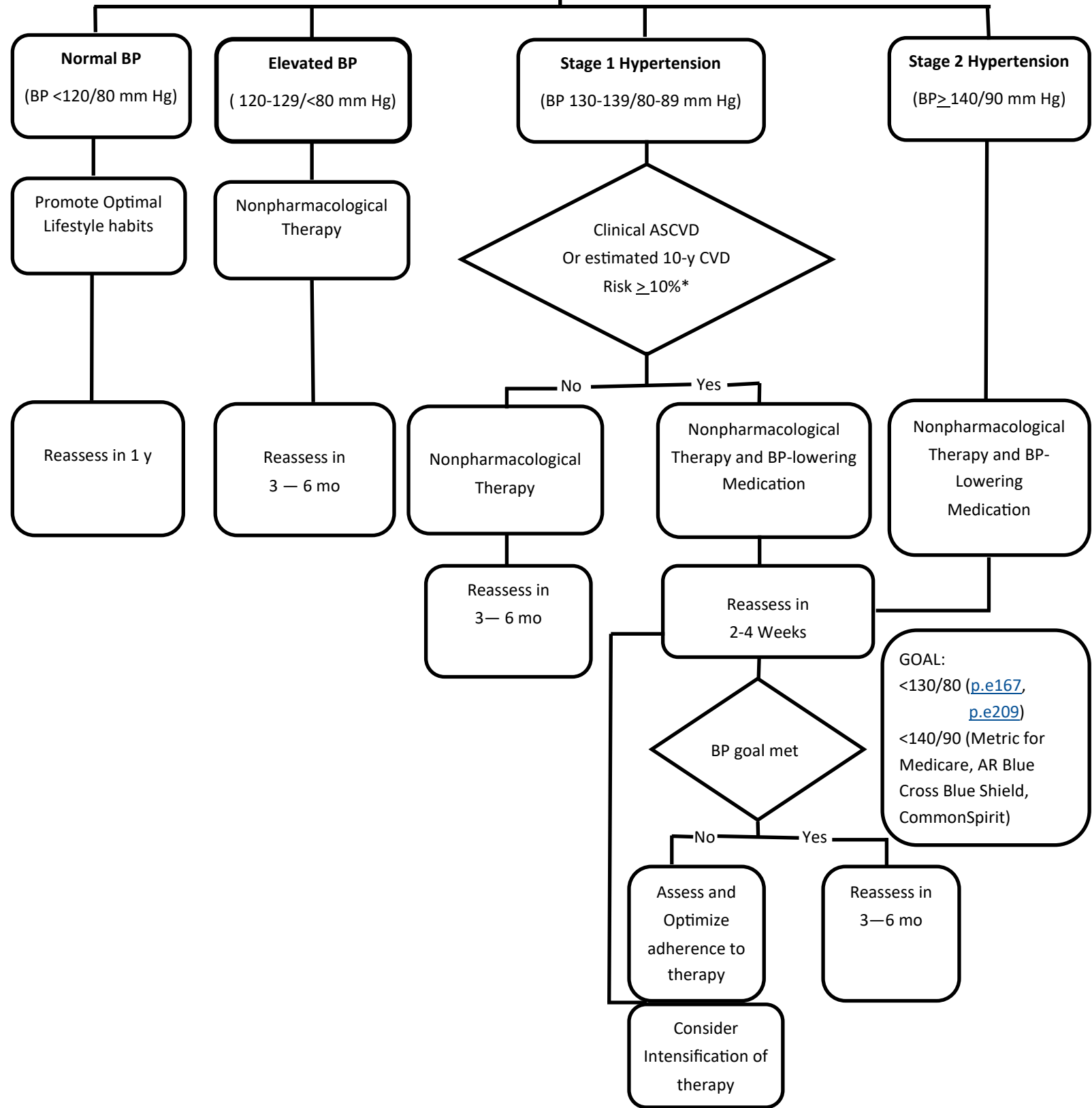




HYPERTENSION GUIDELINE (9/20/2021)

BP thresholds and recommendations for treatment and follow-up ([p.e162](#))



Annual Quality Measures and Targets:

Target Age: 18-85 y/o (CMS)
 18-65 y/o (CHI St. Vincent Employee Health Plan)
 18 and up (BCBS)

B/P Goal: <130/80 ([p.e167](#), [e209](#))
 <140/90 - CMS, St. Vincent Employee Health Plan

Hypertension Control: 72.2% - CMS MSSP ACO/ CHI St. Vincent Employee Health Plan

Annual Serum Creatinine - 83.2% ([p.e159](#))

*Cardiovascular Disease Risk Estimator ([p.e160](#)):

<http://tools.acc.org/ASCVD-Risk-Estimator/>

Additional Resources:
 "UP TO DATE" link in eCW
 App: "CALCULATE" by QxMD (medical calculator)
 App: "MDCalc"

- Nonpharmacological Interventions ([p.e156](#)):
- Healthy Diet (DASH dietary pattern)
 - Limit alcohol consumption (see limits below)
 - Reduce sodium intake - optimal goal to <1500 mg/day
 - Increase potassium intake to 3500 - 5000 mg/day (Unless with CKD)
 - Moderate-to-vigorous activity of 90-150 min/wk
 - Smoking cessation ([p.e202](#))
 - Weight loss - goal ideal body weight

Daily Alcohol Limits ([p.e156](#)):

- Men - 2 drinks
- Women - 1 drink

(One drink = 12oz. Beer, 5 oz. wine, 1.5 oz. of distilled spirits)

- Basic Testing for Primary Hypertension ([p.e159](#))
 - Fasting blood glucose
 - Complete blood count
 - Lipid profile
 - Annual serum creatinine
 - Serum sodium, potassium, calcium
 - Thyroid-stimulating hormone
 - Urinalysis
 - Electrocardiogram
- Optional Testing
 - Echocardiogram
 - Uric acid
 - Urinary albumin to creatinine ratio

PHARMACOLOGICAL RECOMMENDATIONS

First line agents for drug therapy:
Thiazide Diuretics, CCBs
ACEI or ARBs ([p.e168](#))

Initial Therapy: Mono-Therapy vs Combination Therapy (p.e169)		
Stage 1 w/ goal <130/80	1 BP drug	Dosage titration and additional agent as needed to achieve BP
Stage 2 w/ >20/10 above BP goal	2 first line BP drugs	Separate agents or fixed dose combination

ABBREVIATIONS

ACE	angiotensin-converting enzyme
	angiotensin-converting enzyme inhibitor
ACEi	
ARB	angiotensin receptor blocker
	arteriosclerotic cardiovascular disease
ASCVD	
BB	beta blocker
BP	blood pressure
CCB	calcium channel blocker
CKD	chronic kidney disease
CVD	cardiovascular disease
DBP	diastolic blood pressure
	Dietary Approaches to Stop Hypertension
DASH	
HR	heart rate
MM HG	millimeter mercury
OZ	ounces
SBP	systolic blood pressure

Co-morbid conditions	Initial Recommendations in Therapy for HTN
Stable Ischemic Heart Disease	BB, ACE inhibitors, or ARB (p. e172)
Heart Failure With Reduced Ejection Fraction	Guideline-directed management and therapy (p. e174)
Heart Failure With Preserved Ejection Fraction	Diuretics then ACE or ARB and BB (p. e174)
Chronic Kidney Disease	ACE inhibitor or ARB (p. e175)
Secondary Stroke Prevention	thiazide diuretic, ACE inhibitor, or ARB, or combination treatment (p. e182)
Diabetes	diuretics, ACE inhibitors, ARBs, OR CCBs (p. e184)
Diabetes with presence albuminuria	ACE Inhibitor or ARB (p. e184)
Atrial Fibrillation	ARB , CCB (p. e186 , CCB - Hypertension Committee Recommendation)
Chronic aortic insufficiency	Avoid beta blockers and other agents that slow HR (p. e187)
Thoracic Aortic Disease	BB (p. e188)
African American	Thiazide diuretic or CCB (p. e189)
Pregnancy	Methyldopa, nifedipine, and/or labetalol (p. e190)
Older persons	Risk/benefit assessment to determine intensity of BP lowering and choice of antihypertensive (p. e191)

Disclaimer: This guideline is not intended to dictate or substitute for the professional judgment of a health care practitioner in a particular case. (AHN) The present guideline is intended to be a resource for the clinical and public health practice communities. It is designed to be comprehensive but succinct and practical in providing guidance for prevention, detection, evaluation, and management of high BP. ([p.e134](#))

Whelton, P. K., Carey, R. M., Aronow, W. S., Casey, D. E., Collins, K. J., Himmelfarb, C. D., ... & MacLaughlin, E. J. (2018). 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Journal of the American College of Cardiology*, 71(19), [e127-e248](#).