M.A.P. (Measure, Act, Partner)

THE M.A.P. (Measure, Act, Partner) to prevent type 2 diabetes—physicians and care teams can use this document to determine roles and responsibilities for identifying adult patients with prediabetes and referring to community-based diabetes prevention programs. “Point-of-Care” and “Retrospective” methods may be used together or alone.

Choose and check what works best for your practice

<table>
<thead>
<tr>
<th>Step 1: Measure</th>
<th>When</th>
<th>Who</th>
<th>How (draw from AMA-CDC tools)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Point-of-care method</strong></td>
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<tr>
<td>• Assess risk for prediabetes during routine office visit</td>
<td>• During vital signs</td>
<td>• Medical assistant&lt;br&gt;• Nurse&lt;br&gt;• Physician&lt;br&gt;• Other _________</td>
<td>• Provide “Are you at risk for prediabetes?” patient education handout in waiting area&lt;br&gt;• Use/adapt “Point-of-care algorithm”</td>
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<tr>
<td>• Test and evaluate blood glucose level based on risk status</td>
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<tr>
<td><strong>Retrospective method</strong></td>
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<tr>
<td>• Query EHR to identify patients with BMI ≥24; ≥22 if Asian* and blood glucose level in the prediabetes range</td>
<td>• Every 6–12 months</td>
<td>• Health IT staff&lt;br&gt;• Other _________</td>
<td>• Use/adapt “Retrospective algorithm”</td>
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| Step 2: Act | | |
|-----------------|------|-----|------------------------------|
| **Point-of-care method** | | | |
| • Counsel patient re: prediabetes and treatment options during office visit | • During the visit | • Medical assistant<br>• Nurse<br>• Physician<br>• Other _________ | • Advise patient using “So you have prediabetes … now what?” handout<br>• Use/adapt “Health care practitioner referral form”<br>• Refer to “Commonly used CPT and ICD codes” |
| • Refer patient to diabetes prevention program | | | |
| • Share patient contact info with program provider** | | | |
| **Retrospective method** | | | |
| • Inform patient of prediabetes status via mail, email or phone call | • Contact patient soon after EHR query | • Health IT staff<br>• Medical assistant (for phone calls)<br>• Other _________ | • Use/adapt “Patient letter/phone call” template<br>• Use/adapt “Health care practitioner referral form” for making individual referrals<br>• Use/adapt “Business Associate Agreement” template on AMA’s website if needed |
| • Make patient aware of referral and info sharing with program provider | | | |
| • Refer patient to diabetes prevention program | | | |
| • Share patient contact info with program provider** | | | |

| Step 3: Partner | | |
|-----------------|------|-----|------------------------------|
| **With diabetes prevention programs** | | | |
| • Engage and communicate with your local diabetes prevention program | • Establish contact before making 1st referral | • Office manager<br>• Other _________ | Use/adapt “Business Associate Agreement” template on AMA’s website if needed<br>Refer to “Commonly used CPT and ICD codes” |
| • Establish process to receive feedback from program about your patients’ participation | | | |
| **With patients** | | | |
| • Explore motivating factors important to the patient | • During office visit | • Medical assistant<br>• Nurse<br>• Physician<br>• Other _________ | • Advise patient using “So you have prediabetes … now what?” handout and provide CDC physical activity fact sheet www.cdc.gov/physicalactivity |
| • At follow-up visit, order/review blood tests to determine impact of program and reinforce continued program participation | | | |
| • Discuss program feedback with patient and integrate into care plan | | | |

* These BMI levels reflect eligibility for the National DPP as noted in the CDC Diabetes Prevention Recognition Program Standards and Operating Procedures. The American Diabetes Association (ADA) encourages screening for diabetes at a BMI of ≥23 for Asian Americans and ≥25 for non-Asian Americans, and some programs may use the ADA screening criteria for program eligibility. Please check with your diabetes prevention program provider for their specific BMI eligibility requirements.

** To share patient contact information with a diabetes prevention program, you may need a Business Associate Agreement (BAA).
Referring patients to a diabetes prevention program

Method 1:

Point-of-care identification and referral

Download and display patient materials
Download and print the practice and patient resources included in this guide in advance of patient visits, so your office can have them available in the waiting room or during consult.

Measure

Step 1 – During rooming/vitals:
A. If the patient is age 40 to 70 and is obese or overweight (USPSTF criteria), and does not have diabetes, proceed to the blood test.
B. If the patient is age ≥18 and does not have diabetes, nor meet the criteria in A, provide the self-screening risk test.
   - If the self-screening test reveals high risk (score ≥ 5), proceed to calculating the patient’s body mass index.
     - The screening test can also be mailed to patient along with other pre-visit materials. If a patient completes the self-screening risk test, insert test results in the patient’s paper chart or electronic medical record (EMR).

Step 2 – During exam/consult: Follow the “Point-of-care prediabetes identification algorithm” to determine if patient has prediabetes.
If the blood test results do not indicate prediabetes:
Encourage the patient to maintain healthy lifestyle choices. Continue with exam/consult.

Act
A. If the patient screens positive for prediabetes and has BMI <24 (<22 if Asian)*:
   - Introduce the topic of prediabetes by briefly explaining what it is and its relation to diabetes (use the handout “So you have prediabetes … now what?”). Review the patient’s own risk factors.
   - Emphasize the importance of prevention, including healthy eating, increased physical activity, and the elimination of risky drinking and tobacco use. (Visit the National Diabetes Education Program’s GAME PLAN to Prevent Type 2 Diabetes for additional patient resources.)
B. If the patient screens positive for prediabetes and has BMI ≥24 (≥22 if Asian)*:
   - Follow the steps in “A” above, discuss the value of participating in a diabetes prevention program, and determine the patient’s willingness to let you refer him/her to a program.
   - If the patient agrees, complete and send the referral form to a community-based or online diabetes prevention program, depending on patient preference.
   - If patient declines, offer him/her a program handout and re-evaluate risk factors at next clinic visit.

Step 3 – Referral to diabetes prevention program: Most diabetes prevention programs are configured to receive referrals via conventional fax (over a phone line) or secure email. Complete the referral form and submit to a program as follows:
A. If using a paper referral form, send via fax (over a phone line) or scan and email
B. If the referral form is embedded in your EMR, either fax (over a phone line) or email using the EMR
   - Some diabetes prevention programs can also receive an e-fax (over the Internet)

Physicians and other health care providers should also use their independent judgment when referring to a diabetes prevention program.

Partner

Step 4 – Follow-up with patient: Contact patient and troubleshoot issues with enrollment or participation. At the next visit, ask patient about progress and encourage continued participation in the program.

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Point-of-care prediabetes identification

If the patient is age 40-70 (USPSTF criteria), is obese or overweight, and does not have diabetes, proceed to the blood test.

If the patient is age > 18 and does not have diabetes, nor meet the criteria above, provide self-screening test, and if self-screening test reveals high risk, proceed to next step.

Review medical record to determine if BMI ≥24* (≥22 if Asian) or history of GDM**

YES

If no: Patient does not currently meet program eligibility requirements

NO

Determine if a HbA1C, FPG or OGTT was performed in the past 12 months

YES

Order one of the tests below:
- Hemoglobin A1C (HbA1C)
- Fasting plasma glucose (FPG)
- Oral glucose tolerance test (OGTT)

NO

Determine if a HbA1C, FPG or OGTT was performed in the past 12 months

YES

Evaluate test results:

<table>
<thead>
<tr>
<th>Diagnostic test</th>
<th>Normal</th>
<th>Prediabetes</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1C(%)</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>

**ACT**
- Encourage patient to maintain a healthy lifestyle.
- Refer to diabetes prevention program, provide brochure.
- Confirm diagnosis; retest if necessary.
- Consider retesting annually to check for diabetes onset.
- Counsel patient re: diagnosis.
- Initiate therapy.
- Continue with exam/consult. Retest within three years of last negative test.

**PARTNER**
- Communicate with your local diabetes prevention program.
- Contact patient and troubleshoot issues with enrollment or participation. At the next visit, ask patient about progress and encourage continued participation in the program.


*These BMI levels reflect eligibility for the National DPP as noted in the CDC Diabetes Prevention Recognition Program Standards and Operating Procedures.

**History of GDM = eligibility for diabetes prevention program.
Method 2:

Retrospective identification and referral

Step 1 – Query EMR or patient database

Measure
Query your EMR or patient database every 6–12 months using the following criteria:

A. Inclusion criteria:
   - Age ≥18 years and
   - BMI ≥24 (≥22 if Asian)* and
   - A positive test result for prediabetes within the preceding 12 months:
     - HbA1C 5.7–6.4% or
     - Fasting plasma glucose 100–125 mg/dL or
     - Oral glucose tolerance test 140–199 mg/dL or
   - Clinically diagnosed gestational diabetes during a previous pregnancy

B. Exclusion criteria:
   - Current diagnosis of diabetes or
   - Current Insulin use

Generate a list of patient names and other information required to make referrals:

- Gender and birth date – Email address
- Mailing address – Phone number

Act

Step 2 – Referral to diabetes prevention program

A. Contact patients via phone, email, letter or postcard to explain their prediabetes status and let them know about the diabetes prevention program.

B. Send relevant patient information to your local (or online) diabetes prevention program coordinator and have him/her contact the patient directly (may require Business Associate Agreement).

C. Flag patients’ medical records for their next office visit.

Physicians and other health care providers should also use their independent judgment when referring to a diabetes prevention program.

Partner

During the next office visit, discuss diabetes prevention program participation:

- If the patient is participating, discuss program experience and encourage continued participation
- If the patient has declined to participate, stress the importance of lifestyle change and continue to encourage participation (use the handout “So you have prediabetes … now what?”)

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Retrospective prediabetes identification

**MEASURE**

Query EMR or patient database every 6–12 months using the following criteria:

A. Inclusion criteria:
   - Age ≥18 years **and**
   - Most recent BMI ≥24 (≥22 if Asian)* **and**
   - A positive lab test result within previous 12 months:
     - HbA1C 5.7–6.4% (LOINC code 4548-4) **or**
     - FPG 100–125 mg/dL (LOINC code 1558-6) **or**
     - OGTT 140–199 mg/dL (LOINC code 62856-0) **or**
   - History of gestational diabetes (ICD-9: V12.21; ICD-10: Z86.32)

B. Exclusion criteria:
   - Current diagnosis of diabetes (ICD-9: 250.xx; ICD-10: E10.x, E11.x, E13.x and O24.x) **or**
   - Current Insulin use

**ACT**

Use the patient list to:

A. Contact patients to inform of risk status, explain prediabetes, and share info on diabetes prevention programs, **and/or**

B. Send patient info to diabetes prevention program provider
   - Program coordinator will contact patient directly, **and**

C. Flag medical record for patient’s next office visit

**PARTNER**

Discuss program participation at next visit

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