NorthShore Medical Group Hypertension Guidelines

**Target values depend on age and comorbidities**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Target BP</th>
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</thead>
<tbody>
<tr>
<td>If patient is &lt; 60 years old or</td>
<td>&lt;140/90</td>
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<tr>
<td>Patient is any age with Diabetes or Chronic Kidney Disease</td>
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<tr>
<td>If patient is ≥ 60 years old</td>
<td>&lt;150/90</td>
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</tbody>
</table>

A hypertensive patient is considered to be out of control if the following BP reading is above target:

The LOWEST recorded BP at the most recent
a) office visit with Internal Medicine, Family Medicine, Endocrinology, Cardiology, and Nephrology OR
b) Telephone/NorthShore Connect encounter in which “patient reported” values were entered

**Practical JNC 8 Hypertension Treatment Algorithm**

- **Adult (age ≥ 18 years)**
  - Start with any of the 3 categories of generic meds to the right. Patients with chronic kidney disease should initially receive RAS agent. Diuretic or calcium channel blocker (CCB) may be more effective in AA patients.
  - Return 1-3 months after a new medication is started or after a medication dose is increased. If not at goal, increase the medication dose or add a second or third generic medication and increase the dose as needed to reach goal.
  - If not at goal on maximal dose of 3 medications, see options to the right.
  - If not at goal with above treatments, consider medication non-adherence and interfering agents (NSAIDs, alcohol, stimulants, estrogens, decongestants, excess dietary salt, illicit drugs).
  - Also consider referral to hypertension specialist and evaluation for secondary causes of HTN, including primary hyperaldosteronism, renovascular disease, Cushing’s syndrome, sleep apnea, pheochromocytoma, and renal parenchymal disease.

- **A. Diuretic:** HCTZ 12.5, 25, 50 mg QAM OR chlorthalidone 25 mg (0.5, 1, 1.5 tab) QAM (not both)
- **B. RAS agent:** lisinopril 5, 10, 20, 40 mg QHS OR losartan 25, 50, 100 mg QHS* (not both)
- **C. CCB:** amlodipine 2.5, 5, 10 mg QAM

- **Continue current medication regimen and consider:**
  - A. Adding spironolactone 25 mg (0.5, 1 tab) QAM if on thiazide diuretic and eGFR > 60 and K < 4.5
  - B. Adding beta blocker bisoprolol 2.5, 5, 10 mg QAM
  - C. Adding vasodilator hydralazine 25 mg BID or TID
  - D. Adding loop diuretic torsemide 5, 10, 20 QAM with eGFR < 60

*In addition to losartan (Cozaar), other generic ARBs include irbesartan (Avapro) 75, 150, 300 mg; telmisartan (Micardis) 20, 40, 80 mg; and candesartan (Atacand) 4, 8, 16, 32 mg. Do not use RAS agents in women if they could become pregnant. Valsartan (Diovan) 40, 80, 160, 320 mg will soon be generic but it tends to be more expensive.

Adapted from James et al. The JNC 8 Report. JAMA 2014; 311(5): 507-520.