Blood Pressure Control in Primary Care

- Aspirin when appropriate
- Blood pressure control
- Cholesterol management
- Smoking cessation

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Authors: Jennifer Lewey, MD, Stephen Braun, Michael Fischer, MD, MS, Arielle Mather, MPH.
Screening and treating hypertension can improve the health of patients and the population.  
Many patients don’t know that they have hypertension, are not on treatment or are not controlled.

Effective treatment of hypertension can reduce:

- Heart failure: 50%
- Stroke: 35-40%
- Myocardial infarction: 20-25%

Identifying hypertension

Accurate blood pressure measurement is critical for establishing the diagnosis. Tools to help practice staff accurately measure blood pressure can be found at http://ophic.ouhsc.edu/rpr

Once a patient has been identified as hypertensive, clinicians should:

1. Assess lifestyle factors that can elevate blood pressure, including diet, alcohol, physical inactivity, and obesity;
2. Identify other cardiovascular risk factors or concomitant disorders that will guide treatment;
3. Search for identifiable secondary causes of high blood pressure;
4. Determine extent of end-organ damage

Target blood pressure: For most patients, a goal of 140/90 should be used to guide treatment.
2014 Guidelines for HTN Treatment
Recommendations from JNC 8 panelists

For adults aged ≥18 years with hypertension:
- Implement long term lifestyle changes
- BP goal 140/90; consider 150/90 if ≥60

First-line therapy

For most patients initiate thiazide-type diuretic or ACEI or ARB or CCB, alone or in combination.
- If CKD present: Initiate ACE or ARB, alone or in combination with other drug class.
- If black: Initiate thiazide-type diuretic or CCB, alone or in combination.

Titrate medication

Maximize initial medication and/or Add second medication (use medication class not previously selected and avoid combined ACE/ARB)

Long-term plan

- Continue to monitor BP level
- Reinforce lifestyle & medication adherence
- Increase medication dosage or add medication when needed

Lifestyle modification remains a critical component of health promotion and ASCVD risk reduction, both prior to and in concert with the use of antihypertensive medications.
Choosing an antihypertensive drug class

Multiple drug classes can effectively lower blood pressure. Patient characteristics should guide the initial choice.

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Best Suited For</th>
<th>Risks/Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiazide-type diuretics(^5,6)</td>
<td>First-line treatment of hypertension in most patients</td>
<td>Monitor kidney function &amp; potassium</td>
</tr>
<tr>
<td>ACE-I or ARB(^7,8)</td>
<td>Diabetes</td>
<td>Monitor kidney function &amp; potassium</td>
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<td></td>
<td>Chronic kidney disease</td>
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<tr>
<td></td>
<td>Congestive heart failure</td>
<td>Cough with ACE-I (can switch to ARB)</td>
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<tr>
<td></td>
<td>Ischemic heart disease</td>
<td></td>
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<tr>
<td>CCB(^9)</td>
<td>Coronary artery disease (if beta blocker intolerant)</td>
<td>Lower extremity edema</td>
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<tr>
<td></td>
<td></td>
<td>Constipation</td>
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<tr>
<td>Beta-blockers(^10)</td>
<td>Coronary artery disease</td>
<td>No longer first choice for uncomplicated hypertension</td>
</tr>
<tr>
<td></td>
<td>Congestive heart failure</td>
<td>Use with caution in obstructive pulmonary disease</td>
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</tbody>
</table>

Several other medication classes, including loop diuretics, potassium-sparing diuretics, alpha blockers, and direct renin inhibitors may have a role for patients requiring multiple agents to control their hypertension.

References

9. McDonagh MS, K.B. Eden, and K. Peterson, Drug class review on calcium channel blockers. 2005, Oregon Evidence-based Practice Center; Oredon.