could help them lead longer, healthier, more productive lives, wouldn’t you do it?

- **Look at your attraction and retention.** If you could attract top talent and reduce turnover with a competitive benefits package that costs little, wouldn’t you do it?

- **Look at your bottom line.** If you could save thousands of dollars over the next three years, wouldn’t you do it?

YOU CAN.

NEXT STEPS:

1. Review the assessment tool to estimate the prevalence of prediabetes in your organization.


3. Present this white paper and senior leadership slides to make the business case.

4. Contact your insurer to make the National DPP a covered benefit.

5. Visit the National DPP website (https://nccd.cdc.gov/DDT_DPRP/Programs.aspx) to identify program options.
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* Different cost calculator tools can yield different conclusions because of the data and assumptions underlying their calculations. Two of the primary factors leading to differences in conclusions generated by these two tools are the estimates of 1) progression from prediabetes to type 2 diabetes; and 2) the reduction in risk provided by lifestyle intervention. The CDC’s assumptions for these estimates are towards the lower ranges modeled after a more nationally representative sample, and the AMA’s assumptions are towards the higher ranges modeled after a more targeted employer representative sample.

Default values programmed in the AMA Diabetes Prevention Cost Savings Calculator are based on studies referenced in the Assumptions and Methodology provided with the tool. Cost estimates in the AMA Diabetes Prevention Cost Savings Calculator are derived from the Khan et al 2017 study using claims data from the Truven Health Mar-ketScan® Lab Database (commercially insured population). Default values programmed in the CDC Diabetes Prevention Impact Toolkit are based on numerous studies referenced in the Technical Report that accompanies the Toolkit as well as early data from the CDC Diabetes Prevention Recognition Program.

While the datasets and assumptions supporting the AMA and CDC cost calculators are different, both tools can help organizations customize and forecast the benefits of offering the National DPP Lifestyle change program.

This work was supported by the Grant or Cooperative Agreement Number DP004793-05, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.