

1           **NATIONAL INSTITUTE FOR HEALTH AND CARE  
2           EXCELLENCE**

3           **Guideline scope**

4           **Hypertension in adults (update)**

5       This guideline will update the NICE guideline on hypertension in adults  
6       (CG127).

7       The guideline will be developed using the methods and processes outlined in  
8       [Developing NICE guidelines: the manual](#).

9       This guideline will also be used to update the NICE [quality standard](#) for  
10      hypertension in adults.

11      **1           Why the update is needed**

12      New evidence that could affect recommendations was identified through the  
13      surveillance process. Topic experts, including those who helped to develop  
14      the existing guideline, advised NICE on whether areas should be updated or  
15      new areas added. Full details are set out in the [surveillance review decision](#).

16      ***Why the guideline is needed***

17      **Key facts and figures**

18      High blood pressure (hypertension) is one of the most important treatable  
19      causes of premature morbidity and mortality in the UK. Hypertension is a  
20      major risk factor for stroke (ischaemic and haemorrhagic), myocardial  
21      infarction, heart failure, chronic kidney disease, cognitive decline and  
22      premature death. Untreated hypertension is usually associated with a  
23      progressive rise in blood pressure. The vascular and renal damage that this  
24      may cause can potentially culminate in a treatment-resistant state.

25      Blood pressure is normally distributed in the population and there is no natural  
26      cut-off point above which 'hypertension' definitively exists and below which it  
27      does not. The risk associated with increasing blood pressure is continuous,

1 with each 2 mmHg rise in systolic blood pressure associated with a 7%  
2 increased risk of mortality from ischaemic heart disease and a 10% increased  
3 risk of mortality from stroke. Hypertension is common in the UK and the  
4 prevalence is strongly influenced by age. In people younger than 50, diastolic  
5 pressure is more commonly elevated than systolic pressure. With ageing,  
6 systolic hypertension becomes a more significant problem, as a result of  
7 progressive stiffening and loss of compliance of larger arteries. At least one  
8 quarter of adults (and more than half of those older than 60) have high blood  
9 pressure.

10 The clinical management of hypertension is one of the most common  
11 interventions in primary care, accounting for 12% of visits to primary care  
12 practitioners, and its consequences are responsible for up to £2.1 billion of  
13 healthcare expenditure.

14 **Current practice**

15 Since the publication of the 2011 guideline, there has been variable access to  
16 ambulatory blood pressure monitoring and consequently uptake of home  
17 blood pressure monitoring has been low.

18 Resistant hypertension continues to be a challenge. Current pharmacological  
19 treatment regimens often fail to achieve adequate reductions in blood  
20 pressure.

21 Developments in the pharmacological management of hypertension have  
22 resulted in the publication of substantial clinical trial data since the 2011  
23 guideline was published. This evidence needs to be reviewed in the context of  
24 existing guidance.

25 In addition, the management of malignant hypertension in secondary care has  
26 been identified as a priority topic and will be reviewed within this update, as  
27 will blood pressure management in adults with type 2 diabetes.

## 1    2       Who the guideline is for

2    People using services, their families and carers and the public will be able to  
3    use the guideline to find out more about what NICE recommends, and help  
4    them make decisions.

5    This guideline is for:

- 6      • Healthcare professionals in primary and secondary care.
- 7      • Commissioners and providers of services.

8    NICE guidelines cover health and care in England. Decisions on how they  
9    apply in other UK countries are made by ministers in the [Welsh Government](#),  
10   [Scottish Government](#), and [Northern Ireland Executive](#).

### 11   ***Equality considerations***

12   NICE has carried out [an equality impact assessment](#) during scoping. The  
13   assessment:

- 14      • lists equality issues identified, and how they have been addressed
- 15      • explains why any groups are excluded from the scope.

16   The guideline will look at inequalities relating to the needs of

- 17      • people of west African and Caribbean family origin in the context of hypertension and increased risk of stroke
- 18      • people of Indian family origin in the context of hypertension and increased risk of renal and cardiovascular complications, especially in people with diabetes
- 19      • people aged over 80 if these differ from the needs of the general adult population.

## 1    3        What the updated guideline will cover

### 2    3.1        Who is the focus?

#### 3    Groups that will be covered

- 4    • Adults (over 18 years) with hypertension.
- 5    • Adults with hypertension and type 2 diabetes.

6    No specific subgroups of people have been identified as needing specific  
7    considerations.

#### 8    Groups that will not be covered

- 9    • Children and young people (under 18 years).
- 10    • Pregnant women and women planning pregnancy.
- 11    • People with secondary causes of hypertension such as tumours or  
12      structural vascular defects (including Conn's adenoma,  
13      phaeochromocytoma and renovascular hypertension).
- 14    • People with type 1 diabetes.
- 15    • People with chronic kidney disease in an ACR (albumin:creatinine ratio)  
16      category of A3 or above.

### 17    3.2        Settings

#### 18    Settings that will be covered

- 19    • All settings in which NHS commissioned care is provided.

### 20    3.3        Activities, services or aspects of care

#### 21    Key areas that will be covered in this update

22    We will look at evidence in the areas below when developing this update. We  
23    will consider making new recommendations or updating existing  
24    recommendations in these areas only.

- 25    1        Diagnosing hypertension.
- 26    2        Monitoring blood pressure.

## **Proposed outline for the guideline**

The table below outlines all the areas that will be included in the guideline. It sets out what NICE plans to do for each area in this update.

Area of care	What NICE plans to do
Measuring blood pressure	No evidence review: retain recommendations from existing guideline.
Diagnosing hypertension	Review evidence: update existing recommendations as needed.
Monitoring blood pressure	Review evidence: update existing recommendations as needed.
Assessing cardiovascular risk and target organ damage	No evidence review: retain recommendations from existing guideline.
Lifestyle interventions	No evidence review: retain recommendations from existing guideline.
Initiating and monitoring antihypertensive drug treatment, including blood pressure targets	Review evidence: update existing recommendations as needed.
Choosing antihypertensive drug treatment	Review evidence: update existing recommendations as needed and include adults with type 2 diabetes.
Patient education and adherence to treatment	Remove recommendations 1.7.1, 1.7.2, and 1.7.4: refer to NICE guidelines on medicines adherence (CG76) and medicines optimisation (NG5).
Managing malignant hypertension in secondary care	Review evidence: new area in the guideline.

1 Recommendations in areas that are being retained from the existing guideline  
2 may be edited to ensure that they meet current editorial standards, and reflect  
3 the current policy and practice context.

4 **Areas not covered by the guideline**

5 These areas will not be covered by the guideline.

6 1 Preventing hypertension.

7 2 Screening for hypertension.

8 3 Specialist management of secondary hypertension (that is, hypertension  
9 arising from other medical conditions).

10 4 Non-pharmacological interventions (e.g. supplements, acupuncture,  
11 herbal remedies).

12 **Related NICE guidance**

13 • [Multimorbidity: clinical assessment and management](#) (2016) NICE  
14 guideline NG56

15 • [Chronic kidney disease in adults: assessment and management](#) (2014)  
16 NICE guideline CG182

17 • [Cardiovascular disease: risk assessment and reduction, including lipid  
18 modification](#) (2014) NICE guideline CG181

19 **NICE guidance about the experience of people using NHS services**

20 NICE has produced the following guidance on the experience of people using  
21 the NHS. This guideline will not include additional recommendations on these  
22 topics unless there are specific issues related to hypertension:

23 • [Medicines optimisation](#) (2015) NICE guideline NG5

24 • [Patient experience in adult NHS services](#) (2012) NICE guideline CG138

25 • [Service user experience in adult mental health](#) (2011) NICE guideline  
26 CG136

27 • [Medicines adherence](#) (2009) NICE guideline CG76

1   **3.4       *Economic aspects***

2   We will take economic aspects into account when making recommendations.  
3   We will develop an economic plan that states for each review question (or key  
4   area in the scope) whether economic considerations are relevant, and if so  
5   whether this is an area that should be prioritised for economic modelling and  
6   analysis. We will review the economic evidence and carry out economic  
7   analyses, using an NHS and personal social services (PSS) perspective, as  
8   appropriate.

9   **3.5       *Key issues and questions***

10   While writing this scope, we have identified the following key issues, and draft  
11   review questions related to them:

- 12   1   Diagnosing hypertension
  - 13       1.1 In adults with suspected primary hypertension, what is the best
  - 14           method of measuring blood pressure (home, ambulatory or clinic
  - 15           measurement) to establish the diagnosis and predict cardiovascular
  - 16           events?
- 17   2   Monitoring blood pressure
  - 18       2.1 In adults with treated primary hypertension, what is the best method
  - 19           of measuring blood pressure (home, ambulatory or clinic
  - 20           measurement) to assess the response to treatment and predict
  - 21           cardiovascular events?
- 22   3   Initiating and monitoring antihypertensive drug treatment, including blood
- 23   pressure targets
  - 24       3.1 At what blood pressure or cardiovascular disease risk threshold
  - 25           should antihypertensive drug treatment be initiated?
  - 26       3.2 Does the use of targets improve outcomes for adults with treated
  - 27           primary hypertension, and should these be based on blood pressure
  - 28           or cardiovascular risk?
  - 29       3.3 What are the optimum blood pressure or cardiovascular risk targets
  - 30           for adults with treated primary hypertension?
- 31   4   Choosing antihypertensive drug treatment

- 1        4.1 Which is more clinically and cost effective for first-line treatment of
  - 2              hypertension, monotherapy or combination therapy?
  - 3        4.2 What is the most clinically and cost-effective sequence of
  - 4              antihypertensive drug treatment, and does this vary with age,
  - 5              ethnicity, or presence of type 2 diabetes?
  - 6        5     Managing malignant hypertension in secondary care
  - 7        5.1 In adults with malignant hypertension, what is the most clinically and
  - 8              cost-effective treatment, and does this vary with age and ethnicity?
- 9        The draft questions may be used to develop more detailed review questions,
- 10      which guide the systematic review of the literature.

### 11      **3.6      *Main outcomes***

12      The main outcomes that will be considered when searching for and assessing

13      the evidence are:

- 14     4     All-cause mortality.
- 15     5     Stroke (ischaemic or haemorrhagic).
- 16     6     Myocardial infarction.
- 17     7     Heart failure.
- 18     8     Vascular procedures (including both coronary and carotid artery
- 19              procedures).
- 20     9     Angina needing hospitalisation.
- 21     10    Health-related quality of life.
- 22     11    Adverse events such as acute kidney injury, falls or new-onset type 2
- 23              diabetes.

## 24      **4      NICE quality standards and NICE Pathways**

### 25      **4.1      *NICE quality standards***

26      **NICE quality standards that may need to be revised or updated when**

27      **this guideline is published**

- 28      • Hypertension in adults (2013) NICE quality standard QS28

1    **4.2        NICE Pathways**

2    When this guideline is published, the recommendations will be added to NICE  
3    Pathways. NICE Pathways bring together all related NICE guidance and  
4    associated products on a topic in an interactive flowchart. The existing  
5    flowchart on [hypertension](#) will be reviewed and updated to integrate the  
6    updated recommendations.

7    **5            Further information**

This is the draft scope for consultation with registered stakeholders. The consultation dates are 9 June to 7 July 2017.

The guideline is expected to be published in August 2019.

You can follow [progress of the guideline](#).

Our website has information about how [NICE guidelines](#) are developed.