# Blood Pressure Control in Primary Care

**A**spirin when appropriate

**B**lood pressure control

**C**holesterol management

**S**moking cessation

**Healthy Hearts for Oklahoma (H2O)**

The Oklahoma Cooperative for AHRQ's EvidenceNOW

ADVANCING HEART HEALTH IN PRIMARY CARE

NaRCAD

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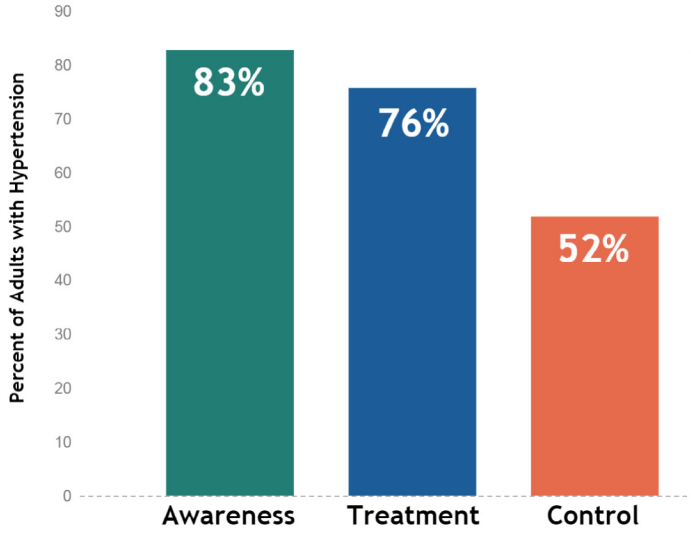
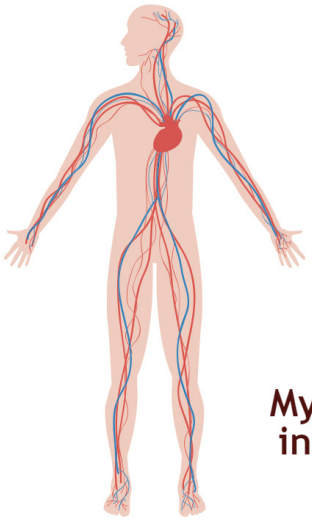
# Screening and treating hypertension can improve the health of patients and the population[1]

Many patients don't know that they have hypertension, are not on treatment or are not controlled.




Extent of awareness, treatment, and control of high blood pressure among adults with hypertension[2]

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[4]

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.

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

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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