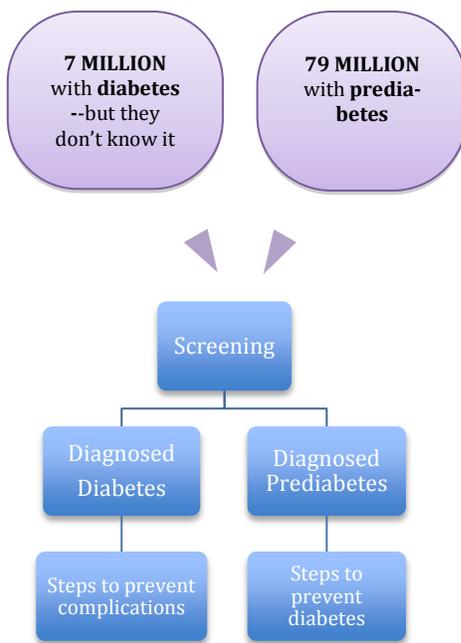


DIABETES SCREENING: THE GATEWAY TO PREVENTION AND CONTROL

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 plans to update its recommendation in spring of 2013.

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.

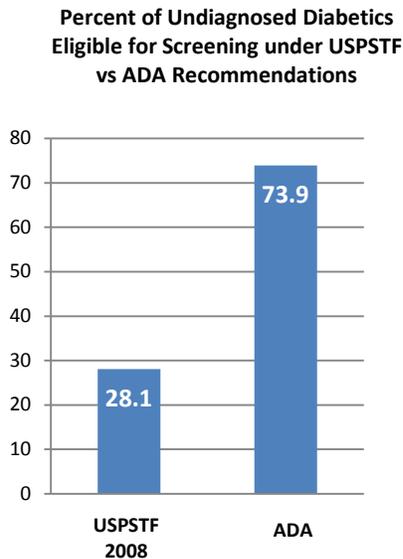
- For those with prediabetes—diet, exercise, and weight loss are measures that can prevent or delay type 2 diabetes.
- For those with previously undiagnosed diabetes—appropriate treatment and care, including Diabetes Self-Management Training, can prevent or delay complications.

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 those people with prediabetes are unaware of their condition, a grim statistic given that prediabetes often progresses to type 2 diabetes within 7-10 years.⁵

US PREVENTIVE SERVICES TASK FORCE SCREENING GUIDELINES OVERLOOK MILLIONS⁶

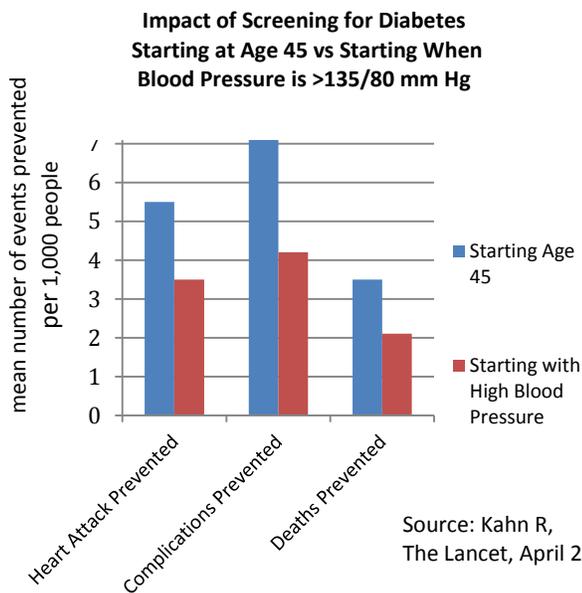
Current USPSTF recommendations focus on managing the risk of heart disease rather than on preventing diabetes itself.



Source: Thorpe KE, Presentation, 3/27/12

- USPSTF recommends screening *only* for asymptomatic adults who have sustained high blood pressure greater than 135/80 mm Hg, because screening would inform decisions about coronary heart disease prevention.⁶
- Without screening, many of the 7 million adults with undiagnosed diabetes may remain unaware of their condition until costly complications set in. As shown in the graph at left, USPSTF recommendations would identify only 28.1% of those with undiagnosed diabetes, while the ADA guidelines would identify 73.9%.⁷

Recently published, peer-reviewed studies suggest that broader diabetes screening guidelines, such as those of the ADA, identify more people with diabetes.^{8 9} ADA recommends testing for asymptomatic adults who are overweight or obese (BMI ≥ 25 kg/m²) and who have one or more additional risk factors for diabetes, such as family history, lack of exercise, membership in a high-risk group, hypertension, and abnormal cholesterol. In those without these types of risks, testing should begin at the age of 45.¹⁰



Source: Kahn R, The Lancet, April 2010

- A modeling study (left) found that screening for type 2 diabetes reduces complications and deaths when started between the ages of 30 and 45, with screening repeated every 3-5 years.¹¹
 - The study also found that screening for diabetes as recommended by the USPSTF detected fewer cases of type 2 diabetes and had a smaller effect on preventing eye, kidney, and nerve damage than did screening based on age.

NEW REPORT URGES USPSTF TO CONSIDER BROADER ARRAY OF EVIDENCE

The USPSTF has scheduled diabetes screening for a priority review in 2013. A recent 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:¹²



- 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.”**

The Diabetes Advocacy Alliance is a diverse group of organizations that has come together for the purpose of changing how we perceive and approach the problem of diabetes. www.DiabetesAdvocacyAlliance.org

¹ Centers for Disease Control and Prevention. DC National Diabetes Fact Sheet. 2011.

² Centers for Disease Control and Prevention. DC National Diabetes Fact Sheet. 2011.

³ Franco OH, Steyerberg EW, Hu FB, et al. Associations of diabetes mellitus with total life expectancy and life expectancy with and without cardiovascular disease. *Arch Int Med* 2007;167:1145-51

⁴ Centers for Disease Control and Prevention. DC National Diabetes Fact Sheet. 2011.

⁵ Geiss LS et al. Diabetes risk reduction behaviors among US adults with prediabetes. *Am J Prev Med*. April 2010.

⁶ <http://www.uspreventiveservicestaskforce.org/uspstf08/type2/type2art.htm>

⁷ Kenneth E. Thorpe, “Building a National Diabetes Prevention and Treatment System,” slide presentation March 27, 2012

⁸ Sheehy A, *Mayo Clinic Proceedings*, January 2009.

⁹ Narayan et al. Global prevention and control of diabetes will require paradigm shifts in policies within and among countries. *Health Affairs* 31(1), January 2012.

¹⁰ *Diabetes Care*, January 2011 Vol. 34 no. Supplement 1 S11-S61

¹¹ Kahn R et al. Age at initiation and frequency of screening to detect type 2 diabetes: a cost-effectiveness analysis. *Lancet* 375 (9723): 1365-1374, April 2010.

¹² Villarivera C et al. The US preventive services task force should consider a broader range of evidence in updating its diabetes screening guidelines. *Health Affairs* 31 (1), January 2012.