



## Hypertension Clinical Guideline

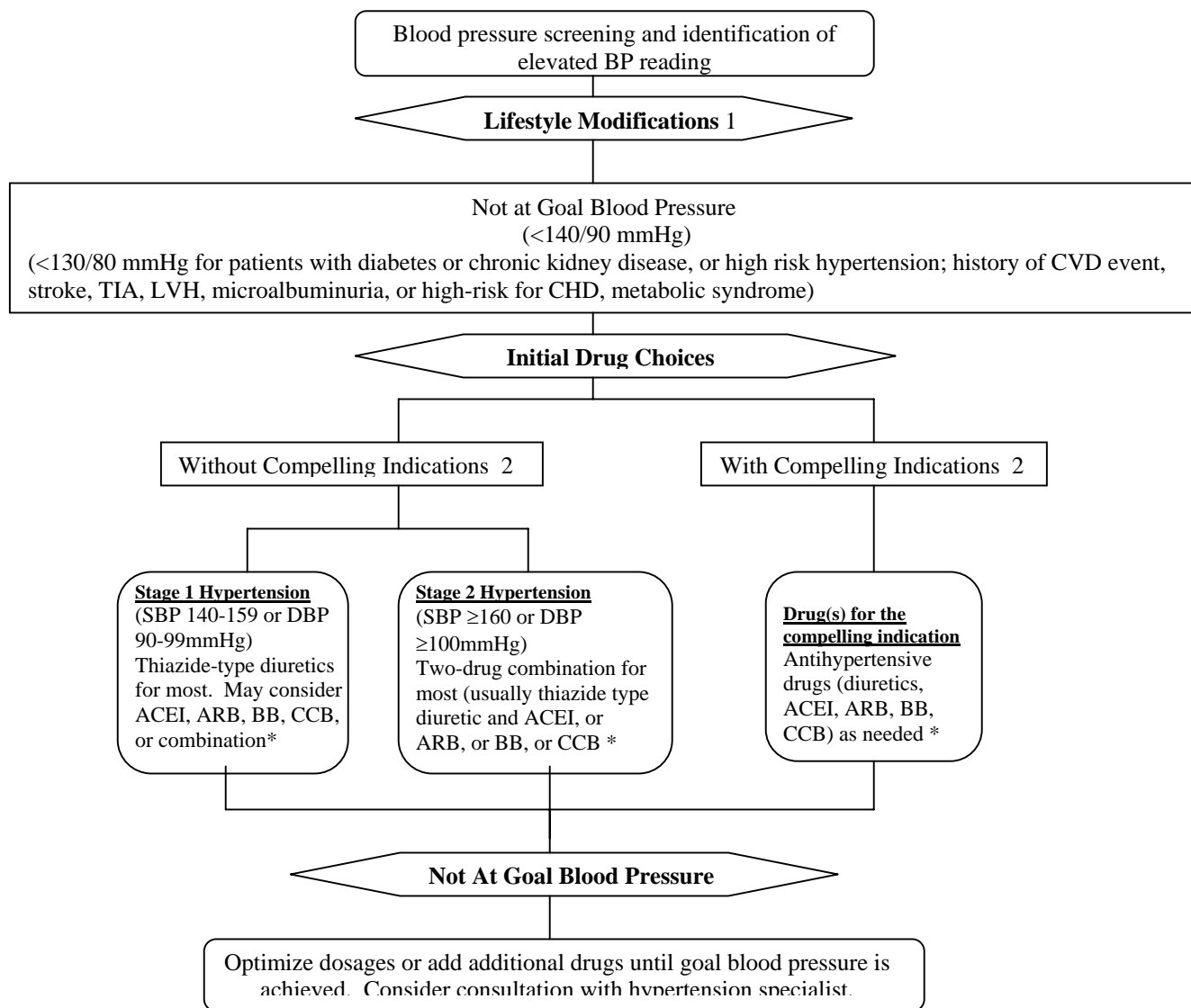
### Guideline History

Date Approved	05/03, 10/03, 10/05 , 10/07
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These Guidelines are promulgated by Sentara Healthcare (SHC) as recommendations for the clinical management of specific conditions. Clinical data in a particular case may necessitate or permit deviation from these Guidelines. The SHC Guidelines are institutionally endorsed recommendations and are not intended as a substitute for clinical judgment.

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## Algorithm



\* DBP diastolic blood pressure, SBP, systolic blood pressure. Drug abbreviations: ACEI (angiotensin converting enzyme inhibitor), ARB (angiotensin receptor blocker), BB (beta-blocker), CCB (calcium channel blocker)

### Annotations

#### 1. Lifestyle Modifications

Blood Pressure Classification	Lifestyle Modifications
Normal	Encourage
Prehypertension	Yes
Stage 1 Hypertension	Yes
Stage 2 Hypertension	Yes

#### 2. Compelling indicators: Heart Failure, Post MI, High CAD Risk, Diabetes, Chronic Kidney Disease, recurrent Stroke Prevention

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## Key Points

- The new report changes the former blood pressure definitions to:

**Table 1**

<b>Blood Pressure Classification</b>	<b>SBP mmHg</b>	<b>DBP mmHG</b>
Normal	<120	< 80
Prehypertension	120-139	80-89
Stage 1 Hypertension	140-159	90-99
Stage 2 Hypertension	>160	≥ 100

Source: USDHHS (2003). JNC 7 Express

- In persons older than 50 years, systolic blood pressure greater than 140 mmHg is a much more important cardiovascular disease (CVD) risk factor than diastolic blood pressure.
- The risk of CVD beginning at 115/75 mmHg doubles with each increment of 20/10 mmHG
- Individuals who are normotensive at age 55 have a 90 percent lifetime risk for developing hypertension.
- Individuals with a systolic blood pressure of 120-139 mmHg or a diastolic blood pressure of 80-89 mmHg should be considered as prehypertensive and require health-promoting lifestyle modifications to prevent CVD. These include losing excess weight, becoming physically active, limiting alcoholic beverages, and following a heart-healthy eating plan, including cutting back on salt and other forms of sodium. The report also recommends that, for overall cardiovascular health, person quit smoking.
- Thiazide-type diuretics should be used in drug treatment for most patients with uncomplicated hypertension, either alone or combined with drugs from other classes. Certain high-risk conditions are compelling indications for the initial use of other antihypertensive drug classes (angiotensin converting enzyme inhibitors, angiotensin receptor blockers, beta-blockers, calcium channel blockers).
- Most patients with hypertension will require two or more antihypertensive medications to achieve goal blood pressure (<140/90 mmHg, or <130/80 mmHg for patients with diabetes or chronic kidney disease).
- If blood pressure is >20/10 mmHg above goal blood pressure, consideration should be given to initiating therapy with two agents, one of which usually should be a thiazide-type diuretic.
- The most effective therapy prescribed by the most careful clinician will control hypertension only if patients are motivated. Motivation improves when patients have positive experiences with, and trust in, the clinician. Empathy builds trust and is a potent motivator.
- In presenting these guidelines, the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure recognizes that the responsible physician's judgment remains paramount.

USDHHS (2003). JNC 7 Express. Retrieved June 2007, from <http://www.nhlbi.nih.gov/guidelines/hypertension/express.pdf>

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