



NICE lowers treatment threshold for high blood pressure

Elisabeth Mahase

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Patients with hypertension aged under 80 with an estimated 10 year risk of cardiovascular disease of 10% or more should be offered blood pressure lowering drugs, new NICE guidelines state.¹

The recommendation represents a large reduction in the treatment threshold for hypertension, which was previously set at 20% risk of cardiovascular disease.

NICE said that the change would have a “significant impact on practice” with many more people becoming eligible for treatment, meaning more time and resources needed to start and monitor patients on antihypertensive drugs.

Clinical management of hypertension currently accounts for 12% of visits to primary care and up to £2.1bn (€1.3bn; \$1.5bn) of healthcare expenditure.

The updated guidelines recommend that starting antihypertensive drug treatment, in addition to lifestyle advice, should be discussed with adults aged under 80 with persistent stage 1 hypertension who have one or more of the following: target organ damage, established cardiovascular disease, renal disease, diabetes, or an estimated 10 year risk of cardiovascular disease of 10% or more. Stage 1 hypertension is defined as clinic blood pressure of 140/90 to 159/99 mm Hg and a subsequent daytime average on ambulatory blood pressure monitoring or average home blood pressure measurements of 135/85 to 149/94 mm Hg.

Antihypertensive drugs should be offered to adults of any age with persistent stage 2 hypertension (clinic blood pressure of 160/100 mm Hg or higher but less than 180/120 mm Hg and subsequent ambulatory daytime average or home measurement average of 150/95 mm Hg or higher). Clinical judgment should be used for people of any age with frailty or multimorbidity.

Because of variation in how the previous 20% risk threshold recommendation was implemented, NICE said that around half of people with stage 1 hypertension and with risk below 20% were already receiving antihypertensive drugs.²

The guidelines said, “The committee members were mindful of the additional population that would be affected by lowering the threshold and aware that the decision to start drug treatment would depend on the person’s preferences and their individual risk of cardiovascular disease.

“People with stage 1 hypertension should already be monitored every year, but reducing the threshold will increase the number of people being prescribed antihypertensive drugs and increase staff time and consultations involved in starting and monitoring their drug treatment.”

The committee predicted that adopting the guidelines would reduce cardiovascular events and lead to savings for the NHS, although it acknowledged that the costs and savings “may fall in different sectors of the NHS.”

High blood pressure affected around 13.5 million people in 2015 and contributed to 75 000 deaths in England, NICE said.

When the draft guidelines were first announced earlier this year, some doctors welcomed the shift in focus towards early intervention, while others warned that, as the change could affect many patients, it should not be taken lightly and must be evidence based.³

An editorial published in *The BMJ* raised concerns about the potential harms of lowering the treatment threshold, including adverse drug reactions, psychological harms, and overtreatment.⁴

- 1 NICE. Hypertension in adults: diagnosis and management. 2019. <https://www.nice.org.uk/guidance/ng136/chapter/recommendations#starting-antihypertensive-drug-treatment>
- 2 Sheppard JP, Stevens S, Stevens RJ, et al. Association of guideline and policy changes with incidence of lifestyle advice and treatment for uncomplicated mild hypertension in primary care: a longitudinal cohort study in the Clinical Practice Research Datalink. *BMJ Open* 2018;8:e021827. 10.1136/bmjopen-2018-021827 30185571
- 3 Pike H. NICE proposes lower threshold for treating high blood pressure. *BMJ* 2019;364:l1105. <https://www.bmj.com/content/364/bmj.l1105>. 10.1136/bmj.l1105 30850358
- 4 Haase CB, Gyuricza JV, Brodersen J. New hypertension guidance risks overdiagnosis and overtreatment. *BMJ* 2019;365:l1657. 10.1136/bmj.l1657 30979699

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