A M.A.P. for improving blood pressure: Application within the QIN-QIO community

Donna Daniel, PhD
Director, Improving Health Outcomes Strategies
American Medical Association

Michael Rakotz, MD
Director, Chronic Disease Prevention
American Medical Association

Kim Salamone, PhD, MPA
Vice President, Health Information Technology
Health Services Advisory Group

Improving Health Outcomes: Blood Pressure (IHO: BP)
September 9, 2015

EXTENDING OUR REACH: Innovation, Efficacy, and Collaboration
What we hope to accomplish today

• Provide an overview of the IHO: BP program and evidence behind the M.A.P. framework

• Describe Health Services Advisory Group’s (HSAG) experience in adopting the IHO: BP program as part of Task B.1

• Explain the expectations of participating in the IHO: BP program from the perspective of a QIN-QIO and from a practice or health center

• Summarize the options available for QIN-QIOs that are interested in implementing the IHO: BP program
Collaborating to improve BP control

Objective
Help improve blood pressure control in patients with hypertension by facilitating improvements in care at ambulatory medical practices and health centers

Approach
• Engage medical practices and health centers in improving blood pressure control
  • Tap into the wisdom of both clinical and non-clinical care team members and patients
• Develop, test and disseminate tools and resources for improving hypertension care
  • Evidence-based checklists, fact sheets and posters, audit tools, etc.
• Adapt proven QI interventions (e.g., TRIP-CUSP model) to the ambulatory setting
• Identify and pursue relevant advocacy opportunities
Prototyping new tools and resources

Partner: Johns Hopkins Medicine
- Armstrong Institute for Patient Safety and Quality (Dr. Peter Pronovost)
- Center to Eliminate Cardiovascular Health Disparities (Dr. Lisa Cooper)

Advisory group of national experts in HTN care

Patient and family advisory group

10 Diverse Practice Sites
- From solo practitioner to multispecialty practice with 14 physicians
- Diverse patient panels ranging from 95% African-American to 87% Latino, 60% Medicaid to 55% Medicare

Feedback on a framework, tools and resources and curriculum
Patient involvement in program design
- Advisory group charged with reviewing tools, advising on how best to meet patient and family needs
- Suggest new ideas, help prioritize tool development

Patient and family advisor recruitment guide and onboarding toolkit
- Facilitate the recruitment and orientation process for engaging patients and families as advisors in the planning, delivery and evaluation of care in practice
The M.A.P. framework

- Measure blood pressure accurately
- Act rapidly to manage uncontrolled hypertension
- Partner with patients, families and communities to promote self-management

Actionable data  Evidence-based tools  Adaptive change
A curriculum for engaging care teams

- Two-hour virtual or a four-hour in-person kickoff event followed by seven to eight ‘modules’
- Modules:
  - Administered on a monthly basis following the kickoff event
  - Pre-recorded podcasts (w/ accompanying fast fact sheets) – Approx. 10-12 minutes each
  - Tools support implementation of evidence-based best practices summarized in the M.A.P. checklists
  - Share Your Experiences (SYE) Webinar
- Approximate length of IHO: BP curriculum: 8-10 months (Kickoff → Module 8)
## Curriculum overview

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kickoff</td>
<td>Prepare for Your Journey</td>
</tr>
<tr>
<td>Module 1</td>
<td>Apply the Science of Improving Care to Measuring BP Accurately</td>
</tr>
<tr>
<td>Module 2</td>
<td>Automated Office BP Measurement: An Opportunity to Engage the Entire Practice or Health Center</td>
</tr>
<tr>
<td>Module 3</td>
<td>Understanding How Clinical Inertia and Limited Patient Engagement Contribute to Uncontrolled Hypertension</td>
</tr>
<tr>
<td>Module 4</td>
<td>Protocols to Guide Evidence-based Prescribing</td>
</tr>
<tr>
<td>Module 5</td>
<td>Engaging Patients through Evidence-based Communication Strategies</td>
</tr>
<tr>
<td>Module 6</td>
<td>Self-measured Blood Pressure Monitoring to Improve BP Control</td>
</tr>
<tr>
<td>Module 7</td>
<td>Dietary and Lifestyle Interventions to Improve BP Control</td>
</tr>
<tr>
<td>Module 8</td>
<td>Sustainability and Wrap-up Celebration</td>
</tr>
</tbody>
</table>
Evidence for the M.A.P. framework

Michael Rakotz, MD
Director, Chronic Disease Prevention
American Medical Association
62% increase in annual deaths related to hypertension

46% are uncontrolled

Most adults with uncontrolled hypertension have health insurance and a usual source of care

2015 – Prevalence rate 33%
2030 – Prevalence rate 41% (projected)

Source: CDC, AHA
Barriers to success

- Patient factors
  - Non-adherence
  - Financial
  - Literacy
- Physician factors
  - Time
  - Financial
  - Knowledge of evidence
- System factors
  - Quality reporting
  - Work flow
  - Management (buy-in)
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
  - Ensure 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

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

**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
  - Direct patients and families to resources that support medication adherence and healthy lifestyles

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

**Evidence-based communication strategies include**
- Begin with open-ended questions about adherence, including recent medication use
- Explore reasons for possible non-adherence or a single pill combination
- Encourage 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 correct positioning**
- Ensure patient is seated comfortably with:
  - 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 the measurement

**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.
The 2015 MAP checklists for improving BP control

**Measure accurately**

**Screening checklist**
- When screening patients for high blood pressure:
  - Use a validated, automated device to measure BP
  - Ensure patient is seated comfortably with:
    - Back supported
    - Legs uncrossed
    - Feet flat on the ground or supported by a foot stool
    - No one talking during the measurement

**Confirmatory checklist**
If screening blood pressure is ≥140/90 mm Hg obtained, 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**
- Ensure patient is seated comfortably with:
- Back supported
- Legs uncrossed
- Feet flat on the ground or supported by a foot stool
- No one talking during the measurement

**Act rapidly**
- If a patient has blood pressure ≥140/90 mm Hg confirmed:
  - Use 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
  - Dihydralazine calcium channel blockers
  - ACE inhibitors (ACEI) or
  - 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
- 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 or a single pill combination
- Effect patient views on options and priorities to customize a care plan for each patient
- Remain non-judgmental at all times
- Use lexis 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 ≤130/85 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.

EXTENDING OUR REACH: Innovation, Efficacy, and Collaboration
Why measuring blood pressure accurately is important

- Uncertainty of patients’ true blood pressure is the leading cause for failure of a clinician to act on a high blood pressure in the office

- Significant BP variability exists in all patients

- Poor measurement technique decreases reliability of a patient’s BP, which can lead to poor clinical decisions, adversely affecting the health of a patient

*How does this impact clinicians in practice?*

How many errors in BP measurement do you see?
How many errors in BP measurement do you see?

1. Back is not supported
2. Arm is not supported near heart level
3. Cuff is over sweatshirt
4. Legs are crossed
5. Legs are not both flat on the stool
6. She is talking
7. She is listening (lack of quiet environment)
Common problems that account for inaccurate blood pressure measurement

- When the patient has ...
  - The cuff over clothing: BP can appear higher by 10–40 mm Hg
  - A full bladder: BP can appear higher by 10–15 mm Hg
  - A conversation or is talking: BP can appear higher by 10–15 mm Hg
  - An unsupported arm: BP can appear higher by 10 mm Hg
  - An unsupported back: BP can appear higher by 5–10 mm Hg
  - Unsupported feet: BP can appear higher by 5–10 mm Hg
  - Crossed legs: BP can appear higher by 2–8 mm Hg


EXTENDING OUR REACH: Innovation, Efficacy, and Collaboration
Why use office BP measurement?

• Opportunity to obtain BPs
• Technology has improved measurement reliability (validated, automated machines → less human error)
• Protocols improve reliability, reduce variability and errors and can improve workflow efficiency
• Obtaining confirmatory measurements increases diagnostic accuracy and reduces misclassification of hypertension
• By reducing errors and increasing reliability of BP measurement, clinicians are less likely to hesitate when initiating or escalating treatment (clinical inertia)
Most common factors contributing to uncontrolled hypertension

1. Clinicians miss opportunities to treat a patient with a BP > 140/90
   • Fail to initiate or escalate therapy during an office visit
   • Fail to stress frequent follow up until BP is controlled

2. Patient non-adherence to treatment plan
   • Usually due to not taking medications as instructed
The 2015 M.A.P. checklists for improving BP control

<table>
<thead>
<tr>
<th>Measure accurately</th>
<th>Act rapidly</th>
<th>Partner with patients, families and communities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Screening checklist</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use a validated, automated device to measure BP⁴⁷⁸⁹</td>
<td>Use evidence-based protocol to guide treatment⁴⁷⁸⁹</td>
<td>To empower patients to control their blood pressure:</td>
</tr>
<tr>
<td>Ensure patient has an empty bladder²³⁴⁵</td>
<td>Re-assess patient every 2-4 weeks until BP is controlled²³⁴⁵</td>
<td>³³帮助患者准确度量血压²³⁴⁵</td>
</tr>
<tr>
<td>Ensure patient has rested quietly for at least five minutes²³⁴⁵</td>
<td>Whenever possible, prescribe single-pill combination therapy²³⁴⁵</td>
<td>☐ Direct patients and families to resources that support medication adherence and healthy lifestyles</td>
</tr>
<tr>
<td>Obtain the average of at least three BP measurements²³⁴⁵</td>
<td>Evidence-based protocols typically include</td>
<td>Evidence-based communication strategies include</td>
</tr>
</tbody>
</table>

- 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
  - Dihydropyridine calcium channel blockers
  - ACE inhibitors (ACEI) or
  - 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

**Evidence-based tips for correct positioning**

- Ensure patient is seated comfortably with:
  - 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 the measurement

**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.
Factors leading to clinical inertia

CLINICIAN

• Failure to initiate treatment
• Failure to titrate to goal
• Failure to recommend follow-up
• Failure to set clear goals
• Underestimating patient needs
• Failure to identify and manage comorbid conditions
• Not enough time
• Insufficient focus or emphasis on goal attainment
• Reactive rather than proactive

Adapted from Milani RC et al J Am Coll Cardiol. 2013; 62: 2185-2187
Factors leading to clinical inertia

PATIENT
- Medication side effects
- Failure to take meds
- Too many medications
- Cost of medications
- Denial of disease
- Forgetfulness
- Perception of low susceptibility

- Absence of symptoms
- Poor communication
- Mistrust of clinician
- Mental illness
- Low health literacy

Adapted from Milani RC et al J Am Coll Cardiol. 2013; 62: 2185-2187
Factors leading to clinical inertia

HEALTH SYSTEM

• Lack of clinical guideline
• Lack of care coordination
• No visit planning
• Lack of decision support
• Poor communication between office staff
• No disease registry
• No active outreach

Adapted from Milani RC et al J Am Coll Cardiol. 2013; 62: 2185-2187
Why standardized treatment protocols are important

In patients with HTN with systolic BPs >150 mm Hg, increased risk of acute cardiovascular events or death can occur with

- Delays in medication intensification >6 weeks
- Delays in follow-up appointments >10 weeks after medication intensification

Xu et al. BMJ 2015;350:h158 doi: 10.1136/bmj.h158
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**
- Ensure patient is seated comfortably with:
  - 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 the measurement

**Act rapidly**

If a patient has blood pressure ≥140/90 mm Hg confirmed:
- Use 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**
- Cessation of smoking and lifestyle modifications
- Ensure early follow-up and add preferred medications in a stepwise fashion until BP is controlled
- For most patients, give preference to:
  - Thiazide diuretics
  - Diuretics in combination with a calcium-channel blocker
  - ACE inhibitors or ARBs
  - Angiotensin receptor blockers (ARBs)
  - Do not prescribe both ACEIs and ARBs to the same patient
  - If BP ≥160/100 mm Hg, start therapy with two medications or a single-pill combination

**Partner with patients, families, and communities**
- Empower patients to control their blood pressure
- Engage patients using evidence-based communication strategies
- 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 or a single-pill combination
- 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 ≥2 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 ≥130/85 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.

**EXTENDING OUR REACH:** Innovation, Efficacy, and Collaboration
Use evidence-based communication strategies

• Patient engagement is important if we expect patients to adhere to therapy

• When clinicians use this style of communicating – which is essentially talking less and listening more – we often learn important details that help us determine a preferred treatment approach

• When patients use this kind of communication, they are more engaged/committed, and as a result, are more likely to adhere

• Using these communication techniques does not lengthen visits (it actually shortens them), especially if all practice staff are using them

“Evidence indicates that in primary care clinics, brief physician motivational interviewing has a positive effect on weight loss attempts, exercise efforts, decreased substance use, and blood pressure control.”

Searight, RH. Realistic approaches to counseling in the office setting. *Am Fam Physician*. 2009;79(4);277-284

Module 5
Why SMBP is clinically useful

SMBP better predicts CV morbidity and mortality than office BPs

- Reduces variability and provides more reliable BP measurement
- Provides better assessment of hypertension control
- Empowers patients to self-manage their HTN
- May improve medication adherence

---

<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>Population</th>
<th>n</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohasama¹</td>
<td>1998</td>
<td>Population</td>
<td>1789</td>
<td>Strokes and mortality predicted better by home BP</td>
</tr>
<tr>
<td>SHEAF²</td>
<td>2004</td>
<td>Treated HTN</td>
<td>4939</td>
<td>CV morbidity and mortality predicted better by home BP</td>
</tr>
<tr>
<td>PAMELA³</td>
<td>2005</td>
<td>Population</td>
<td>2051</td>
<td>CV and total mortality predicted better by home BP</td>
</tr>
<tr>
<td>Belgian⁴</td>
<td>2005</td>
<td>Referred</td>
<td>391</td>
<td>Combined CV events predicted better by home BP</td>
</tr>
<tr>
<td>Didima⁵</td>
<td>2006</td>
<td>Population</td>
<td>662</td>
<td>CV events predicted similarly by home and office BP</td>
</tr>
</tbody>
</table>

---

AMA-JHM SMBP monitoring program

• Assists practices and health centers with implementing their own SMBP monitoring program
AMA-JHM SMBP monitoring program

- Table of contents delineates the documents by audience and the program type

<table>
<thead>
<tr>
<th>Page</th>
<th>Name of document</th>
<th>Practice staff</th>
<th>Patient</th>
<th>Blood pressure monitor loaner program</th>
<th>Patient-owned blood pressure monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Measuring accurately: Self-measured blood pressure monitoring</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>Clinical competency: Patient self-measured blood pressure at home</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>Measure accurately: A guide for blood pressure measurement</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>How to check a home blood pressure monitor</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Device loaner program

Guidance documents will help the practice or health center develop a program that will loan home blood pressure monitors to patients when short-term SMBP is useful.
Patient-specific information

Patient-facing documents provide the patient with information on SMBP monitoring that are easy to understand (*also available in Spanish*)

---

**Self-measured blood pressure technique:** How to take your own blood pressure

**Before you measure**
1. Use a certified, automated device to measure your blood pressure (BP) using your arm (not finger or wrist).
2. Use a cuff that is the right size for your arm.
3. Do not exercise, smoke, eat a large meal, take decongestants or have caffeine within 30 minutes of measuring your blood pressure.
4. Use the bathroom if you need to, before the measurement.
5. Rest for five minutes before measuring your blood pressure.

**Position yourself correctly**
6. Sit in a chair, with your back supported.
   - Sit with your legs uncrossed and feet flat on the floor (or stool).
   - Rest your arm on a table close to heart level.
   - Place the blood pressure cuff over bare skin, on mid-arm at heart level and just above your elbow.

**Perform blood pressure measurement**
7. Do not talk, text, read, watch TV or use your phone, computer or tablet while measuring your blood pressure.

8. "Power on" the machine and push the start button.
   - When the machine stops, write down the upper and lower BP numbers (systolic and diastolic) if the machine does not store them automatically.
   - Wait one minute and then repeat (some machines will do this automatically). You should always check at least two blood pressure measurements one minute apart and write them down.

9. Take your two blood pressure measurements in the morning and two in the evening for one week, and report them to your doctor's office.
Impact of lifestyle changes for improving blood pressure in patients with HTN

<table>
<thead>
<tr>
<th>LIFESTYLE CHANGE</th>
<th>CAN LOWER SBP/DBP UP TO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DASH diet, compared with typical American diet</td>
<td>11.6/5.3 mm Hg</td>
</tr>
<tr>
<td>Reduce sodium intake by average of 1150 mg/d</td>
<td>4/2 mm Hg</td>
</tr>
<tr>
<td>Average weight loss of 11 lbs</td>
<td>4.4/3.6 mm Hg</td>
</tr>
<tr>
<td>40 minutes of moderate intensity aerobic physical activity, 3–4 times a week</td>
<td>5/4 mm Hg</td>
</tr>
</tbody>
</table>
Adaptive change in ambulatory practice (ACAP)

• Provides ambulatory teams with a framework for leveraging the experience and knowledge of all practice or health center team members to improve care

• Improves patient care through:
  – Engaging all clinical and non-clinical staff members whose work can affect patient care
  – Using the care team’s collective wisdom to identify the best solutions to complex problems
  – Improving teamwork and communication in a practice or health center

• Can be implemented alongside other change models such as LEAN, Six Sigma or the Institute for Healthcare Improvement’s Model for Improvement
## Curriculum overview

<table>
<thead>
<tr>
<th>Kickoff</th>
<th>Prepare for Your Journey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module 1</strong></td>
<td>Apply the Science of Improving Care to Measuring BP Accurately</td>
</tr>
<tr>
<td><strong>Module 2</strong></td>
<td>Automated Office BP Measurement: An Opportunity to Engage the Entire Practice or Health Center</td>
</tr>
<tr>
<td><strong>Module 3</strong></td>
<td>Understanding How Clinical Inertia and Limited Patient Engagement Contribute to Uncontrolled Hypertension</td>
</tr>
<tr>
<td><strong>Module 4</strong></td>
<td>Protocols to Guide Evidence-based Prescribing</td>
</tr>
<tr>
<td><strong>Module 5</strong></td>
<td>Engaging Patients through Evidence-based Communication Strategies</td>
</tr>
<tr>
<td><strong>Module 6</strong></td>
<td>Self-measured Blood Pressure Monitoring to Improve BP Control</td>
</tr>
<tr>
<td><strong>Module 7</strong></td>
<td>Dietary and Lifestyle Interventions to Improve BP Control</td>
</tr>
<tr>
<td><strong>Module 8</strong></td>
<td>Sustainability and Wrap-up Celebration</td>
</tr>
</tbody>
</table>
Application within the QIN-QIO community: HSAG

Kim Salamone, PhD, MPA
Vice President, Health Information Technology
Health Services Advisory Group
The HSAG QIN-QIO: AZ, CA, FL, OH, and the USVI

HSAG serves nearly **25 percent** of our nation’s Medicare beneficiaries: 12,604,838 beneficiaries*

*Source: Centers for Medicare & Medicaid Services  Denominator File: April 2013–March 2014
HSAG’s activity and approach

As the QIN-QIO, HSAG:
• Equips
• Communicates
• Convenes
• Engages

HSAG’s Approach:
• Decreasing cardiac risk factors among at-risk patients
• Reducing health disparities in diabetes care through self-management education
• Improving prevention coordination through meaningful use of health information technology
• Providing quality-reporting technical assistance in preparation for value-based payments
HSAG IHO: BP program rollout

• Lessons learned
  – Communication
  – Value of “see one, do one”
  – Targeted marketing
  – Unrecognized knowledge gap
  – Testimonials
  – Value in training QIN-QIO staff ahead of program kickoff
  – Through collaboration applied rapid-cycle improvements

• Recommendations
  – QIN-QIO CMO leadership role in virtual IHO: BP program
  – Time-zone specific SYE webinars
HSAG IHO: BP program rollout (cont.)

Successes
- Formed strong working relationship with AMA-JHM
- Opportunity to promote work through QIN-QIO newsletters
- Demonstrated success through high evaluation scores
  - Avg. 4.8 out 5 overall satisfaction score (AZ, CA, FL and OH)
- Ongoing promotion of the IHO: BP program

Value add
- Out-of-the-box intervention
- Proven success
- Ease of implementation
- Partnership with nationally recognized experts

“Appears to be a program that if implemented should have an important role in improving quality of care at our clinic!”

“Because of the openness and transparency that the JHM and AMA speakers have shown in sharing their personal experiences, the audience of clinical staff has been receptive to sharing its own thoughts, concerns, barriers and solutions.”

“On SYE webinars: “The fact that we can learn ideas among sites that are a part of the project. I like how we can share our successes’ and flaws and try to help each other out.”

“Because this information is extremely important because I see BPs being taken over clothing, and with legs dangling all of the time. Also, I frequently see high pressures written down and then no discussion or action taken.”
IHO: BP program expectations and offerings

Donna Daniel, PhD
Director, Improving Health Outcomes Strategies
American Medical Association
Why participate?

• Evidence-based tools and resources
• Peer-to-peer learning
• AMA-JHM faculty
• No cost program
• Tri-branding (AMA, JHM and QIN-QIO logos)
• Aligned with Task B.1
• CME offerings
• Designed for busy practices with competing priorities
QIN-QIO participation expectations

• Provide a local infrastructure that helps implement the IHO: BP program
  – e.g. host IHO: BP materials on website

• Garner active engagement of practices and health centers
  – e.g. consistent follow-up and technical assistance to practices

• Communicate program information effectively

• As applicable, provide participating practices with practice facilitation resources

• Attend training on the IHO: BP program

• Actively participate throughout the program!
Practice or health center participation expectations

• Identify a core team of two to three staff members, including a clinician that will lead IHO: BP program efforts
  – Identify an IHO: BP QI team lead (MA, Office Manager, RN)

• Dedicate two to three hours per month

• Generate EHR performance reports showing BP control rates by provider

• Actively participate in the IHO: BP program
  – e.g. listen to podcasts, review fast fact sheets, utilize tools and resources and put knowledge into practice!
  – Participate in monthly SYE webinars for peer-to-peer learning
AMA-JHM offerings

• Three primary options for QIN-QIO interested in collaborating with the AMA-JHM:
  1. Full IHO: BP program rollout
  2. Consulting services
  3. Tool dissemination

• Combination of options
Full IHO: BP program

- Kickoff event followed by series of modules
- Train your staff on program implementation by AMA-JHM practice facilitators

<table>
<thead>
<tr>
<th>Kickoff</th>
<th>Prepare for Your Journey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>Apply the Science of Improving Care to Measuring BP Accurately</td>
</tr>
<tr>
<td>Module 2</td>
<td>Automated Office BP Measurement: An Opportunity to Engage the Entire Practice or Health Center</td>
</tr>
<tr>
<td>Module 3</td>
<td>Understanding How Clinical Inertia and Limited Patient Engagement Contribute to Uncontrolled Hypertension</td>
</tr>
<tr>
<td>Module 4</td>
<td>Protocols to Guide Evidence-based Prescribing</td>
</tr>
<tr>
<td>Module 5</td>
<td>Engaging Patients through Evidence-based Communication Strategies</td>
</tr>
<tr>
<td>Module 6</td>
<td>Self-measured Blood Pressure Monitoring to Improve BP Control</td>
</tr>
<tr>
<td>Module 7</td>
<td>Dietary and Lifestyle Interventions to Improve BP Control</td>
</tr>
<tr>
<td>Module 8</td>
<td>Sustainability and Wrap-up Celebration</td>
</tr>
</tbody>
</table>

EXTENDING OUR REACH: Innovation, Efficacy, and Collaboration
Consulting services

- Cardiac Learning and Action Networks (LAN)
- Stakeholder meetings
- Interest in specific components of M.A.P. and modules
- AMA-JHM professional expertise
## Tool dissemination

Provide tools and resources, as requested

<table>
<thead>
<tr>
<th>Key Tools</th>
<th>Kickoff</th>
<th>Mod 1</th>
<th>Mod 2</th>
<th>Mod 3</th>
<th>Mod 4</th>
<th>Mod 5</th>
<th>Mod 6</th>
<th>Mod 7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• M.A.P. checklists</td>
<td>• Measure accurately assessment tools</td>
<td>• Templated letter to health system leaders</td>
<td>• Act rapidly video</td>
<td>• Million Hearts® treatment protocol template</td>
<td>• Fast fact sheets</td>
<td>• SMBP monitoring program</td>
<td>• Links to dietary and lifestyle resources</td>
</tr>
<tr>
<td></td>
<td>• Communication plan</td>
<td>• Learning from defects tool</td>
<td>• Fast fact sheets</td>
<td>• Act rapidly assessment tool</td>
<td>• Fast fact sheets</td>
<td>• Podcasts</td>
<td>• Fast fact sheets</td>
<td>• Fast fact sheets</td>
</tr>
<tr>
<td></td>
<td>• Action plan</td>
<td>• Measure accurately poster</td>
<td>• Podcasts</td>
<td>• Partner with patients assessment tool</td>
<td>• Podcasts</td>
<td>• Podcasts</td>
<td>• Podcasts</td>
<td>• Podcasts</td>
</tr>
<tr>
<td></td>
<td>• QI team membership form</td>
<td>• Fast fact sheets</td>
<td></td>
<td>• Culture checkup tool</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Improvement science webinar recording and attendance tracking sheet</td>
<td></td>
<td></td>
<td>• Fast Fact sheets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• QI teams roles, responsibilities and tasks form</td>
<td></td>
<td></td>
<td>• Podcasts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions?
What’s next?

If interested in participating in and/or learning more about the IHO: BP program, please contact:

Vikas Bhala, MPH, MBA

Vikas.bhala@ama-assn.org

Improvement Advisor

American Medical Association
STEPS Forward: Improving blood pressure control

www.stepsforward.org
Thank you!