Clinician Summary of USPSTF Recommendation

Screening for Prediabetes and Type 2 Diabetes in Children and Adolescents

September 2022



What does the USPSTF recommend?



For children and adolescents younger than 18 years who do not have any symptoms of type 2 diabetes: The USPSTF found that the evidence is insufficient to assess the balance of benefits and harms of screening for type 2 diabetes in children and adolescents.



To whom does this recommendation apply?

- Children and adolescents younger than 18 years who have no signs or symptoms of diabetes or prediabetes.
- Screening for diabetes in adolescents who are pregnant is covered in a separate USPSTF recommendation.



What's new?

This is a new USPSTF recommendation; the USPSTF has not previously released a recommendation on this topic.



How to implement this recommendation?

- There is insufficient evidence to recommend for or against screening for type 2 diabetes in children and adolescents without symptoms of diabetes or prediabetes.
- Clinicians should use their clinical judgement to determine if screening is appropriate for individual patients.



What additional information should clinicians know about this recommendation?

- Type 2 diabetes disproportionately affects American Indian/Alaska Native, Black, Hispanic/Latino, and Native Hawaiian/Pacific Islander youth.
- Risk factors for type 2 diabetes include obesity and excess adipose tissue, especially when centrally distributed, as well as a family history of diabetes.
- Several screening tests (such as fasting plasma glucose level, hemoglobin A1c level, or oral glucose tolerance test) can identify type 2 diabetes and prediabetes; however, there is inadequate evidence that screening and early intervention lead to improvements in health outcomes such as renal impairment, cardiovascular morbidity, mortality, and quality of life.
- Treatment of type 2 diabetes and prediabetes generally includes lifestyle modifications (changes in diet and physical activity), medications to improve glycemic control, or both. However, there is limited evidence that interventions for screen-detected type 2 diabetes and prediabetes improve health outcomes.
- Approximately 1 in 5 adolescents aged 12 to 18 years has prediabetes, but there is limited evidence on whether interventions for prediabetes delay or prevent progression to type 2 diabetes. Approximately 20% to 50% of children and adolescents with prediabetes return to normal glycemia or normal glucose tolerance without intervention.

1





Why is this recommendation and topic important?

- Type 2 diabetes affects approximately 23,000 children and adolescents in the US. The incidence of type 2 diabetes is on the rise.
- Youth with type 2 diabetes have an increased prevalence of associated chronic comorbid conditions, including hypertension, dyslipidemia, and nonalcoholic fatty liver disease.



What are other relevant USPSTF recommendations?

The USPSTF has a recommendation on screening for obesity in children and adolescents, screening for prediabetes and type 2 diabetes in adults, and screening for gestational diabetes in pregnant persons, which can be found on the USPSTF website.



Where to read the full recommendation statement?

Visit the USPSTF website or the *JAMA* website to read the full recommendation statement. This includes more details on the rationale of the recommendation, including benefits and harms; supporting evidence; and recommendations of others.