

CLINICAL GUIDELINE

Hypertension Management, Heart MCN

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.

Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.



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Heart MCN Hypertension Guidelines

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NHSGGC 2024 Heart MCN Hypertension Guidelines

This guideline is intended for use by primary care clinicians to guide diagnosis and subsequent management of hypertension in adult patients in GG&C

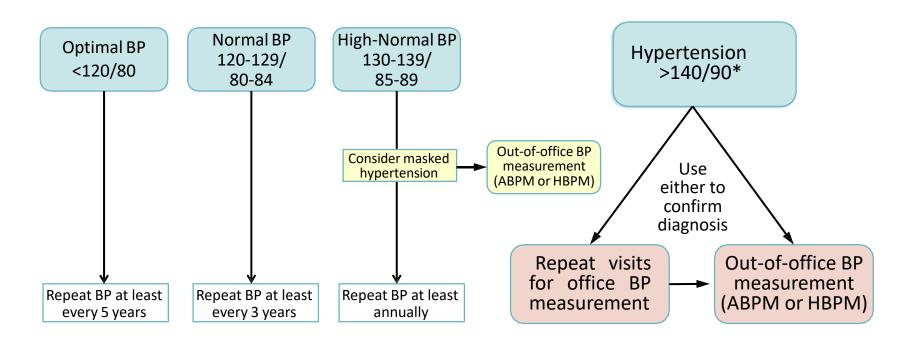
Investigation and Assessment of Risk: <u>All</u> patients ≥ 40 years should have their blood pressure recorded.

High Risk category patients are those with:

- 1. Target organ damage (TOD)
- 2. Known cardiovascular disease
- 3. Previous stroke or Transient Ischaemic Attack
- 4. Renal disease
- 5. Diabetes mellitus
- 6. Previous hypertension (HTN) in pregnancy

Essential investigations in all hypertensives:

- 1. Urinalysis for protein/albumin
- 2. U&Es/eGFR
- 3. Fasting (preferable) glucose
- 4. Fasting (preferable) lipid profile
- 5. ECG
- 6. Use ASSIGN score to define cardiovascular risk



Measurement of Clinic Blood Pressure

- The patient should be seated on an upright chair for 5 minutes, with the arm supported.
- Blood pressure must be measured in silence, the patient not talking.
- Ideally three readings should be taken. The first should be discarded, and the second and third averaged.
- A validated automatic device is recommended, if in sinus rhythm.
- In atrial fibrillation blood pressure must be measured manually.
- If there are any postural symptoms, standing BP must be measured. Use standing BP as the target, if lower than seated BP.

Notes on ambulatory or home blood pressure monitoring (ABPM/HBPM)

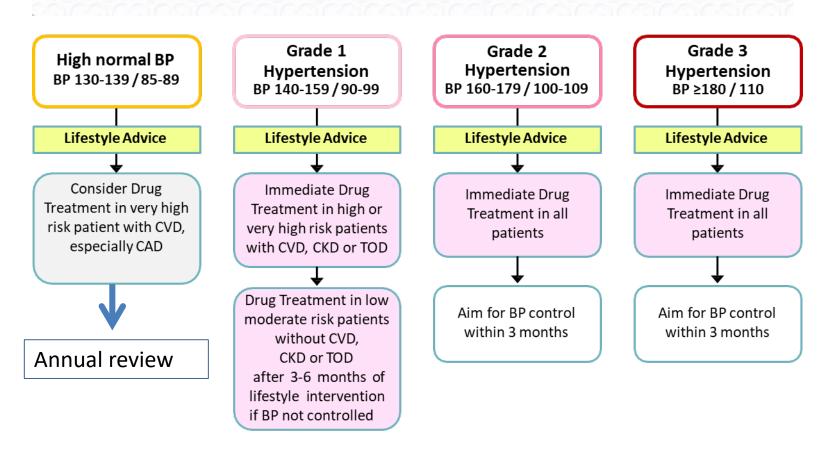
HBPM – Two measurements, one minute apart, twice daily, preferably morning and evening. Continue for four to seven days. Discard measurements on first day and average remaining measurements.

* Thresholds/targets for ABPM/HBPM are 5/5 mm Hg lower than clinic BP values.

ABPM/HBPM should use a validated device. Results from ABPM/HBPM are broadly similar

Classification of high blood pressure

	Category	Systolic (mmHg)		Diastolic (mmHg)
(Optimal	< 120	and	< 80
1	Normal	120–129	and/or	80-84
ı	High normal	130–139	and/or	85-89
	Grade 1 hypertension	140-159	and/or	90-99
	Grade 2 hypertension	160–179	and/or	100-109
(Grade 3 hypertension	≥ 180	and/or	≥ 110
ا (Isolated systolic hypertension	≥ 140	and	< 90



Lifestyle advice:
Restrict salt to 3-5 g/day
Lose weight if obese
Alcohol <14U/week
Regular aerobic exercise
Diet high in fibre especially oats

* CVD is Cardiovascular disease CAD is Coronary Artery Disease

NHSGGC 2024 Heart MCN Hypertension Guidelines

Initiate drug treatment and consider early implementation of dual therapy

A+C or A+D

(Consider monotherapy in low-risk grade 1 hypertension or in patients ≥ 80 years, or frailer patients. Initiate an A drug for patients <55; C or D if >55 or black person of African or Caribbean family origin of any age)

Indications for referral

Urgent -

- 1. Malignant/extreme hypertension
- 2. hypertension in pregnancy

Routine -

- 1. BP > 160/100 mmHg despite a combination of three antihypertensive drugs
- 2. Proteinuria or haematuria
- 3. $eGFR < 30mL/min/1.73m^2$
- 4. < 30 years. Investigate for secondary causes. Referral for TOD assessment

STEP 2

STEP 3

STEP 1

If BP not at target, combine A+C+D

If BP still not at target, add:

- Further diuretic therapy: spironolactone 25mg daily (if K⁺ ≤
 4.5 mmol/L and eGFR>60mL/min/1.73m²), or Amiloride 5-10 mg daily
- Doxazosin or Beta blocker can be considered if additional diuretic therapy fails

Consider seeking specialist advice

Consult the Formulary preferred list for choice of therapy in each class.

A = ACE inhibitor or angiotensin receptor blocker

C = Calcium channel blocker,

D = Thiazide or Thiazide-like diuretic

Treatment of hypertension

- While NICE suggests monotherapy when initiating treatment, dual therapy initiation at lower doses may be used (ESC and ESH)
- Consider single pill combination therapy if adherence an issue.
- Consider compelling contraindications: e.g. pregnancy ACEI, ARBs, spironolactone; gout -Thiazides; Asthma Beta-blockers
- Tailor treatment to the individual needs of the patient

NHSGGC 2024 Heart MCN Hypertension Guidelines

BP treatment targets: < 140/90 mmHg in all patients

Patients <65 years

< 140/90 mmHg in all patients.

If the treatment is well tolerated, target <130/80 mmHg

Older patients 65-80 years

< 140/90 mmHg in all patients

Target SBP 130 to < 140 mmHg and DBP < 80 mm Hg if tolerated

Patients >80 years

<150/80 mm Hg if tolerated.

Check seated and standing BP in all older patients. Use standing BP if lower.

Please see frailty guidelines for further advice when prescribing for the elderly, tailor treatment to the individual needs of the patient

polypharmacy-review.pdf (scot.nhs.uk)

Encourage regular practice/home monitoring

Awareness of InHealthcare Portal for patient-generated BP data

Login with Inhealthcare - Inhealthcare Ltd. (thirdparty.nhs.uk)