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Prediabetes and Obesity: Screen and Intervene to Improve Patient Health

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Prediabetes is defined as blood glucose levels that are higher than normal, but not high enough to be diagnosed as diabetes.¹ More than 1 in 3 adults have prediabetes, but most are unaware of this health risk. Eighty-five percent of individuals with prediabetes are overweight or obese. Clinicians are challenged to manage both prediabetes and obesity, therefore it is important to utilize appropriate screenings and interventions. Treatment should be individualized to effectively manage both conditions. To learn more about screening and treatment, refer to the Cardi-OH [expanded resource](#) on diabetes prevention.

Screen and Identify Prediabetes

Age and body mass index (BMI) are the strongest risk factors for prediabetes. Take the following steps to screen appropriately for prediabetes and monitor the patient if it has been identified.²

1. Screen every three years for all people beginning at age 45, OR Screen every three years for all people who are overweight or obese (BMI is ≥ 25 kg/m² (or ≥ 23 kg/m² in Asian Americans)) and who have one or more of the following risk factors at any age:
 - African American, Hispanic/Latino, Native American, Asian American, or Pacific Islander
 - History of hypertension, cardiovascular disease, polycystic ovarian syndrome, or gestational diabetes
 - HDL cholesterol < 35 mg/dL and/or a triglyceride level > 250 mg/dL
 - Physically inactive
 - First degree relative with type 2 diabetes
2. Monitor annually if a patient has been determined to have prediabetes:
 - A1C is 5.7-6.4% or fasting glucose is 100-125 mg/dL

Intervene to Prevent Diabetes

It is important to remember that the long-term goals are to **reverse prediabetes** and **treat obesity**. Below are several interventions to assist patients in achieving both.

Lifestyle Intervention

- Refer patient to a Diabetes Prevention Plan to reduce risk long-term.
- Partner with patients to set goals for the following **lifestyle** modifications:³
 - » Diet
 - » Exercise
 - » Weight loss
 - » Alcohol avoidance
 - » Smoking cessation
 - » Sleep quality improvement
- Encourage small changes and celebrate successes.



Medication Intervention

- Consider adding an anti-diabetic agent to lifestyle modification if BMI is ≥ 35 kg/m², the patient has a history of Gestational Diabetes Mellitus, or the patient is < 60 years old.⁴
- Metformin has the strongest evidence and long-term safety as pharmacologic therapy for diabetes prevention. Do not use if the estimated glomerular filtration rate is < 30 . Monitor vitamin B-12 levels periodically during metformin therapy.³



Surgical Intervention⁴

- Surgical intervention should be considered for patients with prediabetes with moderate or severe obesity.
- For adults < 65 years old with a BMI ≥ 40 or ≥ 35 with a co-morbidity, strongly consider bariatric surgery assessment. Bariatric surgery prevents diabetes, is the most effective treatment for obesity, improves many medical conditions, and extends lifespan.



REFERENCES

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