

Making the Most of ROI Calculators

for the National Diabetes Prevention Program Lifestyle Change Program

Return on investment calculators can help **determine the value of adding the National DPP lifestyle change program as a covered benefit for employees**

Employers can use workforce data to estimate return on investment (ROI) from offering the National Diabetes Prevention Program (National DPP) lifestyle change program as a covered benefit for their employees. Centers for Disease Control and Prevention (CDC) and American Medical Association (AMA) have both developed cost calculator tools to help estimate potential ROI and other cost and health outcome measures associated with offering the National DPP lifestyle change program to employees at risk of developing type 2 diabetes. Using data from one or both of these tools can show how different variables can affect the ROI of the benefit.

CDC Diabetes Prevention Impact Toolkit

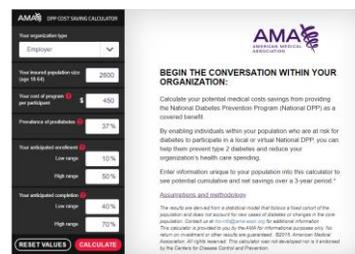
Assess the likely cost-effectiveness or cost-savings of covering the National DPP lifestyle change program. Default values are based on data from relevant research, program implementations, state and industry averages, and expert judgment. Employers can adjust values based on employee demographics, expected adherence, program cost, and more.



<https://nccd.cdc.gov/Toolkit/DiabetesImpact>

AMA Diabetes Prevention Cost Saving Calculator

Estimate potential medical cost savings from offering the National DPP lifestyle change program as a covered benefit. Calculations are based on an analysis of commercial claims data of individuals with prediabetes and the potential savings from preventing or delaying the onset of type 2 diabetes.



<https://ama-roi-calculator.appspot.com/>

Choosing a Calculator.¹ Key differences between the calculators include:

- **Data inputs:** Both calculators require inputs for the total number of insured employees and cost of the National DPP lifestyle change program per participant. AMA’s calculator allows for inputs on anticipated enrollment and completion. Overall, CDC’s calculator provides more data entry fields, including population characteristics, different risk levels among individuals with prediabetes, and productivity costs. Both calculators include default values, but the more you can input custom data, the more tailored your results will be.² To learn more about the calculator fields, see the [Guide to Calculator Values](#) section below.
- **Underlying assumptions and methodologies:** The calculators produce different results based on the data and assumptions underlying the calculations. Two factors that impact results are 1) the estimates of the rate of progression from prediabetes to type 2 diabetes; and 2) the estimates of the degree to which lifestyle intervention reduces risk. CDC’s assumptions for these estimates are lower because they are modeled after a nationally representative sample. AMA’s assumptions are higher because they are modeled after a targeted employer sample.

Using the Calculators

- **Use a data collection form** such as CDC’s [Data Input Checklist](#) to help guide gathering values for the calculator.
- **Run a ROI calculation** using the values you know about your organization.
- **Compare results for different scenarios** by modifying key inputs. For example, CDC’s calculator provides a data field for which risk group (i.e., all persons with prediabetes or only persons with high-risk prediabetes) will participate in the program. ROI can be increased by focusing participation on persons with high-risk prediabetes. For AMA’s calculator, modifying the range of anticipated enrollment and completion will allow you to compare results.

“We encourage our employer clients to consider the clinical effectiveness and outcomes associated with the program, in addition to our focus on cost avoidance and ROI.” – Karen Smith-Hagman, MSN, RN, Vice President, Clinical Consultancy National and Key Accounts, Blue Cross of Idaho

¹ The datasets and assumptions supporting the CDC and AMA cost calculators are different. But both tools can help organizations forecast the benefits of offering the National DPP lifestyle change program. For more information, visit the [National DPP Customer Service Center](#).

² To learn more about the specific metrics in each tool, see the [Technical Report](#) for the CDC Prevention Impact Toolkit and the [Assumptions and Methodology document](#) for the AMA Cost Saving Calculator. For additional tips for the CDC calculator, see the [Help Using the Impact Toolkit](#) resource.

Tips for Accurate Results

- **Ensure the estimated enrollment rate** is no more than 15% of eligible employees. Typically, only 10 – 15% of the eligible population will enroll in the first year or two of the benefit. Keeping the calculator’s default “low” rate populated is realistic.
- **Set an appropriate estimated cost of the program.** Insert at least \$500 per person or the average price of programs in your area based on the charge data collected above in the “Connect with CDC-Recognized Programs” portion of these instructions.

How to Improve ROI

- **Strategies that may increase the enrollment rate include:**
 - Promoting and marketing the program
 - Initiating screening or offering additional screening with automatic referral to the program
 - Offering the program at the worksite
 - Allowing employees to use worktime or lunch breaks to attend class
 - Offering incentives such as wellness points, gift cards, or other items when people participate in screenings and/or enroll in the program
- **Strategies that may increase the completion rate include:**
 - Aligning incentives with program milestones
 - Offering the program onsite and during the paid workday
 - Asking participants to complete a readiness assessment prior to beginning the program
 - Increasing physician referrals and feedback to patients

Value on investment (VOI) refers to additional, often less tangible, benefits from the investment. **VOI financial benefits of the National DPP lifestyle change program could include:**

- Better job performance
- Decreased absenteeism
- Higher employee engagement
- Increased job satisfaction
- Avoided and/or delayed chronic illness and disability

A Guide to Calculator Fields

This table provides a side by side comparison of the fields included in each of the CDC and AMA calculators.

Category	CDC Diabetes Prevention Impact Toolkit Fields	AMA Cost Saving Calculator Fields	Context and Guidance	Key Differences
Population characteristics	Organization type (state, employer, insurer)	Organization type (employer, insurer, health care system, public health, other)	Both tools include default values. When possible, input true numbers from an employer or from state or local reliable statistics to get the most relevant results. The AMA recommends using the default prediabetes prevalence value (37%) unless you have claims data or other estimates specifically from the employer. The 37% default is based on national fasting glucose or A1C data for the general population.	The AMA Cost Saving Calculator has more built-in assumptions around population, however it asks for prevalence of prediabetes. The CDC Diabetes Prevention Impact Toolkit asks for demographic breakdowns. It uses these breakdowns to auto-estimate prediabetes prevalence.
	Number of employees by age	Insured population size (age 18 – 64)		
	Number of employees by sex	Prevalence of prediabetes		
	Number of employees by race/ethnicity			
	Number of employees by body weight			
Risk group to participate in program	Persons with prediabetes	<i>No fields in this category</i>	Increase ROI in the CDC Diabetes Prevention Impact Toolkit by focusing on persons with a high-risk of developing prediabetes. Focusing on people with prediabetes and people at risk for developing type 2 diabetes yields a lower ROI.	The AMA Cost Saving Calculator does not include any fields to account for risk groups. The CDC Diabetes Prevention Impact Toolkit allows for changing risk groups as part of ROI calculations.
	Persons with prediabetes and others at risk for type 2 diabetes			
	Persons at high-risk of developing prediabetes			

Category	CDC Diabetes Prevention Impact Toolkit Fields	AMA Cost Saving Calculator Fields	Context and Guidance	Key Differences
Screening	No new screenings for prediabetes	<i>No fields in this category</i>	The eligible population can be expanded by screening some or all persons without a recent screening.	<p>The AMA Cost Saving Calculator does not include any fields about screening. The cost for screening will need to be considered by the employer. If the employer already covers other screenings, they may be able to add prediabetes screenings for little or no cost.</p> <p>The CDC Diabetes Prevention Impact Toolkit includes a field for new prediabetes screenings as part of ROI calculations.</p>
	Screen persons for prediabetes if they have not been previously screened			
Program enrollment and participation	Percentage of eligible population previously screened for prediabetes	Anticipated enrollment (low and high range)	The AMA Cost Saving Calculator's default numbers for completion are 40% (low) to 70% (high). Increase the low end of completion if the National DPP lifestyle change program provider has had success in this area.	The AMA Cost Saving Calculator and the CDC Diabetes Impact Toolkit define enrollment as eligible participants attending at least one session. Both calculators define completion as the number of adults who completed 12+ sessions (9 during the first 6 months and 3 during the second 6 months) of the year-long lifestyle change program as a percentage of the eligible enrollees.
	Percentage of eligible, screened population who participate in the intervention	Anticipated completion (low and high range)		
Program costs	Program cost per person	Cost of program per participant	The default cost for programs is an estimate. For more accurate calculations, contact a local CDC-recognized organization to ask what they charge for the program and what that cost includes (administrative fees, incentives, marketing, screening, etc.).	<p>The AMA Cost Saving Calculator's default program cost is \$450 per participant.</p> <p>The CDC Diabetes Prevention Impact Toolkit's default program cost is \$417 per participant.</p>
Other	Annual diabetes-attributable medical costs per person	<i>No fields in this category</i>	Productivity costs include days missed per year due to diabetes and daily earnings for employees.	<p>The AMA Cost Saving Calculator does not include any additional fields.</p> <p>The CDC Diabetes Prevention Impact Toolkit includes some secondary benefits and value adds that can impact the ROI of a program.</p>
	Productivity costs			
	Maximum program budget			
	Intervention weight loss and regain schedule			



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