

3. Chronic Disease Patient Care Flowsheet

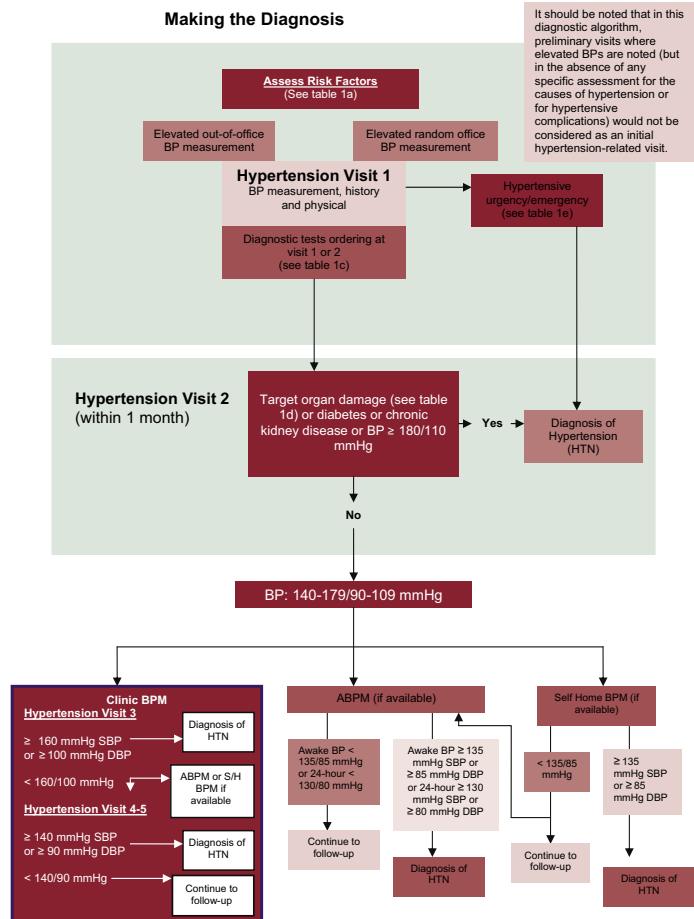
Hypertension Patient Care Flowsheet	
Pre-existing Comorbid Conditions / Complications	
Year of Diagnosis	
Method of Diagnosis	

Patient

PHN

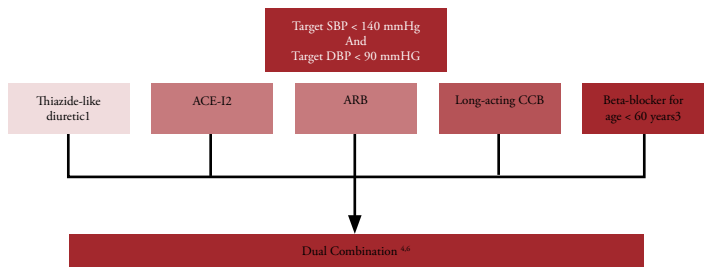
DATE:													
3 TO 6 MONTHS	BP	Blood Pressure	BP ≤ 135/85 BP < 130/80 if "high risk"										
	ANTI HYPERTENSIVE MEDICATION												
		ASA											
	LIFESTYLE / RISK FACTOR	Height Weight	BMI < 25										
Waist Circumference		M <102 cm/40 in W <88 cm/ 35 in											
Smoking or 2 <sup>nd</sup> hand smoke		Quit or avoid											
Diet		DASH or Reduced salt diet											
Alcohol		m<14 weekly w<9 weekly											
Physical Activity (moderate aerobic)		150 minutes weekly											
ANNUALLY	BLOOD WORK	Na/K (esp. if on thiazide)											
		Lipids											
		FBS	(4-7 mmol/l)										
		CBC											
		CVD Risk Score	High ≥ 20% Mod. 11-19% Low ≤ 10%										
KIDNEY	Serum Creatinine												
	MDRD/GFR	>60											
	Urine protein												
	MAUR												
Vaccine	Influenza vaccine	Age >65 or other risks											
Initial & PRN	ECG Ventricular Hypertrophy	Initial											

**Making the Diagnosis**



BP: Blood Pressure HTN: Hypertensive SBP: Systolic blood pressure  
DBP: Diastolic blood pressure BPM: Blood pressure measurement ABPM: Ambulatory blood pressure measurement S/H: Self-home

**Pharmacologic Treatment of Systolic / Diastolic Hypertension**  
Without other compelling indications



**Useful Antihypertensive Drug Combinations**

Column 1	Column 2
Thiazide diuretics	Beta Blocker**
Long-acting CCB*	ACE inhibitor
	ARB

For additive hypotensive effect in dual therapy, combine an agent from column 1 with any in column 2.  
\* Exercise caution when combining a nondihydropyridine CCB and a beta blocker.  
\*\* Relatively Contraindicated for patients with asthma or diabetes.

CCB: Calcium channel blocker  
ACE: Angiotensin-converting enzyme  
ARB: Angiotensin II receptor blocker

- CONSIDER**
- Nonadherence?
  - Secondary HTN?
  - Interfering drugs or lifestyle?
  - White coat effect?
  - Resistant hypertension?

→ 'Triple or quadruple therapy', or other classes of antihypertensives?

- ACE-I: Angiotensin Enzyme Inhibitor  
ARB: Angiotensin II Receptor Blocker  
CCB: Calcium Channel Blocker
- 1: Hypokalemia should be avoided with the use of potassium sparing diuretics
  - 2: Not recommended as first-line therapy for those of African descent
  - 3: Not recommended as first line therapy in older patients
  - 4: Caution should be exercised in combining a non-DHP-CCB and a beta-blocker
  - 5: Such as alpha-blockers or centrally acting agents
  - 6: Useful combinations include thiazide diuretic or CCB with ACE-I or ARB or beta-blocker

**Impact of Lifestyle Therapies on BP In Hypertensive Adults**

Intervention	Amount	SBP/DBP change (mmHg)
Sodium reduction	1.8 g or 78 mmol/day	-5.0 / -2.7
Weight loss	Per kg lost	-1.1 / -0.9
Alcohol intake	-3.6 drinks/day	-3.9 / -2.4
Exercise	120-150 min/week	-4.9 / -3.7
Dietary Patterns	DASH diet	-11.4 / -5.5
	Hypertensive Normative	-3.6/-1.8

**Treatment Target Values**

The treatment targets recommended for Canadian adults with systemic hypertension are different depending on whether patients have additional comorbidities, specifically existing CVD, diabetes and/or renal disease.

Without diabetes and/or renal disease	< 140/90 mmHg
With nondiabetic renal disease or proteinuria	< 130/80 mmHg
With diabetes, chronic Kidney disease or existing CVD	< 130/80 mmHg