Using Prediabetes and Hypertension Change Toolkits in the Context of Improving Quality of Care

Health Care Homes/Statewide Innovative Model Webinar
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Presenters

Sarah Nelson MD - Clinical Consultant Healthy Northland

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Objectives

1. Become familiar with prediabetes and hypertension practice change toolkits

2. Be able to list the components of the Model for Improvement

3. List 2 benefits of using practice change toolkits
Healthy Northland

Collaboration of the Aitkin Itasca Koochiching Community Health Board and Carlton Cook Lake St Louis Community Health Board

Chronic Disease Prevention:
Statewide Health Improvement Partnership
Community Wellness Grant
ASTHO Million Hearts Learning Collaborative
Community Transformation Grant
Community Wellness Grant

Multi-year funding to prevent obesity, diabetes, heart disease and stroke.

Four Strategy Areas:
1. Environmental - healthy eating, active living
2. Lifestyle change support - Diabetes Prevention Program
3. Healthy systems quality care - focus on hypertension and prediabetes
4. Community-Clinic Linkages - Community Health Workers, Community Paramedics, Pharmacists
Today’s Agenda

- Practice change and quality improvement
- Prediabetes toolkit and resources
- Hypertension control toolkits and resources
- Successes and challenges of using toolkits in clinic practice
- Questions and discussion
Practice Change

Community Wellness Grant - “Health System Interventions to Improve the Quality of Health Care Delivery to Populations with the Highest Hypertension and Prediabetes Disparities”

- Improving performance through use of electronic health records and health information technology
- Expanding and monitoring system-wide, provider-focused quality measures
- Engaging non-physician health care professionals in hypertension management
- Increasing the use of self-measured blood pressure monitoring
- Systematically identifying patients with undiagnosed hypertension or prediabetes

MN Health Care Homes - “...focus on redesign of care delivery and meaningful engagement of patients in their care…”

Quadruple Aim of Health Care

- Improving the patient experience of care (including quality and satisfaction);
- Improving the health of populations; and
- Reducing the per capita cost of health care
- Improving work life of health care providers (clinicians and staff)
Model for Improvement

Institute for Healthcare Improvement

Three Questions

1. What are we trying to accomplish? **Aim Statement**
2. How will we know that a change is an improvement? **Measurement**
3. What change can we make that will result in improvement? **Selecting Changes**
Selecting Change Topics for PDSA Cycles

Ideas for change:

- may come from the insights of those who work in the system
- from change concepts or other creative thinking techniques
- by borrowing from the experience of others who have successfully improved

Practice Change Toolkits have been developed to provide systematic change ideas and best practices
KNOWLEDGE CHECK

Which of the following are ways to get ideas for quality improvement change?

A. Insight from people working in the area/system you want to change
B. Borrowing ideas from other people who have implemented change
C. Change concepts and creative thinking
D. A, B, C
KNOWLEDGE CHECK

Which of the following are ways to get ideas for quality improvement change?

A. Insight from people working in the area/system you want to change
B. Borrowing ideas from other people who have implemented change
C. Change concepts and creative thinking
D. A, B, C
A guide to refer your patients with prediabetes to an evidence-based diabetes prevention program
### Overview of guide tools

<table>
<thead>
<tr>
<th>Resource</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engage clinicians</strong></td>
<td><strong>You can prevent type 2 diabetes Health care provider fact sheet</strong>&lt;br&gt;Provides a brief overview of the evidence-based diabetes prevention program and a rationale for engaging with the program, such as improved patient outcomes. Also assists clinicians in advocating to their colleagues and leaders about the value of incorporating diabetes prevention screening and referral into their practices.</td>
</tr>
<tr>
<td><strong>Engage patients</strong></td>
<td><strong>Diabetes Risk Assessments</strong>&lt;br&gt;CDC and American Diabetes Association (ADA) questionnaires&lt;br&gt;Offers an educational opportunity for patients to learn about their risk for prediabetes, and help physicians and care teams identify their patients at great risk.</td>
</tr>
<tr>
<td></td>
<td><strong>Promoting prediabetes awareness to your patients</strong>&lt;br&gt;Helps practices increase patient awareness of prediabetes to pave the way for conversations with patients about screening and referral.</td>
</tr>
<tr>
<td></td>
<td><strong>Are you at risk for type 2 diabetes? Patient handout</strong>&lt;br&gt;For use by physician practices in patient waiting areas to increase patient awareness and pave the way for conversations with patients about screening and referral.</td>
</tr>
<tr>
<td></td>
<td><strong>So you have prediabetes ... now what? Patient handout</strong>&lt;br&gt;For use by physician practices in the exam room after screening has revealed that a patient has prediabetes. Helps the patient leave the office visit with concrete information for later reference.</td>
</tr>
<tr>
<td></td>
<td><strong>Sample “Patient letter/email and phone script”</strong>&lt;br&gt;Enables physician practices to conduct efficient follow-up and referral with patients who have been identified as having prediabetes, informing them of their prediabetes status and referral to an evidence-based diabetes prevention program.</td>
</tr>
<tr>
<td><strong>Incorporate screening, testing and referral into practice</strong></td>
<td><strong>M.A.P. to diabetes prevention for your practice</strong>&lt;br&gt;One-page overview&lt;br&gt;Offers practices a one-page roadmap to applying the elements of the diabetes prevention screening and referral guide.</td>
</tr>
<tr>
<td></td>
<td><strong>Patient flow process Infographic</strong>&lt;br&gt;Provides a high-level overview of how office staff can facilitate point-of-care identification.</td>
</tr>
<tr>
<td></td>
<td><strong>Point-of-care prediabetes identification algorithm Infographic and narrative</strong>&lt;br&gt;With a graphic on one side, and narrative on other, the document offers practices an option to adopt/ incorporate a prediabetes screening and referral process into their workflow.</td>
</tr>
<tr>
<td></td>
<td><strong>Retrospective prediabetes identification algorithm Infographic and narrative</strong>&lt;br&gt;With a graphic on one side, and narrative on other, the document offers practices an option to adopt/ incorporate an identification and referral process into their electronic health records and generate a registry of patients at risk for type 2 diabetes.</td>
</tr>
<tr>
<td></td>
<td><strong>Sample patient referral form/table for calculating body mass index</strong>&lt;br&gt;Makes the referral process easier for practices, helps engage the patient (particularly if they sign the optional patient signature box) and prepares diabetes prevention program providers to engage with the patient as well.</td>
</tr>
<tr>
<td></td>
<td><strong>Commonly used CPT and ICD codes Table</strong>&lt;br&gt; Enables physician practices to obtain reimbursement for prediabetes screening.</td>
</tr>
<tr>
<td></td>
<td><strong>Connect your clinic with diabetes prevention programs</strong>&lt;br&gt;&lt;br&gt;<strong>Link to sample “Business Associate Agreement” on AMA’s website</strong>&lt;br&gt;Provides link to template agreement some practices have used to share information with diabetes prevention program providers.</td>
</tr>
</tbody>
</table>
Engage Patients

So you have prediabetes ... now what?

Prediabetes means your blood glucose (sugar) level is higher than normal, but not high enough to be diagnosed as diabetes. This condition raises your risk of type 2 diabetes, stroke and heart disease.

What can you do about it?
The good news is that there’s a program that can help you.

The National Diabetes Prevention Program, led by the Centers for Disease Control and Prevention (CDC), uses a method proven to prevent or delay type 2 diabetes.

By improving food choices and increasing physical activity, your goal will be to lose 5 to 7 percent of your body weight—that is 10 to 14 pounds for a person weighing 200 pounds.

These lifestyle changes can cut your risk of developing type 2 diabetes by more than half.

How does the program work?
As part of a group, you will work with a trained diabetes prevention coach and other participants to learn the skills you need to make lasting lifestyle changes. You will learn to eat healthy, add physical activity to your life, manage stress, stay motivated and solve problems that can get in the way of healthy changes.

The program lasts one year, with 16 sessions taking place about once a week and six to eight more sessions meeting once a month. By going through the program with others who have prediabetes you can celebrate each other’s successes and work together to overcome challenges.

Some insurance plans will cover the cost of the program. Check with your insurance provider to see if it is covered. Also, some places that provide the program will adjust the fee you pay based on your income.

Why should you act now?
Without weight loss and moderate physical activity, many people with prediabetes will develop type 2 diabetes within five years. Type 2 diabetes is a serious condition that can lead to health issues such as heart attack, stroke, blindness, kidney failure, or loss of toes, feet or legs. NOW is the time to take charge of your health and make a change.

Features of the program:
- A trained coach to guide and encourage you
- A CDC-approved program
- Group support
- Skills to help you lose weight, be more physically active and manage stress

What participants are saying …
“I love having a lifestyle coach. She has given us great information, helped me stay on track and stay positive.”
—Bruce

“I’m so excited because I went to the doctor last week and all of my numbers were down and I officially no longer have prediabetes.”
—Yvien

Sign up today for a program near you!
To find a program in your area that is part of the National Diabetes Prevention Program, visit cdc.gov/diabetes/prevention.
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>Point-of-care method</td>
<td>o At the front desk</td>
<td>o Receptionist</td>
<td>o Provide “Are you at risk for prediabetes?” patient education handout in waiting area</td>
</tr>
<tr>
<td>o Test and evaluate blood glucose level based on risk status</td>
<td>o During vital signs</td>
<td>o Medical assistant</td>
<td>o Use/adopt “Patient flow process” tool</td>
</tr>
<tr>
<td>o Test and evaluate blood glucose level based on risk status</td>
<td>o Physician</td>
<td>o Nurse</td>
<td>o Use CDC or ADA risk assessment questionnaire at check-in</td>
</tr>
<tr>
<td>o Other</td>
<td>o Other</td>
<td>o Display 8 x 11” patient-facing poster promoting prediabetes awareness to your patients</td>
<td></td>
</tr>
<tr>
<td>Retrospective method</td>
<td>o Every 6–12 months</td>
<td>o Health IT staff</td>
<td>o Use/adopt “Point-of-care algorithm”</td>
</tr>
<tr>
<td>Query EHR to identify patients with BMI ≥24* and blood glucose level in the prediabetes range</td>
<td>o Other</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2: Act</th>
<th>When</th>
<th>Who</th>
<th>How (draw from AMA-CDC tools)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point-of-care method</td>
<td>o During the visit</td>
<td>o Medical assistant</td>
<td>o Advise patient using “So you have prediabetes … now what?” handout</td>
</tr>
<tr>
<td>o Counsel patient re: prediabetes and treatment options during office visit</td>
<td>o Nurse</td>
<td>o Use/adopt “Health care practitioner referral form”</td>
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</tr>
<tr>
<td>o Refer patient to diabetes prevention program</td>
<td>o Physician</td>
<td>o Refer to “Commonly used CPT and ICD codes”</td>
<td></td>
</tr>
<tr>
<td>o Share patient contact info with program provider**</td>
<td>o Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retrospective method</td>
<td>o Contact patient soon after EHR query</td>
<td>o Health IT staff</td>
<td>o Use/adopt “Patient letter/phone call” template</td>
</tr>
<tr>
<td>o Inform patient of prediabetes status via mail, email or phone call</td>
<td>o Medical assistant</td>
<td>o Use/adopt “Health care practitioner referral form” for making individual referrals</td>
<td></td>
</tr>
<tr>
<td>o Make patient aware of referral and info sharing with program provider</td>
<td>o (for phone calls)</td>
<td>o Use/adopt “Business Associate Agreement” template on AMA’s website if needed</td>
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</tr>
<tr>
<td>o Refer patient to diabetes prevention program</td>
<td>o Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Share patient contact info with program provider**</td>
<td>o Other</td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Step 3: Partner</th>
<th>When</th>
<th>Who</th>
<th>How (draw from AMA-CDC tools)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With diabetes prevention programs</td>
<td>o Establish contact before making 1st referral</td>
<td>o Medical assistant</td>
<td>Use/adopt “Business Associate Agreement” template on AMA’s website if needed</td>
</tr>
<tr>
<td>o Engage and communicate with your local diabetes prevention program</td>
<td>o Nurse</td>
<td>o Refer to “Commonly used CPT and ICD codes”</td>
<td></td>
</tr>
<tr>
<td>o Establish process to receive feedback from program about your patients’ participation</td>
<td>o Physician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o With patients</td>
<td>o Other</td>
<td>o Other</td>
<td></td>
</tr>
<tr>
<td>o Explore motivating factors important to the patient</td>
<td>o During office visit</td>
<td>o Office manager</td>
<td>o Advise patient using “So you have prediabetes … now what?” handout and provide CDC physical activity fact sheet</td>
</tr>
<tr>
<td>o At follow-up visit, order/verify blood tests to determine impact of program and reinforce continued program participation</td>
<td>o Other</td>
<td>o <a href="http://www.cdc.gov/physicalactivity">www.cdc.gov/physicalactivity</a></td>
<td></td>
</tr>
<tr>
<td>o Discuss program feedback with patient and integrate into care plan</td>
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<td></td>
</tr>
</tbody>
</table>

*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.

Following the M.A.P. for Preventing Type 2 Diabetes can help your practice achieve Patient Centered Medical Home (PCMH) recognition, as well as Meaningful Use of your electronic medical record. (Supports PCMH recognition via Standard 4: Self-Care Support, B. Provide Referrals to Community Resources (3points), NCQA Facilitating PCMH Recognition, 2011.)

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

The American Medical Association and the Centers for Disease Control and Prevention have created a tool kit that can help physician practices screen and refer patients to evidence-based diabetes prevention programs. Visit preventdiabetesstat.org to learn more. Physicians and other health care providers should also use their independent judgment when referring to a diabetes prevention program.
Incorporate screening, testing and referral into practice

Sample patient flow process

MEASURE
- CHECK-IN
  - If age 18 and patient does not have diabetes, provide CDPH Prediabetes Screening Tool or ADA Diabetes Risk Test
  - Patient completes test and returns form
  - Insert completed test in paper chart or note risk score in EMR, flag for possible referral

ROOMING/VITALS
- Calculate BMI (using table) and review diabetes risk score
- If elevated risk score or history of GDM, flag for possible referral

ACT
- EXAM/CONSULT
  - Follow "Preventative pre-diabetes identification algorithm"
  - Determine if patient has prediabetes and BMI ≥ 24.2 for Asian or ≥ 25 for non-Asian. If yes, flag for possible referral
  - Active re: diet/exercise and determine willingness to participate in a Diabetes prevention program
  - If patient agrees to participate, proceed with referral

PARTNER
- REFERAL
  - Complete and submit referral form

FOLLOW UP
- Contact patient and troubleshoot issues with enrollment or participation

*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) now regards BMI ≥ 22.9 for Asian Americans and ≥ 22.5 for non-Asian Americans as an elevated BMI, and some programs may use the ADA screening criteria to determine program eligibility. Please check with your diabetes prevention program provider for their specific BMI eligibility requirements.

Health care practitioner referral form to a diabetes prevention program

Send to: Fax: Email:

PATIENT INFORMATION
- First name
- Last name
- Address
- City
- State
- Zip code
- Phone
- Email

By providing your information above, you authorize the health care practitioner to provide this information to a diabetes prevention program provider, who may in turn use this information to communicate with you regarding its diabetes prevention program.

PRACTITIONER INFORMATION (COMPLETED BY HEALTH CARE PRACTITIONER)
- Physician/NPI
- Practice contact
- Phone
- Fax
- Address

MEDICAL INFORMATION
- Body Mass Index (BMI)
- Blood test (check one)
  - HbA1c
  - Fasting Plasma Glucose
  - 2-hour plasma Glucose
- **Eligibility** = BMI ≥ 22.9 if Asian
- **Test result**

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

Date

OPTIONAL
- By signing this form, I authorize my physician to discuss my diabetes screening results to the participant in our organization, name below for the purpose of determining my eligibility for the diabetes prevention program and conducting other activities as permitted by law.
- Undertook to be obligated to participate in this diabetes screening program and that this authorization is voluntary.
- Understood that my medical record will be used for educational purposes.

Date

Commonly Used CPT and ICD Codes

<table>
<thead>
<tr>
<th>International Classification of Diseases (ICD-9) for pre-diabetes and diabetes screening</th>
<th>CPT-4 codes for prevention-related office visits</th>
<th>CPT-4 codes for office-based laboratory testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z13.1</td>
<td>Diabetes screening</td>
<td>Preventive Visit New Patient</td>
</tr>
<tr>
<td>R13.9</td>
<td>Other abnormal glucose</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>R17.0</td>
<td>Impaired fasting glucose</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>R17.02</td>
<td>Impaired fasting glucose tolerance test</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>R17.9</td>
<td>Hyperglycemia, unspecified</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>E66.81</td>
<td>Macroavascular disease due to exces caloric intake</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>E68.62</td>
<td>Obesity due to caloric intake</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>E68.63</td>
<td>Other obesity</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>Z46.2c</td>
<td>Body mass index ≥ 30.0 kg/m²</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
<tr>
<td>Z46.5c</td>
<td>Body mass index ≥ 40.0 kg/m²</td>
<td>Preventive Visit Established Patient Commercial/Medicaid</td>
</tr>
</tbody>
</table>

*AMA Manual of Coding and Nomenclature 2014*
Other Prediabetes Resources

Minnesota Prediabetes Screening and Treatment Algorithm

- Consider screening all people starting at age 45, if BMI >25 kg/m² and have additional risk factors, start screening earlier and more frequently (i.e., every 1-3 yrs based on risk).

- Obtain A1C, fasting plasma glucose (FPG) or 75 gm oral glucose tolerance test (OGTT)

- Patient diagnosed with prediabetes or diabetes?
  - No: Does patient have diabetes?
    - Yes: Initiate lifestyle interventions for treatment of prediabetes; establish achievable targets/goals with patient; examples include:
      - Weight loss: 7% total body weight
      - Physical activity: 150 minutes/week
      - Structured programs such as those based on Diabetes Prevention Program, Weight Watchers, Curves, YMCA, and health clubs should be considered
    - No: Is patient achieving targets?
      - Yes: Offer positive feedback, continue to reinforce lifestyle changes; screen for diabetes every 6-12 months
      - No: Consider starting metformin* if no contraindications and if any of the following: BMI >35 kg/m²; age <60 years; women with history of GDM

- Starting Dose: 500 mg QD with food
- Increase dose every 1-2 weeks, to achieve clinically effective dose of 1500-2000 mg/day, based on tolerability
- Follow-up: Every 3 months

*Off-label use of metformin, based on Diabetes Prevention Program. American Association of Clinical Endocrinologists (AACE) recommends thiazolidinediones and GLP-1 receptor agonists be used with caution due to limited experience in prediabetes.

Risk Factors for Prediabetes Type 2 Diabetes
- 1st degree relative with diabetes
- Habitually physically inactive
- Hypertension (=140/90 mmHg or on therapy)
- HDL <35 mg/dl and/or triglycerides >250 mg/dl
- A1C 5.7%, IGT or IFG on previous testing
- Previous gestational diabetes or large-for-gestational age infant (>9 lbs.)
- History of cardiovascular disease
- Acarbose, Norbiscus, severe obesity
- Polycystic Ovary Syndrome (PCOS)
- High risk race/ethnicity (Latino, African American, Asian, American Indian, Pacific Islander)

Diagnostic Criteria for Prediabetes and Diabetes (A1C in % and glucose values in mg/dl)

<table>
<thead>
<tr>
<th></th>
<th>Normal</th>
<th>Prediabetes</th>
<th>Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1C</td>
<td>&lt;5.6</td>
<td>5.7-6.4</td>
<td>&gt;6.5</td>
</tr>
<tr>
<td>FPG</td>
<td>&lt;100</td>
<td>100-125</td>
<td>&gt;126</td>
</tr>
<tr>
<td>2 hr 75 gm OGTT</td>
<td>&lt;140</td>
<td>140-199</td>
<td>&gt;200</td>
</tr>
<tr>
<td>RPG</td>
<td>&lt;140</td>
<td>N.A.</td>
<td>&gt;200 + symptoms</td>
</tr>
</tbody>
</table>

Confirm diagnosis on subsequent day unless evidence of unequivocal hyperglycemia; consider OGTT for patients with symptoms of diabetes and normal or impaired fasting plasma glucose (IFG).

Common ICD-9 Codes for Diabetes Screening
- V79.1: Diabetes Screening
- T20.21: Impaired Fasting Glucose
- T20.23: Impaired Glucose Tolerance Test
- 278.00: Obesity

ICD-9 Codes for Diabetes Screening
- CPT 89077: Fasting Plasma Glucose Test
- CPT 89050: Post-meal Glucose
- CPT 89011: Oral Glucose Tolerance Test

Medicare covers one glucose test/year if never previously tested, one test/year if previously tested and not diagnosed with prediabetes and two tests/year for individuals with prediabetes.
Practice Change Toolkits for Hypertension

1. Hypertension Control Change Package for Clinicians - Million Hearts

1. Measure Up Pressure Down - Provider Toolkit to Improve Hypertension Control

1. Washington State Department of Health Hypertension Package

1. AMA Steps Forward - Improving Blood Pressure Control

1. AHA/AMA Target BP
Million Hearts Initiative - prevent 1 million heart attacks and strokes in 5 years.

Initial project - 2012 - 2017

Million Hearts 2022

Figure 1. Hypertension Control Change Package Focus Areas

- Key Foundations
- Population Health Management
- Individual Patient Supports
### Table 1. Hypertension Control Change Package—Key Foundations (continued)

<table>
<thead>
<tr>
<th>Change Concepts</th>
<th>Change Ideas</th>
<th>Tools and Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Systematically Use Evidence-Based HTN Guidelines and Treatment Protocols</strong></td>
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</tr>
<tr>
<td>Implement HTN guidelines effectively, using the most appropriate information and recommendations</td>
<td>• American College of Cardiology, Perspectives on Hypertension: <a href="http://bit.ly/1tOpFy">http://bit.ly/1tOpFy</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Centers for Disease Control and Prevention, Elements Associated with Effective Adoption and Use of a Protocol: Insights from Key Stakeholders: <a href="http://1.usa.gov/1NgGbR">http://1.usa.gov/1NgGbR</a></td>
<td></td>
</tr>
<tr>
<td>Deploy HTN protocols and algorithms</td>
<td>• Centers for Disease Control and Prevention, Evidence-based Treatment Protocols for Improving Blood Pressure Control: <a href="http://1.usa.gov/11q1qXY">http://1.usa.gov/11q1qXY</a></td>
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</tr>
<tr>
<td></td>
<td>• Journal of the American Board of Family Medicine, Resistant Hypertension: <a href="http://bit.ly/10p06s">http://bit.ly/10p06s</a></td>
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<tr>
<td></td>
<td>• Family Practice Notebook, Resistant Hypertension: <a href="http://bit.ly/1pFDN2s">http://bit.ly/1pFDN2s</a></td>
<td></td>
</tr>
<tr>
<td>Overcome treatment inertia</td>
<td>• American Medical Group Association, BP Addressed for Every Hypertension Patient at Every Primary Care or Cardiology Visit: <a href="http://bit.ly/1a0VM">http://bit.ly/1a0VM</a></td>
<td></td>
</tr>
<tr>
<td>Manage resistant HTN effectively</td>
<td>• New York City Health and Hospitals Corporation, Adult Hypertension Clinical Practice Guidelines: <a href="http://1.usa.gov/11q1qXY">http://1.usa.gov/11q1qXY</a></td>
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<td>• Family Practice Notebook, Resistant Hypertension: <a href="http://bit.ly/1pFDN2s">http://bit.ly/1pFDN2s</a></td>
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<td><strong>Equip Direct Care Staff to Facilitate Patient Self-Management</strong></td>
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<tr>
<td>Ensure team is skilled in identifying/promoting patient medication adherence</td>
<td>• Centers for Disease Control and Prevention, Hypertension Control: Action Steps for Clinicians: Actions to Improve Medication Adherence (Table 2): <a href="http://1.usa.gov/1hf63C2">http://1.usa.gov/1hf63C2</a></td>
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<td>• American College of Preventative Medicine, Medication Adherence—Improving Health Outcomes: <a href="http://bit.ly/1mMcIP">http://bit.ly/1mMcIP</a></td>
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<td>• New York City Department of Health, Medication Adherence Action Kit: Provider Resources: <a href="http://on.nyc.gov/13bJLJr">http://on.nyc.gov/13bJLJr</a></td>
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<td>• Centers for Disease Control and Prevention, Medication Adherence Education Module: <a href="http://1.usa.gov/1kDe7J">http://1.usa.gov/1kDe7J</a></td>
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<tr>
<td>Establish a program to support home BP monitoring</td>
<td>• Centers for Disease Control and Prevention, Self-Measured Blood Pressure Monitoring: Action Steps for Clinicians: <a href="http://1.usa.gov/1BxUJ7b">http://1.usa.gov/1BxUJ7b</a></td>
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* Source: American Medical Group Foundation's Measure Up!Blood Pressure Down!* 2013 Provider Toolkit. [www.measureup pressuredown.com](http://www.measureup pressuredown.com)Click here to find your toolkit. Find a toolkit or read more.

*For patient-facing tools, see Table 3. Use all Care Steps as Appropriate to Support Hypertension Control.
Million Hearts Change Package

Key Foundations:

1. Make HTN Control a Practice Priority
2. Implement a Policy and Process to Address BP for Every Patient with HTN at Every Visit
3. Train and Evaluate Direct Care Staff on Accurate BP Measurement and Recording
4. Systematically Use Evidence-Based HTN Guidelines and Treatment Protocols
5. Equip Direct Care Staff to Facilitate Patient Self-Management
Million Hearts Change Package

Population Health Management:

1. Use a Registry to Identify, Track, and Manage Patients with HTN

2. Use Clinician Managed Protocols for Medication Adjustments and Lifestyle Recommendations

3. Use Practice Data to Drive Improvement
Million Hearts Change Package

Individual Patient Supports:

1. Support Patients in HTN Self-Management During Their Routine Daily Activities (e.g., not related to any specific visit)

2. Prepare Patients and Care Team Beforehand for Effective HTN Management During Office Visits (e.g., via pre-visit patient outreach and team huddles)

3. Use Each Patient Visit Phase to Optimize HTN Management: Intake (e.g., check-in, waiting, rooming), Provider Encounter (e.g., documentation, ordering, patient education/engagement), Encounter Closing (e.g., checkout)

4. Follow up to Monitor and Reinforce HTN Management Plans (i.e., after visits)
American Medical Group Foundation
2013

Measure Up Pressure Down

PROVIDER TOOLKIT
TO IMPROVE HYPERTENSION CONTROL
Hypertension Campaign Goal:
80% of Patients at Goal BP
According to JNC7

Process Planks for
Achieving Goal

**PRIMARY PROCESS PLANKS**

- Direct Care Staff Trained in Accurate BP Measurement
- Hypertension Guide Used and Adherence Monitored
- BP Addressed for Every Hypertension Patient, Every Primary Care Visit
- All Patients Not at Goal or with New Rx Seen within 30 days
- Prevention, Engagement, and Self-Management Program in Place

**VALUE-ADD PROCESS PLANKS**

- Registry Used to Identify and Track Hypertension Patients
- All Team Members Tained in Importance of BP Goals
- All Specialties Intervene with Patients Not in Control
AMA’s STEPS Forward™

About the AMA’s STEPS Forward™
Series of modules for practice transformation.

Includes CME for the modules and downloadable tools and resources.

Helps practices achieve the **Quadruple Aim**: better patient experience, better population health and lower overall costs with improved professional satisfaction.

Modules include hypertension control and diabetes prevention.
Measure, Act and Partner (M.A.P.) to help patients control blood pressure and ultimately prevent heart disease.

Improving blood pressure control

Michael Rakotz, MD, FAAFP
AMA

AMA IN PARTNERSHIP WITH JOHN'S HOPKINS MEDICINE

CME CREDITS: 1.0
The 2015 M.A.P. checklists for improving BP control

**Measure accurately**

**Screening checklist**
When screening patients for high blood pressure:
- Use a validated, automated device to measure BP
- Use the correct cuff size on a bare arm
- Ensure patient is positioned correctly

**Confirmatory checklist**
If screening blood pressure is ≥140/90 mm Hg, obtain a confirmatory measurement:
- Repeat screening steps above
- Ensure patient has an empty bladder
- Ensure patient has rested quietly for at least five minutes
- Obtain the average of at least three BP measurements

**Evidence-based tips for correct positioning**
- Back supported
- Arm supported
- Cuff at heart level
- Legs uncrossed
- Feet flat on the ground or supported by a foot stool
- No one talking during measurement

**Act rapidly**
If patient has blood pressure ≥140/90 mm Hg confirmed:
- Use an evidence-based protocol to guide treatment
- Re-assess patient every 2–4 weeks until BP is controlled
- Whenever possible, prescribe single-pill combination therapy

**Evidence-based protocols typically include**
- Counsel on and reinforce lifestyle modifications
- Ensure early follow-up and add preferred medications in a step-wise fashion, until BP is controlled
- For most patients, give preference to:
  - Thiazide diuretics
  - Diuretics
  - Calcium channel blockers
  - ACE inhibitors (ACEI)
  - Angiotensin receptor blockers (ARB)
- Do not prescribe both ACEI and ARB to same patient
- If BP ≥160/100 mm Hg, start therapy with two medications or a single pill combination

**Partner with patients, families and communities**
To empower patients to control their blood pressure:
- Engage patients using evidence-based communication strategies
- Help patients accurately self-measure BP
- Direct patients and families to resources that support medication adherence and healthy lifestyles

**Evidence-based communication strategies include**
- Begin with open-ended questions about adherence, including recent medication use
- Explore reasons for possible non-adherence
- Elicit patient views on options and priorities to customize a care plan for each patient
- Remain non-judgmental at all times
- Use teach-back to ensure understanding of the care plan

**Evidence-based tips for patient self-measurement of BP**
- Instruct patient to measure BP accurately using a validated, automated device and correct positioning for measurement
- Ask patient to record ≥2 morning BP measurements and ≥2 evening BP measurements for ≥4 consecutive days between office visits
- Develop a systematic approach to ensure patients can act rapidly to address elevated BP readings between office visits
- Counsel patients that self-measured BP ≥135/85 mm Hg is considered elevated

**Evidence-based lifestyle changes to lower BP include**
- Following the DASH diet, which is rich in fruits, vegetables and whole grains; low-fat dairy, poultry, fish and plant-based oils; and limits sodium, sweets, sugary drinks, red meat and saturated fats
- Engaging in moderate physical activity, such as brisk walking, for 40 minutes a day at least four days a week
- Maintaining a healthy body mass index (BMI)
- Limiting alcohol to ≤2 drinks/day in men, ≤1 drink/day in women

These checklists are not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.
KNOWLEDGE CHECK

Of the following, which one is not a best practice in hypertension control change?

A. Train staff in accurate measurement of blood pressure
B. Take blood pressure right after a patient has coffee and a cigarette
C. Engage patients in self-management
D. Adopt and use an evidence based hypertension treatment protocol
KNOWLEDGE CHECK

Of the following, which one is not a best practice in hypertension control change?

A. Train staff in accurate measurement of blood pressure
B. Take blood pressure right after a patient has coffee and a cigarette
C. Engage patients in self-management
D. Adopt and use an evidence based hypertension treatment protocol
Rainy Lake Clinic

Small Rural Health clinic in International Falls, MN.
Part of Rainy Lake Medical Center
Primary Care includes 1 physician, 1 physician assistant, 2 nurse practitioners

Nancy Lee RN BSN
Prediabetes Toolkit

Rainy Lake Medical Center Annual Wellness Event:

Prediabetes display:

**86 MILLION AMERICAN ADULTS have prediabetes**

You could be one of them.

Having prediabetes means you are at increased risk for developing serious health problems such as type 2 diabetes, stroke, and heart disease.

You could have prediabetes if you have:
- High cholesterol
- High blood pressure
- A parent, brother, or sister with diabetes

Your risk goes up if you are also overweight, and/or over age 45.

If you have prediabetes, we can help!

Ask your doctor how you can stop diabetes before it starts.

---

AMA/CDC “You Could be One of Them” information sheet

MDH “Prediabetes in Minnesota”

Who are at risk for prediabetes?

- People with prediabetes are at higher risk of developing type 2 diabetes, heart disease, and stroke. "About 1 in 4 people with prediabetes will develop type 2 diabetes within 5 years."
- People with prediabetes are also at higher risk of developing type 2 diabetes.
- Your risk goes up if you are also overweight and/or over age 45.

Who should get tested for prediabetes?

- People with prediabetes are at higher risk of developing diabetes, heart disease, and stroke. "About 1 in 4 people with prediabetes will develop type 2 diabetes within 5 years."
- People with prediabetes are also at higher risk of developing type 2 diabetes.
- Your risk goes up if you are also overweight and/or over age 45.
Point of Care Screening for Prediabetes

American Diabetes Association Patient Risk Assessment
Developed a process for identification of prediabetes in clinic patients.
Patients 30 and older coming to the clinic for an annual physical.

Registration Staff
LPN (rooming staff)
Providers
Lab
HIM
Nurse Educator
Hypertension Toolkit
AMA STEPS Forward
Controlling Hypertension

At nursing meeting gave LPN staff the AMA/John Hopkins sheet on steps for Blood Pressure Measurement

Have developed a **process for rechecking blood pressure** if the first reading is greater than 140/90
## High Blood Pressure Self-Care Plan

**Date:**
At your appointment today you and your healthcare team discussed your high blood pressure (also called hypertension) and made a plan for what to do next. These are notes on what you did and decided.

**Goal:**
The goal you have set for your high blood pressure is:

**Current blood pressure:**

**Treatment guidelines**
- **Goal:** Reduce high blood pressure to 120/80 mm Hg or lower.
- **Goal:** Reduce high blood pressure to 140/90 mm Hg or lower.
- **Goal:** Reduce high blood pressure to 140 and above / 90 and above.

**Yearly lab test:**
Write the most recent date you had the following:
- Comprehensive/basics metabolic panel (CMP/BMP)

**Self-management:**
We discussed some changes you can make that will help you manage your high blood pressure and reach your goals.

**How important are these changes to you?** (1-10):
- What would help you move from a _____ to a _____?

**How confident are you that you can make these changes?** (1-10):
- What would help you move from a _____ to a _____?

**Self-care goals and monitoring**
- **Check the goals that you must want to work on now.**
  - Take medication daily.
  - Complete yearly lab tests. (See left panel)
  - Monitor blood pressure at home at least once a week and write results in the BP Tracker.
  - Increase physical activity.
  - Aim for 30 to 45 minutes of moderate-intensity aerobic activity (such as brisk walk) most days of the week.
  - Manage weight to reach a BMI between 18.5 and 24.9.
  - Follow the DASH diet (Dietary Approaches to Stop Hypertension).
  - Eat a diet rich in fruits, vegetables, and low-fat dairy products and low in saturated and total fat.
  - Reduce dietary sodium to below 1500 mg per day.
  - Limit alcohol to 2 drinks per day for most men, and 1 drink per day for most women and lighter weight men.
  - Stop smoking.
  - Manage stress. Identify 3 ways to reduce stress.
  - Sign up for and use Intermountain MyHealth to review lab results and health records, and to communicate with healthcare providers as needed.

**Patient education resources**
Write the date you received each resource.
- **BP Basics booklet**
- **High Blood Pressure and the DASH diet**
- **BP Tracker**

**Online resources**
- [www.intermountainhealthcare.org/bp](http://www.intermountainhealthcare.org/bp)
- Hypertension and Your Heart from AHA [www.heart.org/HEARTORG/Conditions/Hypertension](http://www.heart.org/HEARTORG/Conditions/Hypertension)
- [www.hearthealthway.org/bp.html](http://www.hearthealthway.org/bp.html)
- Heartheart Blood Pressure Tracker app for smart phone
- Blood Pressure Companion app for smartphone

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Home BP Monitoring Program
Developed protocols and using the Omron monitors supplied by grant funds
Provider identifies patient with potential hypertension
Referral to Nurse Educator
Education on proper technique of taking blood pressure
Tracking sheet given to patient
Follow up with provider
Referral for Home Blood Pressure Monitor

Patient Sticker

Ordering Provider

Length of time for home monitoring:

Days

Week(s)

Time of day to take BP:

Morning

Afternoon

Evening

---

Rainy Lake CLINIC

Home Blood Pressure Monitoring Agreement

Name

DOB

DOB

Date

Phone

This Omron Blood pressure monitor is the property of Rainy Lake Clinic

To keep this digital monitor in the best condition and protect the unit from damage follow the directions listed below.

1. Make sure the AC adapter is placed under the main unit so that it does not damage the display.
2. Avoid kinking or sharply bending the AC adapter cord.
3. Do not forcefully bend the arm cuff or air tube. Do not fold the cuff tightly.
4. Clean the monitor with a soft dry cloth. Do not use abrasives or volatile cleaners.
5. Do not attempt to clean the cuff.
6. Do not submerge the device or any of the components in water.
7. Do not subject the monitor to extreme hot or cold temperatures, humidity or direct sunlight.
8. Store the device and the components in a clean safe location.
9. Do not subject the monitor to strong shocks such as dropping the unit on the floor.

RETURN THIS MONITOR TO RAINY LAKE CLINIC

You are to use this blood pressure monitor from to

Signature

Date
Blood Pressure Tracker

Instructions:
- Do not smoke or drink caffeine for 30 minutes before taking BP
- Do not take BP right after eating
- Sit resting at least 5 minutes before taking BP. Take a few deep breaths to help relax.
- Sit with back supported and both feet flat on the floor.
- Elevate your arm that has the BP cuff on a table so it is approximately at heart level.
- Place cuff on bare arm; not over clothing.
- If BP is over 140/90 rest an additional 5 minutes and check again.

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<th>Morning Blood Pressure</th>
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Home BP Monitor Sign-Out Log

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BP Monitor Calibration Log

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Rainy Lake CLINIC
Benefits of using practice change toolkits

1. Benefit from knowledge and work of others
2. Based on best practices and tested protocols
3. Downloadable templates for letters, forms, workflows and other resources
4. Many resources can be customized for your practice
5. Helps your team to develop and follow a stepwise approach to change
KNOWLEDGE CHECK

Which of the following, are benefits of using a practice change toolkit?

A. Not having to “reinvent the wheel”.
B. Having access to tested protocols
C. Having an stepwise approach to change
D. A, B, and C
KNOWLEDGE CHECK

Which of the following, are benefits of using a practice change toolkit?

A. Not having to “reinvent the wheel”.
B. Having access to tested protocols
C. Having an stepwise approach to change
D. A, B, and C
RESOURCES

PREDIABETES

Prevent Diabetes STAT - AMA/CDC prediabetes toolkit

Preventing Diabetes in at risk patients - AMA’s STEPS Forward

Minnesota Prediabetes Screening and Treatment Algorithm
RESOURCES

HYPERTENSION

Hypertension Control Change Package for Clinicians - Million Hearts

Measure Up Pressure Down - Provider Toolkit to Improve Hypertension Control

Washington State Department of Health Hypertension Package

AMA Steps Forward - Improving Blood Pressure Control

AHA/AMA Target BP
Contact Information:

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sarah@silvercliff.net