Algorithm 1: Detection and diagnosis of hypertension

Detection of elevated blood pressure* (≥140/90)
Schedule repeat office assessment

VISIT 1
Hypertension-specific visit
Average (avg.) BP ≥140/90

VISIT 2
- Offer lifestyle management
- Assess further for hypertension (office or self/home BP monitoring)**
- Offer investigations to assess target organ damage and CHD risk***
- Perform physical exam

VISIT 3
Diagnosis of hypertension confirmed
(Avg. BP ≥ 140/90 on three separate occasions)

VISIT 2
- Avg. BP ≥ 160/100 or
- BP < 160/100 with DM, CKD, LVH or vascular dementia or
- CHD risk ≥ 20% over 10 years

If lifestyle management insufficient (i.e., Avg. BP ≥ 140/90)

If diastolic BP > 130 or BP > 180/110 with signs/symptoms (papilloedema, retinal hemorrhage), then urgent treatment
Not hypertensive, review as indicated (age, risk)

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Offer pharmacologic treatment with lifestyle management and reassess regularly

Schedule repeat office assessment

Note: 24-hour ambulatory blood pressure measurement may provide information on white-coat hypertension and may also be helpful in assessing patients with apparent drug resistance, hypotensive symptoms with antihypertensive medications, episodic hypertension and autonomic dysfunction.4

* Rule out exogenous factors, for example: NSAIDS, steroids, oral contraceptives, decongestants, alcohol, stimulants, salt, sleep apnea

** Assess BP for the diagnosis of hypertension:
- Office BP assessment: Avg. BP ≥ 140/90 over 3 visits (See Appendix A for technique)
- 1 week home/self BP measurement (if available): Avg. BP ≥ 140/90 (See Appendix C for worksheet)

*** Investigations and risk assessment:
Urinalysis; blood chemistry (potassium, sodium, creatinine/estimated glomerular filtration rate); fasting blood glucose; fasting total cholesterol; high-density lipoprotein; low-density lipoprotein; triglycerides; standard 12 lead electrocardiogram; microalbuminuria (albumin/creatinine ratio); Framingham risk assessment (10-year CHD risk) or UKPDS risk assessment if Type II Diabetes.