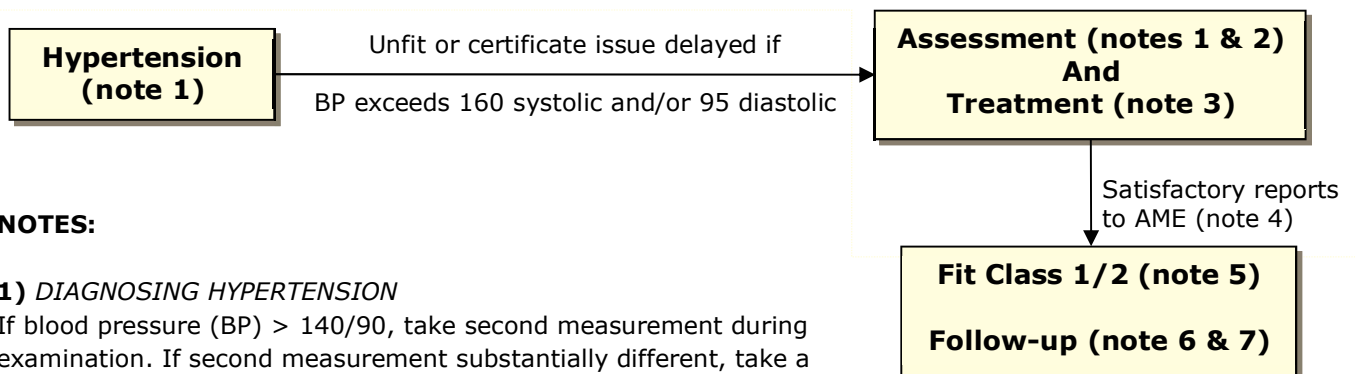


## Flowchart – Hypertension certification



### NOTES:

#### 1) DIAGNOSING HYPERTENSION

If blood pressure (BP) > 140/90, take second measurement during examination. If second measurement substantially different, take a third measurement. Record the lower of the last 2 measurements on the Medical Examination Report. If BP > 140/90, perform 24hr ambulatory BP. Use mean value of at least 14 measurements during waking hours. If 24 hr ambulatory BP cannot be tolerated or for Class 2 certificate holders, home blood pressure monitoring is acceptable (for each blood pressure recording, take 2 measurements 1 minute apart, take 2 recordings a day for at least 4 days, discard 1st day measurements and use average value of remaining measurements).

#### 2) ASSESSMENT

- Check for end organ damage: echocardiography should be performed if ECG shows LVH, repolarisation changes or LA overload; hypertensive retinopathy or chronic renal disease.
- Check urinalysis and urea, creatinine and electrolytes.
- Assess cardiovascular risk (using the [NHG cardiovascular risk assessment tool](#)).
- Certificate holders with hypertension should be referred to their GP or cardiologist for investigation and treatment

#### 3) BLOOD PRESSURE MEDICATION

For pilots already established on a thiazide-like diuretic whose blood pressure is stable and well controlled, treatment can be continued, but if treatment plan is reviewed then alternative acceptable medications should be considered.

Acceptable medication:

- Non-Loop diuretics
- ACE inhibitors (e.g. Ramipril)
- Angiotensin II/AT1 blocking agents (sartans)
- Slow-release calcium channel blocking agents
- Beta-blocking agents (e.g. Atenolol)

Unacceptable medication:

- Centrally acting agents (e.g. methyldopa)
- Adrenergic blocking drugs (e.g. guanethidine)
- Alpha-blocking drugs (Doxazosin may be acceptable in exceptional cases, providing not used as first line treatment- consult Medical Assessor)
- Loop diuretics (e.g. furosemide)

**4)** A full report from cardiologist or GP to the AME should confirm that the BP has stabilised on acceptable treatment (for a minimum of 2 weeks) and that the pilot has no treatment-related side-effects. If satisfactory a fit assessment can be made and/or a medical certificate issued. Reports should be sent to the Medical Assessor.

**5)** Pilots with complications of hypertension or multiple risk factors may need to be referred to (Class 1) or discussed with (Class 2) the Medical Assessor. Class 1 pilots with multiple risk factors (10 year cardiovascular risk  $\geq$  10%) should undergo periodic exercise testing. An OML may be required.

**6)** Pilots should provide evidence of BP stability to their AME at their periodic medical examinations.

**7)** Any changes in medication or dosage should be notified to an AME and will require a two week period of grounding. After two weeks the pilot should provide their AME with a report from their GP or treating specialist to confirm the changes, stability of BP and no treatment related side-effects.