



Care	Objective	Target
Routine Assessment & Monitoring	Clients on non-pharmacologic therapy, follow up every 3-4 months. Clients on antihypertensive drug therapy, follow up every month until 2 consecutive BP readings are at target, then follow up every 3-6 months. More frequent follow-up is recommended for those with symptomatic HTN, severe HTN, antihypertensive drug intolerance or target organ damage.	Decrease morbidity & mortality. Optimize BP control with an effective, well-tolerated treatment regimen
Blood pressure (BP)	Use standardized measurement techniques and validated equipment to ensure accurate measurement. Measurement using electronic upper arm devices is preferred. Four acceptable approaches are: automated office, non-automated office, ambulatory and home BP monitoring. For info on BP measurement devices: <a href="http://www.dableducational.org/sphygmomanometers.html">www.dableducational.org/sphygmomanometers.html</a> <a href="http://www.bhsoc.org/bp-monitors/bp-monitors/">www.bhsoc.org/bp-monitors/bp-monitors/</a>	For everyone, including those with CKD: <b>&lt;140/90</b> ; For those with diabetes: <b>&lt;130/80</b> <b>HTN urgencies/emergencies:</b> diastolic BP $\geq 100^*$ or systolic BP $\geq 160^*$ in those without CVD; *thresholds arbitrary and need to consider clinical & client situation; see FNIHB CPGs for further guidance
Body mass index (BMI)	Measure height, weight and calculate BMI (mass in kg/height in m <sup>2</sup> ); overweight individuals with HTN should be advised to lose weight	Range associated with the least health risk is <b>18.5–24.9</b> ; Overweight 25-30; Obese >30
Waist circumference (WC)	Measure, using proper technique, as an indicator of abdominal fat.	<b>Male <math>\geq 102</math>cm; Female <math>\geq 88</math>cm</b> (North America)
Self-management goal	Collaboratively establish goal(s) to effect behaviour changes that improve clinical outcomes, or smaller changes that increase client's self-efficacy	Goal(s) set collaboratively based on client's level of importance and confidence
Nutrition	Consume a diet that emphasizes fruits, vegetables, low-fat dairy products, whole grain foods rich in dietary fibre, and protein from plant sources that is reduced in saturated fat and cholesterol (Dietary Approaches to Stop Hypertension [DASH] diet; consider reducing sodium intake; increase dietary potassium intake (if not at $\uparrow$ risk for hyperkalemia); limit alcohol intake	Sodium intake $< 2000$ mg/day; DASH dietary pattern; Increased intake of potassium; No or moderate alcohol consumption
Physical activity	Regular physical activity is recommended for both prevention and management of HTN	Aerobic: <b><math>\geq 150</math> minutes/week</b> Resistance: <b>3 sessions/week</b>
Smoking	Tobacco use status should be updated on a regular basis and healthcare providers should clearly advise clients to quit. Advice in combination with pharmacotherapy (eg: varenicline, bupropion, nicotine replacement therapy) should be offered with the goal of cessation.	<b>Smoking cessation</b>
Psychosocial	For patients in whom stress might be a contributor to high BP, stress management should be considered as an intervention; individualized cognitive-behavioural interventions are more likely to be effective when relaxation techniques are used	Client coping and stress manageable
Renal function	Assess for renal injury/damage using a random urine sample for albumin to creatinine ratio (ACR), and renal function using a serum creatinine converted to an estimated glomerular filtration rate (eGFR).	Normal ACR: <b><math>&lt; 2.0</math> mg/mmol</b> Normal eGFR: <b><math>&gt; 60</math> mL/min</b>
Blood glucose	Assess at diagnosis and at least annually thereafter using FBG and/or A1C Diabetes develops in 1-3% per year of those with drug-treated HTN. The risk is higher in those with one or more of: treated with a diuretic or beta-blocker, IFG or IGT, obesity (especially abdominal), dyslipidemia, and sedentary lifestyle and poor dietary habits	Normal FBG: <b><math>\leq 6.0</math> mmol/L</b> Normal A1C: <b><math>\leq 5.9</math> %</b>
Electrolytes	Assess electrolytes after initiation of antihypertensive therapy, and with any dosage changes, in particular, monitor K <sup>+</sup> level	Normal Na <sup>+</sup> : <b>135-145 mmol/L</b> Normal K <sup>+</sup> : <b>3.6 – 5.2 mmol/L</b>
Global cardiovascular risk	Assess global cardiovascular risk using a multifactorial risk assessment model/tool such as those available at <a href="http://www.score-canada.ca">www.score-canada.ca</a> or <a href="http://www.myhealthcheckup.com">www.myhealthcheckup.com</a> Consider informing clients of global risk to improve effectiveness of risk factor modification. Consider using analogies such as “cardiovascular age”, “vascular age” or “heart age” to inform clients of their risk status.	<b>Consider statin therapy if <math>\geq 3</math> CV risk factors:</b> Male, age $\geq 55$ years, LVH, other ECG abnormality, PAD, previous stroke or TIA, microalbuminuria, DM, smoking, family hx of premature CVD, or TC:HDL $\geq 6$ <b>Consider combination of low-dose ASA</b> in clients $\geq 50$ years of age (caution if BP not controlled)
Dyslipidemia	Assess <b>fasting or non-fasting</b> lipid levels (TC, LDL, HDL, TG, and Non-HDL; ApoB optional); Treat-to-target approach in management of dyslipidemia to mitigate CVD risk	Lipid targets for those on pharmacotherapy: <b>Primary target:</b> LDL $< 2.0$ mmol/L or $> 50\%$ reduction <b>Alternate primary target:</b> ApoB $< 0.8$ g/L or non-HDL $< 2.6$ mmol/L
<b>Key messages regarding pharmacotherapy:</b> <ul style="list-style-type: none"> <li>• Combination therapy often required to reach target</li> <li>• Follow up to check kidney function and electrolytes after initiation of antihypertensive therapy and any time dosage changes</li> <li>• Establish minimal dose required to achieve target, and periodically consider decreasing or discontinuing meds if possible; and</li> <li>• Assess adherence at each visit</li> </ul>		
<b>Care objectives:</b> People with chronic disease(s) will have better outcomes if primary healthcare providers: <ul style="list-style-type: none"> <li>• Identify patients with chronic disease(s) in their practice;</li> <li>• Encourage self-management and use of interdisciplinary team approach to attain care objectives;</li> <li>• Schedule disease-focused (proactive) visits; and</li> <li>• Use a patient care flow sheet and systematic recall for visits</li> </ul>		

Canadian Hypertension Education Program accessible at <http://guidelines.hypertension.ca/chep-resources/>

RNAO. (2010) *Strategies to Support Self-Management in Chronic Conditions: Collaboration with Clients*. Available online