

Hypertension Guidelines for Bermuda 2011: Best practice check list for measuring blood pressure

Screen for Hypertension:

1. Routinely screen all patients for hypertension every 1-2 years.
2. Screen for hypertension in patients known to be high risk (eg, patients with diabetes, patients with a history of coronary artery disease) at each visit.

Measure blood pressure (BP):

1. Before measuring blood pressure ensure patients:
 - a. have not, in the previous 30 minutes:
 - i. Smoked
 - ii. Consumed alcohol
 - iii. Exercised
 - b. are:
 - i. rested for at least five minutes
 - ii. seated in a comfortable chair with back supported and feet on the ground
 - iii. bare armed with arm at heart level
2. Ensure the use of:
 - a. Appropriate sized cuff
 - b. Appropriate technique
 - c. BP equipment which has been validated every six months
 - d. Staff who are trained in auscultatory method of BP measurement
3. Take more than one BP reading to confirm elevated BP.
4. Take standing BP at the initial estimation in elderly and/or patients with diabetes.
5. Record BP reading, patient position and arm cuff size in notes.
6. Record reading to the nearest 2mmHg.
7. In children and adolescents hypertension is determined by height and age (see tables in Guidelines pages 62-65) .

Confirm High Blood Pressure:

1. Confirm high BP based on the initial visit, plus one or more follow-up visits with at least three blood pressure readings at each visit.
2. Follow up recommendations based on JNC VII schedule (see table page 8 Guidelines).
3. Use ambulatory BP monitoring to assist with equivocal findings.
4. Document stage of hypertension based on classification: Normal, Prehypertensive, Stage 1, Stage 2 or Stage 3.

Evaluate and assess stage of hypertension and risk of complications:

1. Determine stage of hypertension, specifically looking for secondary causes.
2. Assess impact of hypertension (end organ damage - CKD). Refer patients with evidence of end-organ damage for specialist input.
3. Estimate overall risk of developing premature cardiovascular disease.

Monitor blood pressure:

1. Monitor hypertensive patients as per the Guidelines:
 - o BP <140/90 reassess in 3-6 months
 - o BP 140-159/90-99 (Stage 1) reassess within 2 months
 - o BP > 140-159/90-99 reassess as per guidelines (page 17)

Manage/treat blood pressure:

☐ Lifestyle Management:

1. Initiate lifestyle modification (including patients with pre-hypertension).
2. Includes regular physical activity, following DASH low sodium diet, weight control, alcohol limits, smoking cessation and stress management.
3. Observe patients for 3-6 months for Stage 1 and 2 Hypertension. Do not hesitate to initiate drug therapy when necessary to meet BP goals.
4. Ongoing lifestyle management required even with drug therapy.

☐ Pharmacological Management:

1. Certain medications have adverse effects more relevant in certain patient groups (consider ethnicity and age in choice of agent).
2. Use Algorithm 2 to choose drugs for patients newly diagnosed with hypertension (page 26).
3. Check Hypertension Guidelines for treatment options for persons with diabetes (page 30), renal disease (page 34), cardiac disease (page 37), women (page 43), men (page 45), seniors (page 46) and children (page 47).
4. Up to two thirds of people will need 2 or more drugs to meet their target blood pressure.
5. Consider cost of medications when prescribing (see drug price comparison section page 28).

☐ Strategies to improve adherence to management plans:

Build rapport with patient and use strategies to improve adherence.

1. Address patient issues:
 - a. Emotional stress (denial), financial and other personal concerns.
 - b. Alcohol, tobacco and drug use.
 - c. Barriers to adherence to medication and lifestyle recommendations.
2. Simplify drug regimes.
3. Write a list of medications/treatment goals for patient to take home.
4. Encourage patients to bring family member to appointment and request their help/support.
3. Routinely discuss important lifestyle modifications with patients to decrease the risk of hypertension.

**Information from:
Hypertension Guidelines for Bermuda 2011**

Hypertension Task Group