Prediabetes identification

STEP 1
Determine patient eligibility for laboratory testing
- Exclude patients <18 years of age
- Exclude patients with diabetes (problem list diagnosis or laboratory evidence)
- Exclude currently pregnant women

STEP 2
Determine if a laboratory test for abnormal glucose has been completed in the last 12 months
- If no, proceed to Step 3
- If yes, proceed to Step 4

STEP 3
Proceed with relevant testing option

A. General adult testing
- Determine if patient meets USPSTF criteria for laboratory testing
- Optional: Determine if patient meets ADA criteria for laboratory testing
- If patient meets criteria and laboratory test was not performed in the last three years, order HbA1c or fasting plasma glucose or 2hr glucose tolerance test

B. History of prediabetes (diagnosis code or laboratory evidence)
- Order HbA1c or fasting plasma glucose or 2hr glucose tolerance test

C. History of gestational diabetes
- If a laboratory test has not been performed within the last three years, order HbA1c or fasting plasma glucose or 2hr glucose tolerance test

Note: Women with a history of gestational diabetes and an elevated BMI are eligible to participate in a National Diabetes Prevention Program lifestyle change program regardless of current laboratory test results

STEP 4
Evaluate test results and inform patient

<table>
<thead>
<tr>
<th>Laboratory test</th>
<th>Normal</th>
<th>Prediabetes</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin A1C (%)</td>
<td>&lt; 5.7</td>
<td>5.7–6.4</td>
<td>≥ 6.5</td>
</tr>
<tr>
<td>Fasting plasma glucose (mg/dL)</td>
<td>&lt; 100</td>
<td>100–125</td>
<td>≥ 126</td>
</tr>
<tr>
<td>Oral glucose tolerance test (mg/dL)</td>
<td>&lt; 140</td>
<td>140–199</td>
<td>≥ 200</td>
</tr>
</tbody>
</table>

- If results are normal, retest every three years or as clinically appropriate
- If prediabetes is confirmed, document diagnosis with ICD-10 code R73.03 and proceed to management protocol (reverse side)
- If diabetes is confirmed, document diagnosis and treat as clinically appropriate

DISCLAIMER: Adherence to this protocol may not identify prediabetes/diabetes or achieve prediabetes/diabetes management in every situation. Furthermore, this information should not be interpreted as setting a standard of care, or be deemed inclusive of all proper methods of care, nor exclusive of other methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the appropriateness of any specific therapy must be made by the physician and the patient in light of all the clinical factors, including labs, presented by the individual patient. This protocol reflects the best available evidence at the time that it was prepared. The results of future studies may require revisions to the recommendations in this protocol to reflect new evidence, and it is the clinician’s responsibility to be aware of such changes.

Prediabetes management

**STEP 1**
Educate patient regarding diagnosis
- Counsel on the risks associated with prediabetes, the availability of multiple effective treatments and the potential reversibility of condition
- It may be reasonable to pursue more than one form of treatment

**STEP 2**
Consider three key treatment options, engage in shared decision-making and formalize treatment plan

**National Diabetes Prevention Program lifestyle change program**
Determine eligibility and make referral
- CDC eligibility criteria: BMI of $\geq 25 \text{ kg/m}^2$ ($\geq 23 \text{ kg/m}^2$ if Asian American) plus:
  - Blood test result consistent with prediabetes within the past year (may be self-reported) or
  - History of gestational diabetes or
  - Elevated score on doihaveprediabetes.org risk assessment test

**Metformin**
Determine if clinically appropriate and prescribe
- Metformin is not FDA-approved for the indication of preventing diabetes, however there is substantial evidence for efficacy and safety
- Metformin may be more helpful for patients with persistent abnormal glycemic status despite lifestyle change, women with a history of gestational diabetes, and patients at highest risk for progression to type 2 diabetes (higher blood glucose levels and/or very elevated BMI)
- Consider potential contraindications

**Medical nutrition therapy**
Make referral according to standard process

**Note:** Regardless of what treatment option is selected or if patient does not desire treatment, conduct follow-up as outlined in Step 3 and continue to engage patient about treatment in future encounters

**STEP 3**
Follow up regularly
- Monitor laboratory tests at least annually in patients with prediabetes
- Monitor patient progress throughout treatment and reassess risk

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