A guide to refer patients to the YMCA Diabetes Prevention Program
Preventing diabetes: Making a difference by linking the clinic with the community.

The facts
Approximately 26 million Americans have diabetes, but another 79 million American adults have prediabetes. That’s about one in three people—and in U.S. adults aged 65 years or older, the percentage is even higher, at roughly 50 percent.

The annual total costs of diagnosed diabetes rose from $202 billion to $245 billion (2012 dollars) between 2007 and 2012.

A collaborative way forward
The YMCA Diabetes Prevention Program is based on the Diabetes Prevention Program (DPP) research study led by the National Institutes of Health (NIH). The NIH’s DPP study was a major, multicenter clinical trial that showed this type of lifestyle program can reduce the number of new cases of type 2 diabetes by 71 percent in adults over age 60 and by 58 percent among adults overall.

The YMCA Diabetes Prevention Program is part of the National Diabetes Prevention Program, an alliance (led by the Centers for Disease Control and Prevention) of public and private organizations that coordinates wide-scale implementation of lifestyle change programs proven to prevent type 2 diabetes.

With your help, your patients who have prediabetes can benefit from this proven, evidence-based program and prevent or delay the onset of type 2 diabetes.

To address the health effects and costs associated with diabetes, the American Medical Association is collaborating with the YMCA of the USA, the national resource office for the federated nonprofit movement of YMCAs in the United States, to create innovative clinical-community linkages that leverage evidence-based best practices in diabetes prevention.

How to use this implementation guide
Designed to facilitate the conversation between clinicians and patients about prediabetes, this guide offers recommendations for how to identify, screen and refer patients to the YMCA Diabetes Prevention Program. The guide includes:

- Information on prediabetes and on the YMCA Diabetes Prevention Program
- Steps for screening
- Codes for prediabetes and diabetes screening
- Links to additional resources
- Tools:
  - Sample patient flow process map
  - Patient risk assessment (American Diabetes Association)
  - Retrospective prediabetes identification and intervention algorithm
  - Point-of-care prediabetes identification and intervention algorithm
  - Referral form to the YMCA

Thank you for joining the AMA in this critical effort to prevent type 2 diabetes and to improve care and outcomes for your patients.
Why focus on prediabetes?

**Prediabetes** is a health condition characterized by higher than normal blood glucose levels, but levels not high enough to be diagnosed as diabetes.\(^1\)\(^4\)\(^5\) Prediabetes increases the risk of developing type 2 diabetes, heart disease and stroke.\(^1\)\(^4\) Estimates from 2010 show that 79 million people (20 years and older) in the United States have prediabetes.\(^1\) If your patients have prediabetes or are at risk for developing type 2 diabetes, you can refer them to the [YMCA Diabetes Prevention Program](https://ymca.net/diabetes-prevention), which can help them embrace a healthier lifestyle that is proven to prevent or delay the onset of type 2 diabetes.

We encourage you to counsel your patients that prediabetes is a potentially reversible condition, and one that you can help them manage effectively. This guide will help you start the conversation with your patients and assist you in:

- **Identifying** and **screening** patients with prediabetes
- **Referring** them to a participating YMCA Diabetes Prevention Program
- **Integrating** the YMCA Diabetes Prevention Program’s feedback into the patient’s clinical care plan

What is the YMCA Diabetes Prevention Program and who can participate?

Based on the NIH’s DPP study, the YMCA Diabetes Prevention Program focuses on delaying or preventing the progression of prediabetes to diabetes through lifestyle interventions that target improving diet, physical activity and achieving moderate weight loss. YMCA program participants receive support, guidance and encouragement from a trained lifestyle coach and fellow participants in a group setting as they explore how healthy eating, physical activity, moderate weight loss and other behavior changes benefit their health. Participants also receive guidance for developing a plan for improving and maintaining their overall well-being.

**How it works\(^6\)**

- The 12-month, group-based program offered through your local YMCA consists of 16 core, weekly sessions, followed by monthly maintenance sessions led by a trained lifestyle coach who facilitates a small group of people with similar goals.
- Discussion topics include: healthy eating, increasing physical activity, reducing stress, problem solving and much more.
- Lifestyle coaches assist participants to engage in lifestyle changes and meet program goals with monthly maintenance sessions.

**Who is eligible**

Through a grant from the Center for Medicare & Medicaid Innovation, qualifying seniors in 17 communities may be eligible to participate in the YMCA Diabetes Prevention Program at no cost through approximately June 30, 2015.* (Refer to the [ymca.net/diabetes-prevention](https://ymca.net/diabetes-prevention) for more information on these communities.) People who are eligible to participate in the YMCA Diabetes Prevention Program at no cost must be 65 and older, have Medicare coverage and no previous diagnosis of diabetes, and meet the following criteria:

- BMI of 25 or greater (22+ for Asian individuals) **AND**
- Blood values of:
  - Fasting plasma glucose: 100–125 mg/dL **OR**
  - HbA1C: 5.7–6.4 percent **OR**
  - Two-hour (75 gm glucola) plasma glucose: 140–199 mg/dL

* Adults under the age of 65 who have prediabetes can also participate in the YMCA Diabetes Prevention Program, but they may have to pay a fee.
Program participant goals
The program goals for each participant, if reached, can help reduce the risk of developing type 2 diabetes.
- Reduce body weight by 7 percent
- Gradually increase brisk, physical activity to 150 minutes per week

Referring patients to the YMCA Diabetes Prevention Program

Method 1: Retrospectively identify patients with prediabetes via your EMR

Query
Follow the “Retrospective prediabetes identification and intervention algorithm” (see page 10) to identify patients with prediabetes to refer to the YMCA Diabetes Prevention Program.

A. Perform an EMR query for patients with prediabetes using the following criteria:
   1. Inclusion criteria:
      a. Age ≥65
      b. BMI ≥25 (BMI ≥22 for Asian individuals)
      c. Have Medicare or Medicare Advantage
      d. And with any of these test values (test performed within 12 months)
         i. HbA1C (5.7–6.4%) and/or
         ii. Fasting plasma glucose (100–125 mg/dL) and/or
         iii. Oral glucose tolerance test (140–199 mg/dL)
   2. Exclusion criteria:
      a. Insulin use
      b. Previous diagnosis of diabetes

B. Create a registry with identified patients

Referral to the YMCA Diabetes Prevention Program
After identifying patients with prediabetes via your query, you can refer patients to your local YMCA in one of three ways:

A. Send the list to your local YMCA. The YMCA can call patients and enroll them in the program.
B. Flag patients’ medical records for their next visit and refer them to the YMCA at the time of the visit.
C. Contact patients to explain their prediabetes status and determine their willingness/interest in the YMCA program.
   a. If the patient agrees, send patient information to your local YMCA Diabetes Prevention Program coordinator and have him/her contact the patient directly.
   b. If patient declines, reevaluate risk factors at the next visit.

Feedback from the YMCA Diabetes Prevention Program to physicians
Twice during the program the YMCA notifies the provider via a written progress report from a HIPAA-secure system of the patient’s progress.

In addition, during the program participants complete a self-evaluation that providers can request from the YMCA.
Method 2: Point-of-care identification and intervention

Download materials
We recommend visiting ama-assn.org/go/prediabetes and clicking on the “Prediabetes” tab to download 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.

Patient flow process
View the sample “Patient flow process map” (see page 8) for a visual representation of how your practice can guide and refer your patients to take greater control of their health by participating in the YMCA Diabetes Prevention Program. Here are the steps in that process.

Front desk: As a part of patient check-in, give the patient a clipboard with the American Diabetes Association (ADA) “Are You at Risk for Type 2 Diabetes?” assessment form. After the patient completes the form and returns it to the front desk, insert the form in the patient’s record.

Pre-exam: Take the patient’s vital signs and calculate his or her Body Mass Index. Review the patient’s ADA risk assessment score from the completed form. If the score is “5” or higher, flag this information for the provider for use in the exam/consult.

Exam/consult: Follow the “Point-of-care prediabetes identification and intervention algorithm” (see page 11) to determine if patient has prediabetes.

If the patient does not screen positive for prediabetes:
Encourage the patient to maintain healthy lifestyle choices. Continue with exam/consult.

A. If the patient screens positive for prediabetes:
   1. Introduce the topic of prediabetes by briefly explaining what it is and its relation to type 2 diabetes.
   2. Emphasize the importance of prevention, including healthy eating, increased physical activity, and the elimination of risky drinking and tobacco use.

B. If the patient screens positive for prediabetes, is 65 years old or older, has a BMI ≥ 25 (≥ 22 for Asian individuals), has Medicare and no previous diagnosis of diabetes:
   1. Inform the patient that he/she may have coverage to participate in the YMCA Diabetes Prevention Program at no cost.
   2. Discuss the value of participating in the program.
   3. Determine the patient’s willingness to let you register him/her.
      a. If the patient agrees, complete and send the referral form (see referral steps below) to your local YMCA Diabetes Prevention Program.
      b. If patient declines, reevaluate risk factors at the next visit.

Referral to the YMCA Diabetes Prevention Program: After completing the referral form to the YMCA (see page 12), you can submit it to your local YMCA in one of three ways.
A. Electronically send or fax directly from electronic medical record (EMR) if your practice is set up for this
B. Print from the EMR and then fax
C. Complete the paper form (included in this packet) and send via fax or email

Practice follows up with patient: Contact patient and troubleshoot issues with enrollment or participation.
Feedback from the YMCA Diabetes Prevention Program to physicians
Twice during the program the YMCA notifies the provider via a written progress report from a HIPAA-secure system of the patient’s progress.

In addition, during the program participants complete a self-evaluation that providers can request from the YMCA.

What evidence exists about the prevention of diabetes?

- A randomized clinical trial of 3,234 individuals at high risk for diabetes showed that a diabetes prevention program with lifestyle intervention (improving food choices and increasing physical activity) reduced participants’ risk of developing type 2 diabetes by 58 percent over nearly three years, compared to a placebo.³
- Participation in a diabetes prevention program with lifestyle intervention is estimated to delay the development of type 2 diabetes by 11 years and reduce the absolute lifetime incidence of developing diabetes by 20 percent.⁷
- In adults 60 years and older, intervention programs such as the YMCA Diabetes Prevention Program can reduce the number of cases of type 2 diabetes by 71 percent.¹
- The Deploy Study—a pilot, cluster-randomized trial—compared intervention delivery between a group-based diabetes prevention program and individual counseling by the YMCA. The study showed that individuals in the group-based intervention lost 6 percent body weight compared to 2 percent in controls. Group participants also had a -22mg/dL change in total cholesterol compared to +6 mg/dL in controls. Participants maintained weight loss and cholesterol changes for more than 12 months.⁸

When adjusting for gender and race, all of these studies show similar findings and demonstrate that a diabetes prevention program model is generalizable to diverse populations.
References


Disclaimer

YMCA of the USA selected 17 communities nationwide to offer the YMCA Diabetes Prevention Program at no cost to qualifying Medicare beneficiaries. This project is made possible by funding opportunity number 1C1CMS330965 from the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.

The contents of this material are solely the responsibility of the authors and have not been approved by the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.
PILOT
PROGRAM
RESOURCES
If age 65 and over, has no previous diagnosis of diabetes, BMI ≥ 25* and has Medicare, patient is covered to participate in the YMCA Diabetes Prevention Program.

*BMI ≥ 22 for Asian individuals.

†Request patient brochures from your local YMCA.
Type 2 diabetes is more common in African Americans, Hispanics/Latinos, American Indians, and Asian Americans and Pacific Islanders. For more information, visit us at www.diabetes.org or call 1-800-DIABETES

ARE YOU AT RISK FOR TYPE 2 DIABETES?

Diabetes Risk Test

1. How old are you?
   - Less than 40 years (0 points)
   - 40—49 years (1 point)
   - 50—59 years (2 points)
   - 60 years or older (3 points)

2. Are you a man or a woman?
   - Man (1 point)  
   - Woman (0 points)

3. If you are a woman, have you ever been diagnosed with gestational diabetes?
   - Yes (1 point)  
   - No (0 points)

4. Do you have a mother, father, sister, or brother with diabetes?
   - Yes (1 point)  
   - No (0 points)

5. Have you ever been diagnosed with high blood pressure?
   - Yes (1 point)  
   - No (0 points)

6. Are you physically active?
   - Yes (0 points)  
   - No (1 point)

7. What is your weight status? (see chart at right)

Write your score in the box.

<table>
<thead>
<tr>
<th>Height (in.)</th>
<th>Weight (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4' 10&quot;</td>
<td>119-142</td>
</tr>
<tr>
<td>4' 11&quot;</td>
<td>124-147</td>
</tr>
<tr>
<td>5' 0&quot;</td>
<td>128-152</td>
</tr>
<tr>
<td>5' 1&quot;</td>
<td>132-157</td>
</tr>
<tr>
<td>5' 2&quot;</td>
<td>136-163</td>
</tr>
<tr>
<td>5' 3&quot;</td>
<td>141-168</td>
</tr>
<tr>
<td>5' 4&quot;</td>
<td>145-173</td>
</tr>
<tr>
<td>5' 5&quot;</td>
<td>150-179</td>
</tr>
<tr>
<td>5' 6&quot;</td>
<td>155-185</td>
</tr>
<tr>
<td>5' 7&quot;</td>
<td>159-190</td>
</tr>
<tr>
<td>5' 8&quot;</td>
<td>164-196</td>
</tr>
<tr>
<td>5' 9&quot;</td>
<td>169-202</td>
</tr>
<tr>
<td>5' 10&quot;</td>
<td>174-208</td>
</tr>
<tr>
<td>5' 11&quot;</td>
<td>179-214</td>
</tr>
<tr>
<td>6' 0&quot;</td>
<td>184-220</td>
</tr>
<tr>
<td>6' 1&quot;</td>
<td>189-226</td>
</tr>
<tr>
<td>6' 2&quot;</td>
<td>194-232</td>
</tr>
<tr>
<td>6' 3&quot;</td>
<td>200-239</td>
</tr>
<tr>
<td>6' 4&quot;</td>
<td>205-245</td>
</tr>
</tbody>
</table>

(1 Point)  
(2 Points)  
(3 Points)

Add up your score.

You weigh less than the amount in the left column
(0 points)

Adapted from Bang et al., Ann Intern Med 151:775-783, 2009. Original algorithm was validated without gestational diabetes as part of the model.

Lower Your Risk

The good news is that you can manage your risk for type 2 diabetes. Small steps make a big difference and can help you live a longer, healthier life.

If you are at high risk, your first step is to see your doctor to see if additional testing is needed.

Visit diabetes.org or call 1-800-DIABETES for information, tips on getting started, and ideas for simple, small steps you can take to help lower your risk.

For more information, visit us at www.diabetes.org or call 1-800-DIABETES

Visit us on Facebook
Facebook.com/AmericanDiabetesAssociation

STOP DIABETES

Copyright American Diabetes Association. Used with permission.
Retrospective prediabetes identification and intervention algorithm

Perform an EMR query to identify patients with prediabetes using the following criteria.

Inclusion criteria:
- Age ≥65
- BMI ≥25 (BMI ≥22 for Asian individuals)
- Medicare or Medicare Advantage
- And with any of these test values (test performed within 12 months):
  - HbA1C (5.7–6.4%) and/or
  - Fasting plasma glucose (100–125 mg/dL) and/or
  - Oral glucose tolerance test (140–199 mg/dL)

Exclusion criteria:
- Insulin use
- Previous diagnosis of diabetes

Refer to the YMCA Diabetes Prevention Program

Retest annually

Blood test levels for diagnosis of diabetes and prediabetes

<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>

Retest within 3 years of last negative test.  Refer to a lifestyle change program.  Annually, retest for diabetes onset.  Confirm diagnosis and retest if necessary.  Counsel the patient on diagnosis and initiate therapy.

Reference
Point-of-care prediabetes identification and intervention algorithm

Confirm if patient is age ≥ 65, has Medicare and no diagnosis of diabetes

Review patient medical records to determine if BMI ≥25 (BMI ≥22 for Asian individuals)

If no: Patient does not currently meet the YMCA Diabetes Prevention Program’s requirements

Review patient medical records to determine if a HbA1C, FPG, or OGTT was performed in the past 12 months

If ADA risk assessment score is 5 or higher, order one of the tests below:
- Hemoglobin A1C (HbA1C)
- Fasting plasma glucose (FPG)
- Oral glucose tolerance test (OGTT)

**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>

- Encourage patient to maintain a healthy lifestyle. Continue with exam/consult. Retest within 3 years of last negative test.
- Refer to YMCA Diabetes Prevention Program and provide the program’s patient brochure. Annually, retest for diabetes onset.
- Confirm diagnosis and retest if necessary. Counsel the patient on diagnosis and initiate therapy.

**Reference**

**PATIENT INFORMATION**

<table>
<thead>
<tr>
<th>First name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last name</td>
<td></td>
</tr>
<tr>
<td>Medicare or Medicare Advantage #</td>
<td>City</td>
</tr>
<tr>
<td>Gender</td>
<td>State</td>
</tr>
<tr>
<td>Birth date</td>
<td>ZIP code</td>
</tr>
<tr>
<td>Email address</td>
<td>Phone</td>
</tr>
</tbody>
</table>

By providing your information above, you authorize your health care practitioner to provide this information to the YMCA, who may in turn use this information to communicate with you regarding the YMCA Diabetes Prevention Program.

**PRACTITIONER INFORMATION (COMPLETED BY HEALTH CARE PRACTITIONER)**

<table>
<thead>
<tr>
<th>Physician</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice contact</td>
<td>City</td>
</tr>
<tr>
<td>Phone</td>
<td>State</td>
</tr>
<tr>
<td>Fax</td>
<td>ZIP code</td>
</tr>
</tbody>
</table>

**SCREENING INFORMATION**

<table>
<thead>
<tr>
<th>Exam or lab test date</th>
<th>BLOOD TEST USED FOR SCREENING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Test used (check one)</td>
</tr>
<tr>
<td>Height</td>
<td>□ Hemoglobin A1C</td>
</tr>
<tr>
<td>Weight</td>
<td>□ FPG</td>
</tr>
<tr>
<td>BMI (see back for chart)</td>
<td>□ 2h PG in OGTT</td>
</tr>
</tbody>
</table>

For Medicare requirements, I will maintain this signed original document in the patient's medical record.

By signing this form, I authorize my physician to disclose my diabetes screening results to the YMCA for the purpose of determining my eligibility for the YMCA Diabetes Prevention Program and conducting other activities as permitted by law.

I understand that I am not obligated to participate in this diabetes screening program and that this authorization is voluntary.

I understand that I may revoke this authorization at any time by notifying my physician in writing. Any revocation will not have an effect on actions taken before my physician received my written revocation.

**YMCA of the USA selected 17 communities nationwide to offer the YMCA Diabetes Prevention Program at no cost to qualifying Medicare beneficiaries. This project is made possible by funding opportunity number 1C1CMS330965 from the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services.**

The contents of these materials are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies.

**IMPORTANT WARNING:** The documents accompanying this transmission contain confidential health information protected from unauthorized use or disclosure except as permitted by law. This information is intended only for the use of the individual or entity named above. The authorized recipient of this information is prohibited from disclosing this information to any other party unless permitted to do so by law or regulation. If you are not the intended recipient and have received this information in error, please notify the sender immediately for the return or destruction of these documents. Rev. 05/30/14
BMI stands for "BODY MASS INDEX" which is an estimate of total body fat based on height and weight. It is used to screen for weight categories that may lead to health problems.

**THE GOAL** for most people is to have a BMI in the green area. It is usually best for your BMI to stay the same over time or to gradually move toward the green area.

### BMI Chart


**Blue** Underweight: Less than 18.5

**Green** Healthy Weight: 18.5 - 24.9

**Yellow** Overweight: 25 - 29.9

**Orange** Obese: 30 - 39.9

**Red** Extreme Obesity: 40 or greater
Codes: When screening for prediabetes and diabetes

<table>
<thead>
<tr>
<th>ICD-9 for diabetes screening</th>
<th>CPT for diabetes screening tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>V77.1</strong> Diabetes Screening</td>
<td>CPT 82947 Fasting Plasma Glucose Test</td>
</tr>
<tr>
<td>790.2 Abnormal Glucose</td>
<td>CPT 82950 Post-meal Glucose (2-hour plasma glucose; 2hPG; 2 hr specimen)</td>
</tr>
<tr>
<td>790.21 Impaired Fasting Glucose</td>
<td>CPT 82951 Oral Glucose Tolerance (3 specimens with 2 hr value included)</td>
</tr>
<tr>
<td>790.22 Impaired Glucose Tolerance (oral)</td>
<td>CPT 83036 Hemoglobin A1C</td>
</tr>
<tr>
<td>790.29 Other Abnormal Glucose NEC</td>
<td>CPT 83036QW Hemoglobin A1C (used for POC test that is CLIA waived [-DCA])</td>
</tr>
<tr>
<td>278.00 Obesity</td>
<td></td>
</tr>
<tr>
<td>278.02 Overweight</td>
<td></td>
</tr>
</tbody>
</table>

These codes may be useful to report services/tests performed to screen for prediabetes and diabetes.

References
‡Ackermann RT. Coding Guide for Diabetes and Prediabetes Testing. 2013. (Published here with permission from Ronald T. Ackermann MD, MPH)