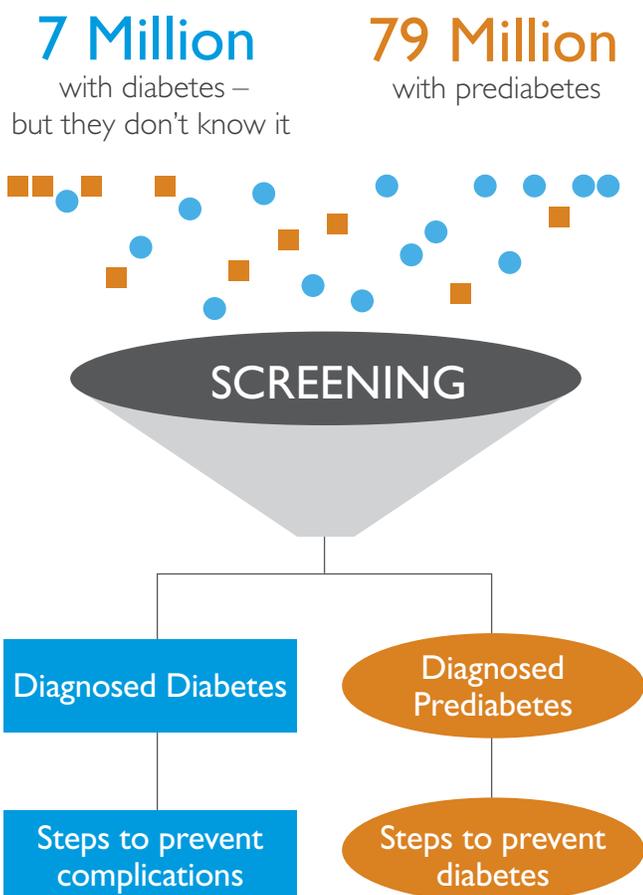


Diabetes Screening: The Gateway to Prevention and Control



Targeted screening for diabetes and prediabetes is the gateway to stopping or curtailing the disease. It is especially critical given the 7 million Americans who have undiagnosed diabetes¹ and the 79 million with prediabetes² who are at high risk of developing type 2 diabetes. The United States Preventive Services Task Force (USPSTF) currently recommends screening for type 2 diabetes only in asymptomatic adults with high blood pressure. Research shows that the guidelines of the American Diabetes Association (ADA), which are based on multiple risk factors, are better at identifying people with undiagnosed diabetes and prediabetes, and that they are also more cost-effective. The USPSTF is currently reviewing its diabetes screening recommendation and is expected to conclude its work in 2015.

Screening Enables Early Identification and Prevention



On average, diabetes reduces life expectancy by 7.5 years in men and 8.2 years in women.³ Targeted screening can identify high blood glucose levels that signal undiagnosed diabetes or prediabetes. With this information, patients and providers can take preventive action or begin treatment to help save lives. Screening can also identify adults who have diabetes but don't know it, to allow for earlier intervention that can help prevent or delay the devastating and costly complications of diabetes.

- For those with prediabetes-diet, exercise, and weight loss can prevent or delay type 2 diabetes.
- For those with previously undiagnosed diabetes, appropriate treatment and care, including Diabetes Self-Management Training, can prevent or delay complications.

Screening is essential in alerting people to the risks they face. Millions don't know they already have type 2 diabetes or are at high risk of developing the disease.

- About 25% of people with diabetes are undiagnosed.⁴
- It is estimated that 90% or more of people with prediabetes are unaware of their condition. Prediabetes often progresses to type 2 diabetes within 7-10 years.⁵

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US Preventive Services Task Force Guidelines Overlook Millions

Studies have shown that USPSTF screening recommendations, if applied universally, would miss millions of cases of diabetes. One recent study (2013) was conducted to determine the effectiveness of USPSTF screening criteria to identify adults with undiagnosed diabetes.⁷

Currently,

- USPSTF recommends screening only for asymptomatic adults with high blood pressure (>135/80 mm Hg).⁶
- ADA recommends testing for any asymptomatic adults who are overweight or obese (BMI \geq 25 kg/m²) and who have one or more additional risk factors for diabetes, including family history of diabetes, lack of physical activity, membership in a high-risk group, high blood pressure, or abnormal cholesterol. For adults without these types of risks, ADA recommends testing begin at the age of 45, with repeat testing considered at least every 3 years thereafter.¹⁰

- The authors noted, "In all demographic groups, the Task Force diabetes screening criteria did not adequately distinguish people with and without undiagnosed diabetes, and missed more than half of those who had undiagnosed diabetes."⁷
- They concluded, "Screening criteria should include the strongest risk factors for developing diabetes, specifically obesity, age, and family history, in order to identify as many people with undiagnosed diabetes as possible."⁷

Other peer-reviewed studies suggest that broader diabetes screening guidelines, such as the American Diabetes Association's (ADA), identify more people with undiagnosed diabetes than USPSTF guidelines.^{8,9}

One research team applied USPSTF and ADA screening guidelines to a database of nearly 47,000 adults in a large US physician group practice. The study was designed to compare the diabetes-case-finding ability of USPSTF versus ADA screening guidelines.⁸

- Approximately 34,000 adults met either the USPSTF or ADA screening criteria. Of these 34,000 patients, approximately 29,000 were tested for diabetes.⁸
- Applying the USPSTF guidelines identified 1/3 fewer cases of diabetes than the ADA guidelines.⁸

A modeling study found that screening for type 2 diabetes initiated at age 30 or 45 and repeated every 3 to 5 years, results in type 2 diabetes being diagnosed earlier than screening based only on high blood pressure—and it is cost effective.¹¹

Screening strategies:

	Years earlier that diabetes is diagnosed:
Age 30, every 3 years	6.30
Age 45, every year	5.98
Age 45, every 3 years	5.33
Age 45, every 5 years	4.72
High blood pressure, every year	2.84
High blood pressure, every five years	2.43

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Research Urges USPSTF to Consider Broader Array of Evidence

An analysis published in the January 2012 *Health Affairs* concluded that USPSTF should consider a broader framework of evidence in evaluating diabetes screening and take into account new evidence showing how diabetes screening can help prevent or delay diabetes.^{1,2}



- The analysis recommended that USPSTF consider the best available evidence on risk-based diabetes screening—and not limit review to data only from randomized controlled trials.
- The analysis also said that the growing amount of evidence showing the link between obesity and diabetes and their combined contribution to other damaging diseases is a sound reason **“to reconsider diabetes screening for its ability to prevent type 2 diabetes itself... rather than recommending screening only if it proves beneficial in reducing diabetes’ long-term complications and morbidity.”**

For more information on diabetes detection and prevention, visit the Diabetes Advocacy Alliance website at www.DiabetesAdvocacyAlliance.org

Citations

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