Target: BP –
A national initiative to improve blood pressure control
February 15, 2017
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Objectives for today

• Describe the impact of uncontrolled blood pressure (BP) from a public health perspective and from a patient’s perspective

• Review how the Target: BP initiative can help with your practice’s blood pressure improvement efforts

• Identify evidence-based best practices that practice sites can use to improve BP control: the M.A.P. checklists
80 million adults have HBP

<table>
<thead>
<tr>
<th>Blood Pressure Category</th>
<th>Systolic (mmHg)</th>
<th>Diastolic (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal / Ideal</td>
<td>less than 120</td>
<td>and less than 80</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120-139</td>
<td>or 80-89</td>
</tr>
<tr>
<td>Hypertension stage 1</td>
<td>140-159</td>
<td>or 90-99</td>
</tr>
<tr>
<td>Hypertension stage 2</td>
<td>160 or higher</td>
<td>or 100 or higher</td>
</tr>
<tr>
<td>Hypertensive crisis</td>
<td>higher than 180</td>
<td>or higher than 110</td>
</tr>
</tbody>
</table>
Prevalence of HBP

Heart Disease and Stroke Statistics—2017 Update: Chapter 9
HBP by race/ethnicity and sex

Heart Disease and Stroke Statistics—2017 Update: Chapter 9
46% are uncontrolled

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

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

Source: CDC, AHA
Estimated Annual Avg. Direct and Indirect Cost of HBP (In billions)

- 2011: 46.4
- 2012: 51.2
- 2030: 200+ (Direct-only)

Death-rate attributable to HBP (2004 – 2014): 7.6%
Actual number of deaths attributable to HBP (2004 – 2014): 34.1%
What is Target: BP?

Vikas Bhala, MPH, MBA
What is Target: BP?

A call to action motivating medical practices, practitioners and health services organizations to prioritize blood pressure control.

Recognition for healthcare providers who attain high levels of blood pressure control in their patient populations, particularly those who achieve 70, 80 percent or higher control.

A source for tools and assets for healthcare providers to use in practice, including the AHA/ACC/CDC Hypertension Treatment Algorithm and the AMA’s M.A.P. Checklist.

http://targetbp.org/
Who is our Target Audience?

• Primary Care System
  - Federally Qualified Health Clinic (FQHC)
  - Federally Designated Rural Health Clinic (RHC)
  - Indian Health Service practice/clinic
  - Practice/Clinic with mission to serve publicly insured, underinsured, or uninsured
  - Private Clinical System (non-FQHC)

• Government Agency or Organization providing care to patients
Why should a clinic participate?

- We know what medicines work but systems aren’t in place to drive control rates
- Algorithm and systems approach described in AHA’s treatment algorithm are proven to increase control rates within a clinical setting
- Sites will received recognition from the AHA
- Help meet required performance metrics
- **Improved health and care of their patients!**

http://targetbp.org/
Recognition criteria and levels

• Two levels of recognition in 2017. The program will be expanded to include additional levels and more quality measures in subsequent years.

• Participation
  – Target: BP registration
  – Submit 2016 data

• Achievement
  – Blood pressure control measure (NQF#18/PQRS#236)
  – \(>70\%\) of adult patients with diagnosis of hypertension whose blood pressure adequately controlled \((<140/90\text{mmHg})\) in 2016
Data submission requirements

• Data submission timing
  – At registration
  – After registration, between March 31 and July 31

• Registration data = recognition data (assumes validation)
  – Participants registered before March 31, 2017 will get an email notification indicating they can now submit recognition data.

• Recognition data (adult patients):
  – Total patient population by age
  – Total patient population by ethnicity (optional)
  – Total number of patients with diagnosis of hypertension
  – Total number of patients with diagnosis of hypertension whose high blood pressure is controlled
M.A.P. Overview

Linda Murakami, RN, BSN, MSHA
Senior Program Manager, American Medical Association
Barriers to success

• Patient factors
  – Non-adherence
  – Financial
  – Literacy
• Physician factors
  – Time
  – Financial
  – Knowledge of evidence
• System factors
  – Quality reporting
  – Work flow
  – Leadership (buy-in)
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**
- **Team-based Care**
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

**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 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 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
- Emphasize 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.
Why measuring blood pressure (BP) accurately is important

• Naturally occurring BP variability exists in all patients, contributing to uncertainty of what a patient’s true BP is.

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

• 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?
## Common errors made during office BP measurement

<table>
<thead>
<tr>
<th><strong>Observer factors</strong></th>
<th><strong>Patient factors</strong></th>
<th><strong>System factors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong cuff size</td>
<td>Full bladder</td>
<td>Location of monitor/device</td>
</tr>
<tr>
<td>Cuff placed over clothing</td>
<td>Stimulants</td>
<td>Noise</td>
</tr>
<tr>
<td>Improper positioning</td>
<td>Recent exercise</td>
<td>Work flows</td>
</tr>
<tr>
<td>No rest period</td>
<td>Recent meal</td>
<td></td>
</tr>
<tr>
<td>Terminal digit preference</td>
<td>Talking, texting, reading</td>
<td></td>
</tr>
<tr>
<td>Talking to patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapid cuff deflation</td>
<td></td>
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</tbody>
</table>
Correct patient position for BP measurement

For screening BP measurement
- Automated, validated device
- Sitting in a chair with back and arm supported (1)
- Legs uncrossed, feet on the ground or a stool (2)
- Cuff over a bare arm (3)
- Correct cuff size
- No talking or texting

If the screening BP is $>140/90$ mm Hg, obtain confirmatory BP measurements

For confirmatory BP measurements, same as above, plus
- Ensure patient has an empty bladder
- Rest for at least five minutes
- Obtain the average of at least three measurements
Most common factors contributing to uncontrolled hypertension

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

   CLINICAL INERTIA

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

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## Act rapidly

If a patient's 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
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## Partner with patients, families and communities

To empower patients to control their blood pressure:
- Engage patients using evidence-based communication strategies
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**Evidence-based communication strategies include**
- Begin with open-ended questions about adherence, including recent medication use
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**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 foods, 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
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
Factors leading to clinical inertia

HEALTH SYSTEM

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

![Diagram illustrating a flowchart for managing hypertension with target blood pressures (BP) of 140-160 or diastolic 90-99 (Stage 1 hypertension) and >160 or diastolic >100 (Stage 2 hypertension). The process includes lifestyle modifications, rechecking blood pressures in 2-4 weeks, considering adding thiazide diuretics, and advising on follow-up appointments.](https://via.placeholder.com/150)
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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
Use evidence-based communication strategies

<table>
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<tr>
<th>STRATEGY</th>
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Why SMBP is clinically useful

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

...improves BP control
Empower patients to self-manage

SMBP empowers patients to:

• Check their BP
• Communicate results
• Make adjustments between visits
• Self-manage HTN

“…regular self-measurements of blood pressure and a simple predetermined titration plan for anti-hypertensive drugs, is more effective in lowering systolic blood pressure than is usual care…”

How to use SMBP in clinical practice

Educating staff to train patients on proper use of SMBP is critical and includes:

- Proper measurement technique
  - Proper frequency to measure SMBPs
- How to record SMBPs
- A plan for patients to act if BPs are out of the desired range
- How to communicate SMBP readings to the clinical team
Lifestyle changes for hypertensive patients

- Healthy diet, such as DASH diet
- Reduced sodium intake
- Weight loss
- Aerobic exercise
- Moderate alcohol consumption
- No smoking

Taking a pill to lower BP
Questions?

Register to participate in the Target: BP national initiative at targetbp.org

Thank you!