

Updated Nice guideline for blood pressure in adults: what's new?

In August 2019, the National Institute for health and Care Excellence (Nice) published new national guidance for the management of blood pressure in adults.

What's new?

This update sees the biggest change to the guideline since it was first published in 2011 – namely reducing the level of a person's cardiovascular disease (CVD) risk at which treatment for high blood pressure can be started.

Nice now recommends that blood pressure-lowering drugs should be offered to people aged under 80 with a diagnosis of stage 1 hypertension who have a 10% or greater risk of developing CVD within the next 10 years. This is in contrast to the 20% risk threshold used in previous Nice guidelines.

By diagnosing high blood pressure earlier and managing it in line with this new guidance, Nice expects that thousands more will benefit from blood pressure treatment.

What role can pharmacy teams play?

Hypertension is a major risk factor for stroke, heart attack, heart failure, chronic kidney disease, cognitive decline and premature death. It is estimated that one in three adults in the UK has high blood pressure, and prevalence increases with age. It is projected that 25% of adults globally have hypertension.

Pharmacists and pharmacy staff are in an ideal position to provide advice about hypertension and lifestyle measures that can be implemented to help reduce blood pressure, as well as identify those people most at risk.

What does the guideline recommend for diagnosis and management?

Measuring blood pressure

Pharmacists should have appropriate training before taking blood pressure measurements, Nice says.

When measuring blood pressure:

- the patient should be in a relaxed and temperate setting (eg a consultation room)
- they should be quiet and seated
- their arm should be outstretched and supported
- an appropriate cuff size for the arm should be used.

Diagnosis

Nice recommends that hypertension is diagnosed in people with:

- a clinic blood pressure of 140/90 mmHg or higher from multiple readings, and
- an ambulatory blood pressure monitoring (ABPM) or home blood pressure monitoring (HBPM) average reading of 135/85 mmHg or higher, to confirm the diagnosis.

Those with blood pressure of 180/120 mmHg or higher require same-day referral.

If hypertension is not diagnosed, blood pressure should be measured every five years, or more frequently in those with readings near 140/90 mmHg. For patients with type 2 diabetes, it should be measured every year.

Lifestyle interventions

Lifestyle interventions can reduce blood pressure. Pharmacists are well-placed to give lifestyle advice to those with suspected or diagnosed hypertension.

Nice advises that patients may be offered advice on the following interventions:

- Diet and exercise – offer guidance, and written or audio-visual materials to encourage change
- Alcohol – encourage a reduced intake of alcohol in those who drink
- Caffeine – discourage excess consumption of coffee and other caffeine-rich products
- Sodium intake – encourage reduction or substitution of dietary sodium intake
- Smoking – encourage those who smoke to stop smoking
- Local initiatives – signpost people to local organisations/groups promoting healthy lifestyle changes.

Drug treatment

Nice recommends that healthcare professionals should discuss treatment options with patients, so they have an understanding of the types of treatment available and the importance of medicines adherence.

It also recommends that antihypertensive treatment, in addition to lifestyle advice, may be offered to those with:

- persistent blood pressure of 160/100 mmHg or higher (and subsequent ABPM or HBPM average of 150/95 mmHg or higher)
- persistent blood pressure between 140/90 mmHg and 159/99 mmHg (and subsequent ABPM or HBPM average of 150/95 mmHg or higher), under the age of 80 and one or more of the following:
 - target organ damage; established CVD; renal disease; diabetes; or an estimated 10-year risk of CVD of 10% or more
- persistent blood pressure between 140/90 mmHg and 159/99 mmHg (and subsequent ABPM or HBPM average of 150/95 mmHg or higher), under the age of 60 and estimated 10-year risk of CVD below 10%
- clinic blood pressure over 150/90 mmHg, over the age of 80
- isolated systolic blood pressure of 160 mmHg or more.

Clinical judgement should be used in those who are frail or with multimorbidity.

Nice recommends the following stepwise treatment approach for hypertension*:

Step 1:

- ACE inhibitor (ACEI), or angiotensin II receptor blocker (ARB) or
- calcium-channel blocker (CCB) or
- thiazide-like diuretic.

Step 2 (discuss adherence):

- add on an alternate first-line drug – but do not combine an ACEI with an ARB.

Step 3 (discuss adherence and ensure doses of current medicines are optimal):

- offer a combination of ACEI or ARB, and CCB and a thiazide-like diuretic.

Step 4 (discuss adherence and confirm elevated blood pressure measurements):

- add fourth drug, such as: spironolactone; alpha-blocker; or beta-blocker; or
- seek specialist advice.

* See Nice guidance for further information on treating hypertensive patients with type 2 diabetes.

This summary is intended as a quick guide resource for pharmacy teams about the Nice guideline on 'Hypertension in adults: diagnosis and management'. For more detailed information, please see the full guideline at tinyurl.com/niceguideline136.

Other sources of useful information include:

- Nice Clinical Knowledge Summary: Hypertension – not diabetic.
- NHS website: High blood pressure.

References

- National Institute for health Care and Excellence (2019) Hypertension in adults: diagnosis and management. Nice guideline (NG136)
- National Institute for health Care and Excellence (2018) Clinical Knowledge Summaries: Hypertension - not diabetic.