



National Audit Office



REPORT

Progress in preventing cardiovascular disease

Department of Health & Social Care, NHS England

SESSION 2024-25
13 NOVEMBER 2024
HC 304



We are the UK's independent public spending watchdog.

We support Parliament in holding government to account and we help improve public services through our high-quality audits.

The National Audit Office (NAO) scrutinises public spending for Parliament and is independent of government and the civil service. We help Parliament hold government to account and we use our insights to help people who manage and govern public bodies improve public services.

The Comptroller and Auditor General (C&AG), Gareth Davies, is an Officer of the House of Commons and leads the NAO. We audit the financial accounts of departments and other public bodies. We also examine and report on the value for money of how public money has been spent.

In 2023, the NAO's work led to a positive financial impact through reduced costs, improved service delivery, or other benefits to citizens, of £1.59 billion. This represents around £17 for every pound of our net expenditure.



National Audit Office

Progress in preventing cardiovascular disease

Department of Health & Social Care, NHS England

Report by the Comptroller and Auditor General

Ordered by the House of Commons
to be printed on 11 November 2024

This report has been prepared under Section 6 of the
National Audit Act 1983 for presentation to the House of
Commons in accordance with Section 9 of the Act

Gareth Davies
Comptroller and Auditor General
National Audit Office

6 November 2024

Value for money reports

Our value for money reports examine government expenditure in order to form a judgement on whether value for money has been achieved. We also make recommendations to public bodies on how to improve public services.

The material featured in this document is subject to National Audit Office (NAO) copyright. The material may be copied or reproduced for non-commercial purposes only, namely reproduction for research, private study or for limited internal circulation within an organisation for the purpose of review.

Copying for non-commercial purposes is subject to the material being accompanied by a sufficient acknowledgement, reproduced accurately, and not being used in a misleading context. To reproduce NAO copyright material for any other use, you must contact copyright@nao.org.uk. Please tell us who you are, the organisation you represent (if any) and how and why you wish to use our material. Please include your full contact details: name, address, telephone number and email.

Please note that the material featured in this document may not be reproduced for commercial gain without the NAO's express and direct permission and that the NAO reserves its right to pursue copyright infringement proceedings against individuals or companies who reproduce material for commercial gain without our permission.

Links to external websites were valid at the time of publication of this report. The National Audit Office is not responsible for the future validity of the links.



Contents

Key facts 4

Summary

Scope of the study 5

Part One

Cardiovascular disease in England 13

Part Two

Primary care and preventing CVD 24

Part Three

The NHS Health Check
programme 29

Part Four

Public health and preventing
cardiovascular disease 39

Appendix One

Our audit approach 43

This report can be found on the National Audit Office website at www.nao.org.uk


If you need a version of this report in an alternative format for accessibility reasons, or any of the figures in a different format, contact the NAO at enquiries@nao.org.uk

The National Audit Office study team consisted of:


Marisa Chambers, Attila Katona, Peter Langham, Sumayyah Mian, Janushanth Sritharan and Katie Thacker, under the direction of Ashley McDougall.

For further information about the National Audit Office please contact:

National Audit Office
Press Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

 020 7798 7400

 www.nao.org.uk

 @NAOorguk

Key facts

6.4mn

approximate number of people living with cardiovascular disease (CVD) in England (as at September 2024)

£7.4bn

estimated annual cost of CVD to the healthcare system in England (2019)

£62mn

total local authority spend on NHS Health Checks (Health Checks) in 2023-24

£15.8 billion estimated annual cost of CVD to the wider economy in England (2019)

41% proportion of deaths in people aged under 70 from CVD in England in 2021 which were attributed to high blood pressure

Quadruple mortality rates from CVD in people aged under 75 in the most deprived areas of England compared to those in the least deprived areas in 2020

20% proportion of the eligible population who have to be offered a Health Check every year to meet the statutory responsibilities on local authorities to cover the whole eligible population every five years

8.8% proportion of the annual eligible population who attended a Health Check in 2023-24 (scaled up, this equates to a five-year coverage of 44% of the eligible population attending Health Checks)

3% proportion of local authorities that delivered a Health Check for all of their annual eligible population in 2023-24

Summary

Scope of the study

1 Cardiovascular disease (CVD) is a general term for conditions affecting the heart or blood vessels, including heart attacks, strokes, heart failure and other arterial and aortic diseases. The British Heart Foundation estimates that there are approximately 6.4 million people in England living with CVD (as at September 2024). In 2022, CVD contributed to a quarter of deaths in England.

2 Evidence shows that CVD is largely preventable by reducing and managing obesity and diet, alcohol and smoking, and physical inactivity (the “modifiable risk factors”). High blood pressure, high cholesterol and other conditions that are risk factors for CVD are treatable if diagnosed and remedial action taken. There had been good progress in reducing premature deaths from CVD. The mortality rate from CVD in people aged under 75 had been falling between 2001 and 2013, but since 2014, progress has stalled, and the rate increased between 2019 and 2023.

3 The Department of Health & Social Care (DHSC) is responsible for setting and overseeing policy on improving public health, including reducing obesity and smoking. NHS England (NHSE) is responsible for commissioning primary care services (which play a key role in identifying patients with CVD) and delivering some prevention commitments set out in the NHS Long Term Plan. Integrated care boards are NHS organisations responsible for planning and commissioning health services for their local population. Local primary care networks sit below integrated care boards and are made up of GP practices (general practice) that work together with other health and social care organisations to provide services to improve the health and wellbeing of their local population. This includes preventative interventions and identifying and treating people who are at risk of CVD. Local authorities are responsible for taking steps that they consider appropriate to improve the health of people in their area, including commissioning and delivering public health services such as weight management. Local authorities have a statutory duty to commission NHS Health Checks for their local eligible population. While DHSC provides funding to local authorities for Health Checks through the public health grant, and retains policy responsibility, local authorities are accountable to their local population for the delivery of Health Checks.

4 This report examines the effectiveness of the government's approach to identifying, preventing and managing CVD in England. We have focused on how primary care identifies and treats people at risk of CVD through routine work with patients and the operation of the NHS Health Check programme (Health Checks) which local authorities are responsible for commissioning. As our focus is on prevention and identification this report does not look at treatment in secondary settings such as hospitals.

5 The report sets out:

- levels and trends in CVD in England (Part One);
- the role of primary care in detecting and preventing CVD (Part Two);
- commissioning, delivery and performance on Health Checks (Part Three); and
- wider public health work on preventing CVD (Part Four).

Key findings

CVD in England

6 CVD imposes costs on the NHS and on wider society. CVD imposes economic costs on society both directly through expenditure on healthcare but also indirectly due to economic inactivity. Public Health England (PHE) in 2019 estimated that the direct healthcare costs of cardiovascular disease in England were £7.4 billion each year and the costs to the wider economy were £15.8 billion each year (paragraph 1.5).¹

7 The rate of people dying prematurely from CVD had been decreasing but this decrease has stalled in the last 10 years. The rate of deaths from CVD in adults aged under 75 halved between 2001 and 2014, from 145 per 100,000 to 74 per 100,000. The rate had increased slightly to 77 per 100,000 by 2023. The number of people diagnosed with one or more of the main conditions that make up CVD increased considerably between 2006-07 and 2023-24. The number of people diagnosed with the most prevalent condition, high blood pressure (hypertension), has increased from 6.7 million to 9.4 million in that period. There have been similar increases in the number of people with other common CVD-related conditions (atrial fibrillation, strokes, and heart failure) (paragraph 1.3 and Figures 1 and 2).

8 The levels of some behaviours which are known risk factors are increasing in the population, while others show a decline. The slight increase in the rate of premature deaths from CVD has coincided with increasing levels of obesity, and little change in the rate of physical inactivity. At the same time, the rate of smoking has steadily fallen (paragraph 1.8 and Figure 5).

¹ Public Health England (PHE) was abolished in 2021. Its role and responsibilities were split between the Department of Health & Social Care, NHS England and the UK Health Security Agency (UKHSA).

9 There are well-known socioeconomic, geographic and ethnic disparities in CVD across communities in England. In 2020, deaths in people aged under 75 from CVD in the most deprived areas of England were quadruple that of those in the least deprived areas. People living in the North-West were more likely to die of CVD than people living in the South-East. PHE noted that CVD is more common where a person is male, older, has a severe mental illness or whose ethnicity is South Asian or African Caribbean (paragraphs 1.9 to 1.11 and Figures 6 and 7).

Primary care and preventing CVD

10 Primary care plays an important role in identifying people at risk of CVD and supporting them to reduce that risk. The 2019 NHS Long Term Plan stated that CVD was “the biggest area where the NHS can save lives over the next 10 years”. Primary care can opportunistically help identify people who are at risk of CVD, for example, as people access primary care in response to other health concerns or problems. However, this opportunistic approach does not address undiagnosed people who may not otherwise interact with health services (paragraphs 2.2 and 2.4).

11 NHSE cannot fully assess ongoing performance to prevent 150,000 heart attacks, strokes and dementia cases by 2028-29. In 2019, NHSE set out its ambition to prevent 150,000 heart attacks, strokes and dementia cases by 2028-29. To achieve this, NHSE set the NHS five national ambitions based on detecting and treating more people with **A**trial fibrillation, high **B**lood pressure and high **C**holesterol (the “ABC” of CVD prevention). As at June 2024, the NHS was exceeding its ambitions for 2025-26 for atrial fibrillation and treating people with a greater than 20% risk of CVD with lipid-lowering therapies (for high cholesterol). It had some way to go to meet the ambition for *treating* people with high blood pressure by 2024-25 but could not measure progress against specific ambitions to *detect the proportion* of the estimated population with atrial fibrillation or high blood pressure. It has data that show the numbers of people who have been detected as having atrial fibrillation and high blood pressure. However, these numbers may also reflect increasing numbers of people with these conditions as well as performance in detecting them (paragraphs 2.5 to 2.8 and Figure 8).

12 NHSE incentivises general practices to meet CVD related targets through the Quality and Outcomes Framework but this does not focus on under-served populations. NHSE incentivises general practices to comply with national priorities using the Quality and Outcomes Framework which is voluntary but has almost universal uptake. NHSE aims to incentivise general practices by payments to keep registers of patients with defined conditions and deliver care based on the National Institute for Health and Care Excellence (NICE) recommendations and other indicators of care. General practices are not paid extra if their achievement levels exceed payment thresholds nor do incentives focus on under-served populations who are less engaged with health services. However, these under-served populations are often most at risk from CVD and may benefit from a more focused approach from their local health services. These services may need additional or different incentivisation mechanisms to achieve this focus (paragraphs 2.10 and 2.11).

The NHS Health Check programme

13 Local authorities have a legislative requirement for continuously improving the percentage of people participating in Health Checks. DHSC introduced the NHS Health Check programme in 2009 with the aim of reducing CVD through a programme to assess and manage the risks to CVD not identified by primary care services. The programme aimed to establish an approach to assessing the risk of CVD for everyone aged between 40 and 74 who do not have pre-existing heart conditions (the “eligible population”). This would be followed by the offer of personalised advice and treatment and individually tailored support to help individuals manage their risk more effectively and support behaviour change. In 2013, responsibility for commissioning Health Checks was transferred, through legislation, from the NHS to local authorities, as part of the transfer of responsibility for elements of public health. Local authorities are required by legislation to invite 100% of the eligible population for a Health Check across five years, which equates to roughly one in five eligible people each year. The legislation did not specify that local authorities must meet targets for the numbers or percentages of eligible people to attend Health Checks and DHSC has not subsequently stated any expectation for attendance. The legislation requires local authorities to secure continuous improvement in the percentage of people participating in Health Checks. The amount local authorities have spent on Health Checks has decreased in real terms from £78 million (with 1.38 million Health Checks conducted) in 2013-14 to £62 million in 2023-24 (with 1.42 million Health Checks conducted) (paragraphs 3.3 to 3.7 and Figure 10).

14 In 2023-24, just under half of the people who were eligible for a Health Check that year attended one. The number of people attending Health Checks fell during the COVID pandemic, as the service was suspended, but it had recovered by 2023-24 to 2015-16 levels. However, the proportion of the eligible population who attended Health Checks is far short of the level of attendance needed to cover the eligible population over five years. In 2023-24, just under half of the annual eligible population attended a Health Check (8.8% compared with the approximately 20% of people eligible to attend in each year). Scaled up, this equates to a five-year coverage of 44% of the eligible population attending Health Checks. Only 3% of local authorities delivered a Health Check to all of the annual eligible population in their areas in 2023-24. The data on the number of invites to Health Checks are too problematic to use with confidence so there is no accurate picture of how many people have been invited (paragraphs 3.9, 3.10 and Figures 10 and 11).

15 There are wide variations in the percentages of eligible people who attend a Health Check across local authorities. In 2023-24, in England, just under half of the annual eligible population attended a Health Check. However, there was considerable variation among local authorities. Five local authorities delivered the implied required level of Health Checks (20%) to their eligible population in that year, while the lowest level of Health Checks delivered was just 0.1%. The wide variation in performance indicates different levels of capacity or appetite for Health Checks at local level or may signify different local needs and priorities as assessed by the commissioning local authority (paragraph 3.13 and Figure 12).

16 DHSC has no levers to influence local authorities' performance in commissioning Health Checks. Although local authorities have a statutory requirement to offer Health Checks, the legislation did not provide DHSC with levers to influence local authorities' performance. The NHS Health Check service is commissioned by local authorities who choose how to prioritise their public health grant and are accountable to their local population for the delivery of Health Checks. DHSC's governance of the Health Check programme is through its Office for Health Improvement and Disparities' (OHID) national and regional teams. This approach aims to provide oversight, guidance and support. National and regional teams can raise performance issues with local authority Directors of Public Health (paragraph 3.15).

17 Local authorities have no levers to require general practices to sign up to conduct Health Checks. Local authorities have discretion over which healthcare professionals they commission Health Checks with, as long as they meet DHSC-specified levels of competence. A PHE survey of local authorities published in 2021 found general practices were the most common provider of Health Checks. However, general practices have no obligation or requirement to deliver Health Checks to their patients. They can choose to enter a contractual agreement with a local authority to deliver Health Checks. Local authorities pay providers to deliver Health Checks but Health Checks are not part of other mechanisms or systems that NHSE routinely uses to pay and incentivise general practices services, such as the Quality and Outcomes Framework or the GP contract. Local authorities are free to use different methods of payment to general practices. Local authorities cannot routinely access general practice data so cannot assess whether the people having Health Checks are those who are at greatest risk of developing CVD (paragraphs 3.16 to 3.18 and 3.24).

18 There is increasing pressure on general practice services which may limit their capacity to do Health Checks. While many people we spoke to during our case study visits were positive and passionate about the value of Health Checks, they had concerns about the capacity of general practices to conduct Health Checks. We have not set out to assess capacity in general practices in this study but our report on emergency and unplanned care set out these pressures. Data show that there were 353 million appointments in general practice in 2023-24 compared with 290 million in 2018-19 (paragraph 3.19).²

19 DHSC has limited data on Health Checks which prevents it knowing how well the Health Check programme is working. Local authorities are required to report the numbers of people invited for a Health Check, and how many people take up the offer and attend. They are not required to provide more detailed information on the age, gender, ethnicity or socio-economic status of people who are invited to and attend Health Checks. Like local authorities, DHSC is not routinely able to access primary care data to get a more detailed picture of who is invited to and attends a Health Check and what happens after the Health Check. As a result, DHSC lacks a national understanding of whether people who are most at risk of CVD are those attending Health Checks and whether people are accessing services or clinical support to help them reduce that risk. A national audit tool, CVDPREVENT, provides the public with anonymised quarterly data on prevalence, treatment, and outcomes for a number of high-risk CVD conditions. However, CVDPREVENT does not include Health Check data so cannot be used to show links between Health Checks and age, gender and ethnicity or location of patients or general practice (paragraphs 3.20, 3.22 to 3.24).

20 A review commissioned by DHSC in 2021 found room for improvement but DHSC has only made progress against two in six of its recommendations. The review concluded that the Health Check programme had “largely achieved its aims”; and that, overall 41% (6,466,090) of eligible people between 2015 and 2020 had a Health Check, even though this was far short of the numbers of eligible people. The review made six recommendations for improvement. As of August 2024, DHSC was making progress with the digital service and is piloting a digital NHS Health Check app. In September 2023, it published research that aimed to help local authorities communicate, design and deliver Health Checks so they are more likely to engage people who are underrepresented and at greater risk of having a heart attack or stroke. In March 2024, DHSC launched a pilot to work with local authorities to provide Health Checks in the workplace. It put the pilot temporarily on hold during the pre-election period in summer 2024 but was underway by autumn (paragraphs 3.11 and 3.12).

² Data for 2018-19 were published in September 2019, data for 2023-24 were published in June 2024. Both sets of data were based on actual appointments.

Public health and preventing CVD

21 Local authorities' spending on public health services which help prevent CVD has decreased by 23%. Local authority public health-related activities which can help people manage their risks for CVD, include services for stopping smoking, adult obesity and adult physical inactivity. Local authorities fund these services through the public health grant. Total expenditure on these services has fallen in real terms by 23% from £340 million in 2015-16 to £262 million in 2023-24. Over the same period, the total public health grant fell in real terms from £4.48 billion to £3.53 billion, a fall of 21% (paragraphs 4.2 to 4.3 and Figure 13).³

22 There is no complete national or local understanding of the effectiveness of public health services which can help prevent CVD. DHSC's limited access to local public health data prevent it understanding the impact of these services. Local authorities do not provide data on the numbers of people who access these services other than some data on stop smoking services and on a small number of weight loss services. As a result, there is no complete national understanding of the benefits of these services or whether they are adequate to meet demand. Furthermore, many local authorities cannot routinely access primary care data so cannot assess the impact of these services on the long-term health of people (paragraph 4.5).

Conclusion on value for money

23 Cardiovascular disease is one of the largest avoidable causes of death in England and undermines the ability of many to live healthy lives, at a cost of billions to the economy. Health Checks are the government's key means for identifying and supporting people at risk of CVD who are not routinely identified by primary care. Given the costs of CVD to the healthcare system and the wider economy, Health Checks have potential to deliver value for money. However, there is currently no effective system for commissioning Health Checks, despite it being a statutory responsibility on local authorities. DHSC and local government have weak levers to encourage primary care or other services to deliver Health Checks. As a result, in England, just under half of the annual eligible population attended a Health Check in 2023-24, and only 3% of local authorities delivered a Health Check for all of their annual eligible population in 2023-24. This is not a satisfactory basis for delivering an important and potentially life-saving and money-saving contribution to population health.

³ Comparison of the Public Health Grant in 2014-15 to subsequent years is not possible due to changes in the services covered by the Public Health Grant. Up until October 2015, health services for children aged 5 and under were the responsibility of the NHS not local authorities. After October 2015 this became the responsibility of local authorities and the Public Health Grant was amended accordingly.

24 There is no systematic targeting of those most in need and there is wide variation in the number of Health Checks attended. DHSC and local authorities cannot routinely access data on what happens to people who receive checks so cannot assess the impact on health outcomes. DHSC will need to more effectively incentivise and target Health Checks if it is to achieve the difference it wants and to embed them in a policy environment that promotes prevention rather than treatment.

Recommendations

- a** DHSC should review the relative value of commissioning Health Checks through local authorities against alternative commissioning routes, such as NHSE, which could include incentives for delivering Health Checks in the Quality and Outcomes Framework for primary care practitioners.
- b** DHSC should set clear targets or expectations for the numbers or percentages of the eligible population who should attend Health Checks.
- c** DHSC should incentivise delivery of Health Checks towards the groups in the population that are at highest risk of CVD to help mitigate health inequalities and reduce potential longer-term costs falling on the NHS in the future.
- d** DHSC and NHSE should assess the effectiveness of data flows between DHSC, local authorities and primary care to inform a data improvement programme. This should include an assessment of the feasibility of adding Health Check data to CVDPREVENT and of the costs and benefits of giving DHSC greater access to primary care data.

Part One

Cardiovascular disease in England

1.1 This section of the report provides an overview of cardiovascular disease (CVD) in England. It assesses trends in factors that make people more at risk of CVD, such as obesity and smoking.

Overview of CVD in England

1.2 CVD is a general term for conditions affecting the heart or blood vessels, including heart attacks, strokes, heart failure and other arterial and aortic diseases. The British Heart Foundation estimates that there are approximately 6.4 million people in England living with CVD (as at September 2024). CVD remains one of the leading causes of death and disability in England, and in 2022 it contributed to a quarter of deaths in England.

1.3 There have been reductions in the rate of premature deaths from CVD but this has stalled since 2014. The rate of deaths from CVD in adults aged under 75 halved between 2001 and 2014, from 145 per 100,000 to 74 per 100,000. The rate had increased slightly to 77 per 100,000 by 2023 (**Figure 1** overleaf). The number of people in England with CVD is also increasing (**Figure 2** on page 15). In the main conditions that make up CVD, between 2006-07 and 2023-24, there has been an increase in people diagnosed with:⁴

- high blood pressure (or hypertension) (6.7 million to 9.4 million);
- atrial fibrillation (690,000 to 1.4 million);⁵
- strokes (860,000 to 1.2 million); and
- heart failure (420,000 to 670,000).

However

- coronary heart disease has decreased slightly from 1.90 million to 1.88 million.⁶

4 Changes in diagnosed prevalence may be the result of improved detection, as well as underlying changes in disease prevalence and demographic shifts.

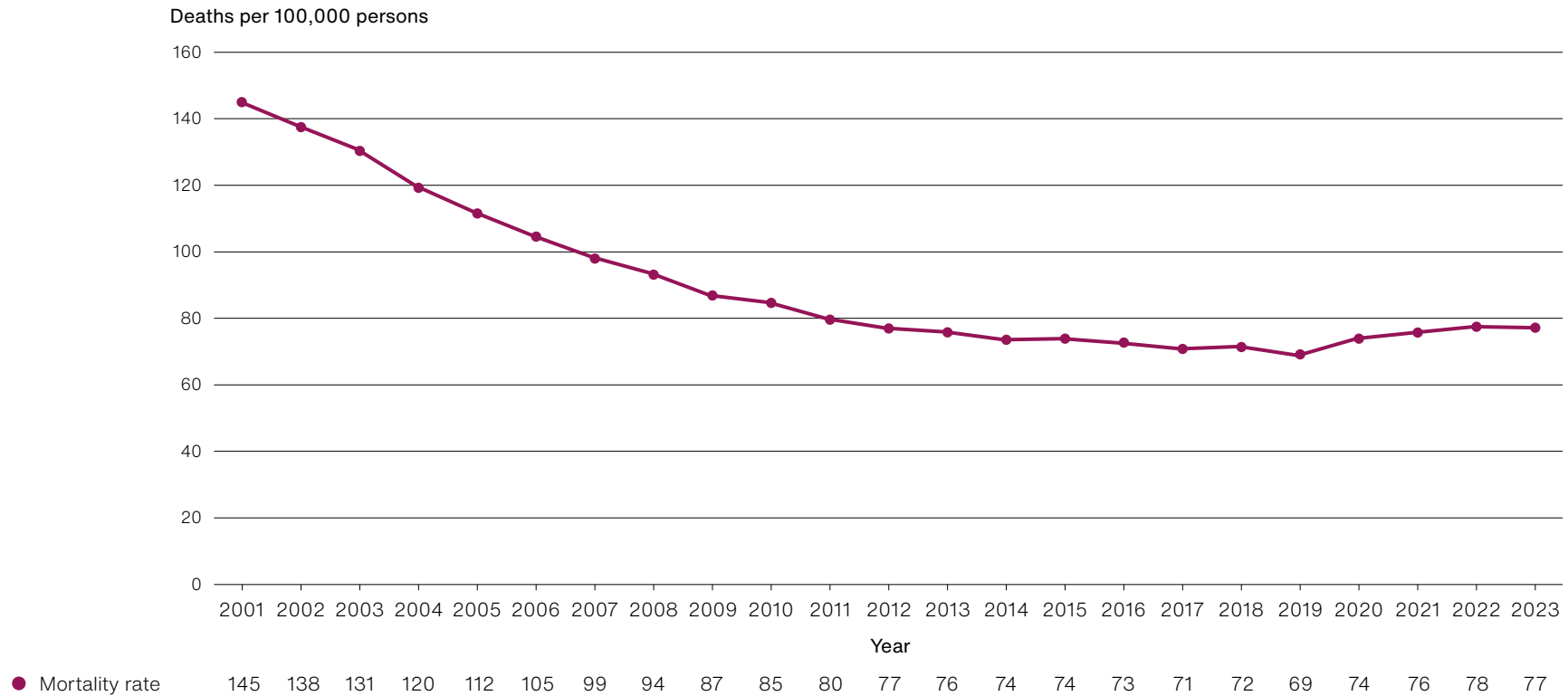
5 Atrial fibrillation is a heart condition which causes an irregular and often abnormally fast heartbeat, which can lead to blood clots, stroke and in extreme cases, heart failure.

6 Most recent data on the prevalence of high cholesterol in the population have been excluded as they are not directly comparable over time.

Figure 1

Mortality rate from cardiovascular disease (CVD) for the under-75s from 2001 to 2023 in England

The mortality rates from CVD in people under the age of 75 had been falling but this decline has stalled in the last 10 years and increased since 2019



Notes

- 1 The mortality rate is age standardised to allow for comparability over time and across areas.
- 2 These figures have been rounded.

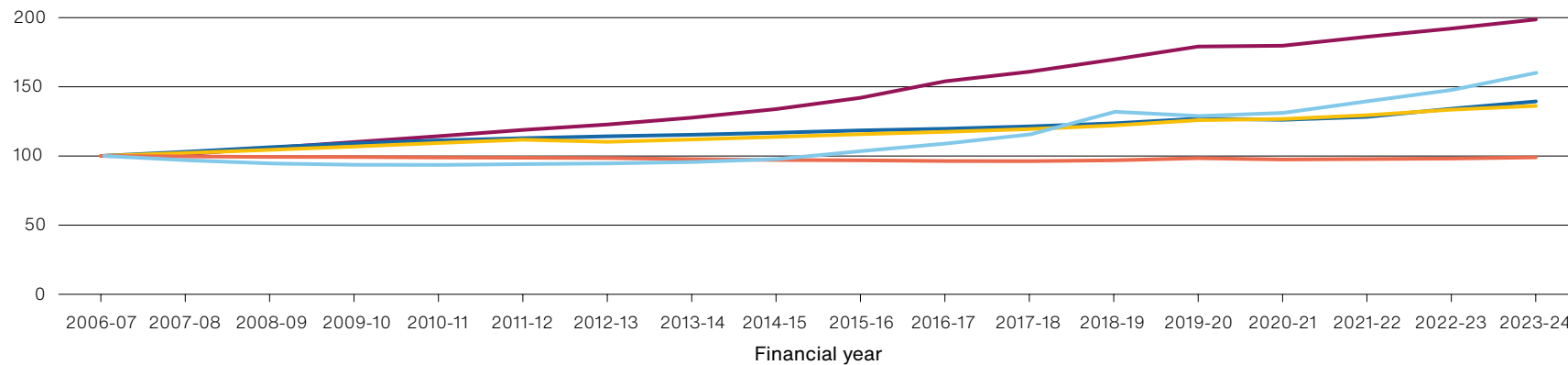
Source: National Audit Office analysis of the Office for Health Improvement and Disparities' data

Figure 2

The percentage change in the numbers of people diagnosed with the main conditions that make up cardiovascular disease (CVD) in England from 2006-07 to 2023-24

Diagnoses of four of the five main conditions of CVD have increased considerably from 2006-07 to 2023-24

2006-07 = 100



Case numbers, 2023-24	
Atrial fibrillation	1.4 million
Heart failure	670,000
Hypertension	9.4 million
Stroke, TIA	1.2 million
Coronary heart disease	1.88 million

Notes

- Hypertension is also known as high blood pressure.
- Data for each year correspond to the figures released in that year.
- TIA is transient ischaemic attack or "mini stroke" and is caused by a temporary disruption in the blood supply to part of the brain.
- Numbers have been indexed with 2006-07 as the base year and therefore equalling 100.

Source: National Audit Office analysis of NHS England's Quality and Outcomes Framework data

Impact of CVD

1.4 Evidence shows that CVD is largely preventable by managing and reducing the known modifiable risk factors such as obesity, diet, alcohol, smoking and physical inactivity. High blood pressure, high cholesterol and other conditions that are risk factors for CVD are treatable if diagnosed and remedial action taken. Investing in activities that will help identify people at most risk and providing public health services and clinical interventions to support them in reducing that risk will give people better health outcomes. It should also give overall financial benefits to the healthcare system and wider economy.

1.5 CVD imposes economic costs on society both directly through expenditure on healthcare but also indirectly due to economic inactivity. In 2019, Public Health England (PHE) estimated that the healthcare costs of CVD in England were £7.4 billion each year and the costs to the wider economy were around £15.8 billion each year.^{7,8} In 2023, the ONS estimated that in the UK, there were over three million working age people living with CVD, of whom 770,000 were economically inactive.

Roles and responsibilities

1.6 There are several organisations responsible for addressing different elements of CVD prevention. **Figure 3** outlines the roles and responsibilities of the national and local healthcare systems in preventing CVD.

- The Department of Health & Social Care (DHSC) is responsible for setting and overseeing policy on improving public health, including reducing obesity and smoking. It is responsible for the NHS Health Check programme, which aims to systematically identify people at risk of CVD who may not be experiencing symptoms. DHSC is also responsible for preventing poor health and tackling health disparities.
- NHS England (NHSE) is responsible for commissioning primary care services (which play a key role in identifying patients with CVD). It is also responsible for delivering some prevention commitments set out in the NHS Long Term Plan which provided funding for specific new NHS prevention programmes targeting CVD modifiable risk factors, including reducing smoking; reducing obesity; and limiting alcohol-related accident and emergency (A&E) admissions.

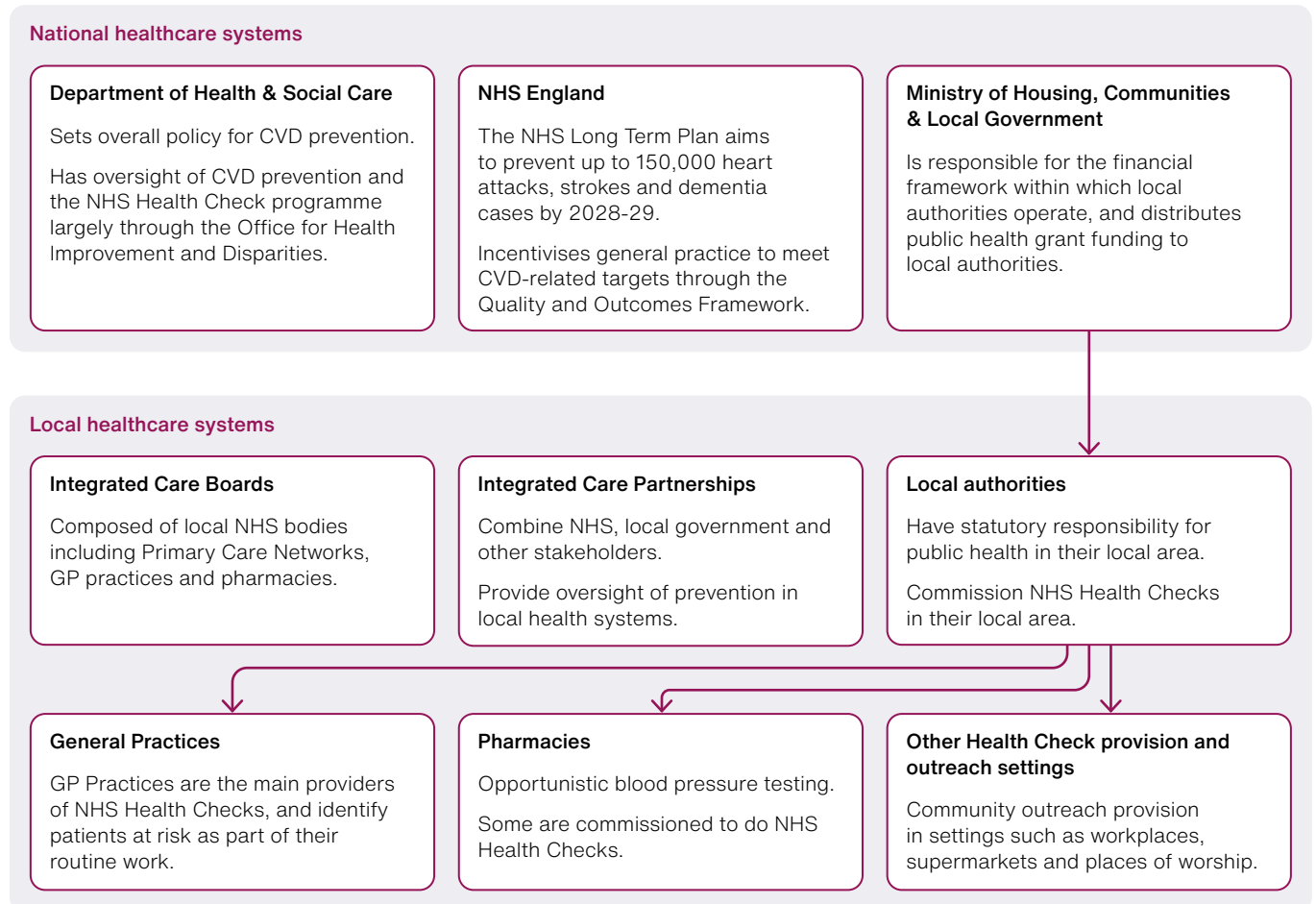
7 Public Health England (PHE) was abolished in 2021. Its roles and responsibilities were split between the Department of Health & Social Care, NHS England and the UK Health Security Agency (UKHSA).

8 Public Health England, *Health matters: preventing cardiovascular disease*, February 2019.

Figure 3

Roles and responsibilities in preventing cardiovascular disease (CVD) in England, 2024

There are several local and national organisations which help to prevent CVD



Source: National Audit Office analysis of documents from the Department of Health & Social Care and NHS England

- Integrated care boards are NHS organisations responsible for planning and commissioning health services for their local population. Local primary care networks sit below integrated care boards and are formed of general practice and other health and social care organisations working together to provide integrated services to improve the health and wellbeing of their local population, including preventative interventions. General practice is also responsible for identifying people at risk of CVD during routine interactions with patients (case finding) and supporting them to reduce that risk through public health services such as weight management or clinical interventions.
- Local authorities are responsible for taking steps that they consider appropriate to improve the health of people in their area, including commissioning and delivering public health services such as weight management. Local authorities have a statutory duty to commission NHS Health Checks for their local eligible population. While DHSC provides funding to local authorities for Health Checks through the public health grant, and retains policy responsibility, local authorities are accountable to their local population for the delivery of Health Checks.

Factors that increase the risk of CVD

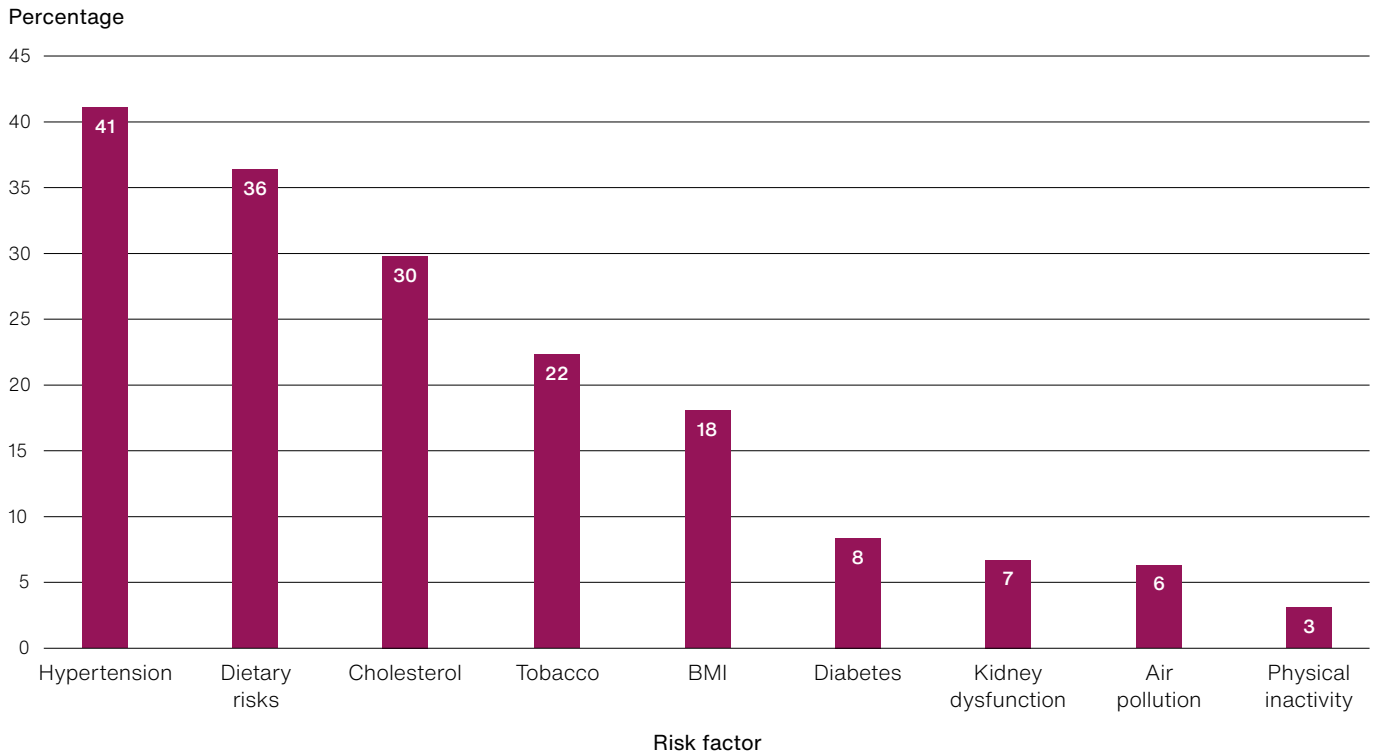
1.7 Evidence shows CVD to be a disease that is largely preventable by managing and reducing the known modifiable risk factors. These include clinical factors such as high blood pressure (hypertension) and high cholesterol, and also behavioural factors such as poor diet, tobacco use and physical inactivity. The Institute of Health Metrics and Evaluation estimated that high blood pressure (hypertension) was a contributory factor in 41% of CVD deaths in England in 2021 and that poor diet (dietary risk) was a contributory factor in 36% of deaths (**Figure 4**).

1.8 Some of these behavioural factors, such as smoking, have improved over time. However, others, such as obesity, have worsened, whereas there has been little change in the rate of physical inactivity. Between 2003 and 2022 the rate of people who smoked in England fell from 25% to 11%, while the rate of people who were obese increased from 23% to 29% (see **Figure 5** page 20).

Figure 4

Percentage of deaths in the under-70s from cardiovascular disease (CVD) which were attributed to modifiable risk factors in England, 2021

High blood pressure (hypertension) and dietary risks were the largest contributory factors to CVD deaths in England in 2021

**Notes**

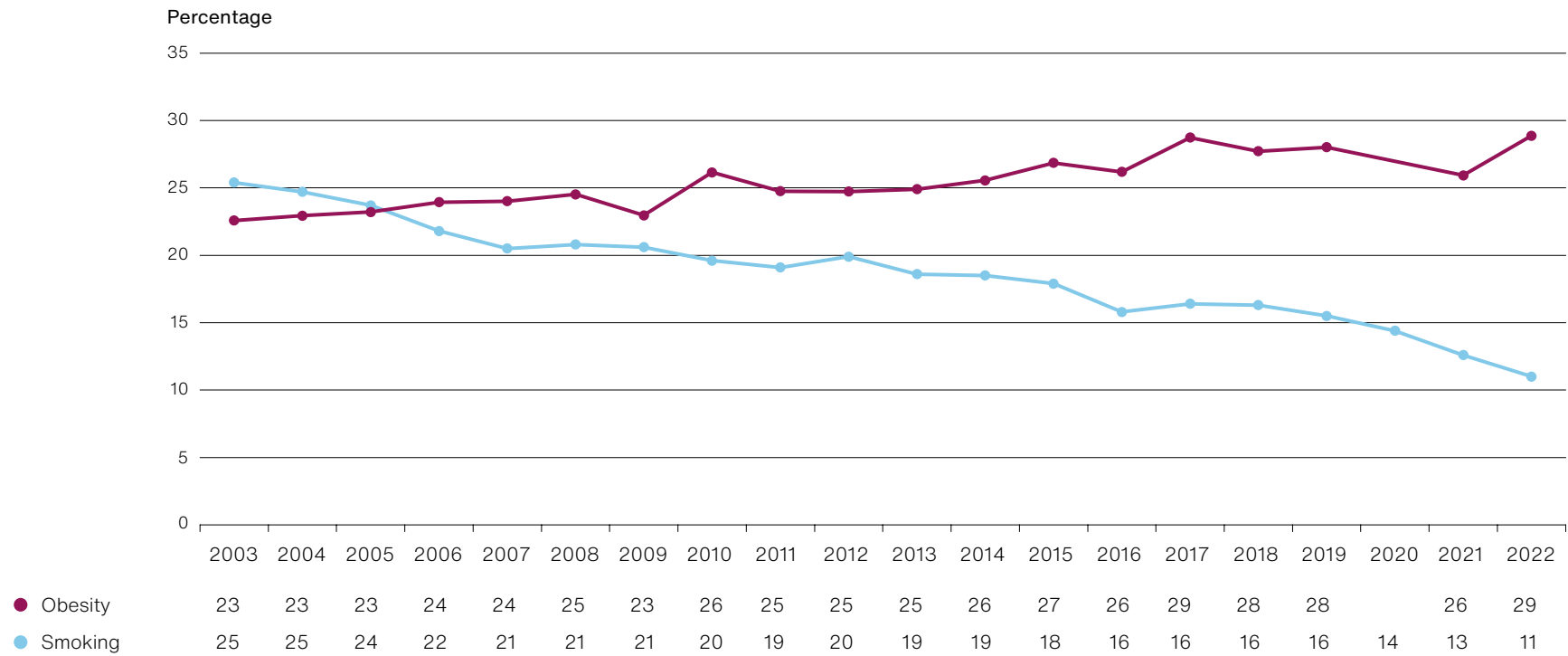
- 1 Some individuals will have multiple modifiable risk factors, therefore the totals will sum to more than 100%.
- 2 Tobacco includes smoking, chewing tobacco and secondary tobacco.
- 3 Hypertension is also known as high blood pressure.
- 4 BMI refers to body mass index.

Source: National Audit Office analysis of the Global Burden of Disease, Institute for Health Metrics and Evaluation, 2021

Figure 5

The percentage of adults who smoke tobacco or are classified as obese in England, 2003 to 2022

Levels of smoking in the population have continued to drop while levels of obesity are increasing



Notes

- 1 Obesity data are from the Health Survey of England. Smoking prevalence data are from the Office for National Statistics Annual Population Survey.
- 2 Adults are aged 16 and over.
- 3 Obesity data are not available for 2020 because the Health Survey of England was suspended due to the COVID pandemic.
- 4 Obesity data from 2021 are not directly comparable with 2003 to 2019 due to changes in how the survey was conducted. Data from 2022 are comparable with data between 2003 and 2019.
- 5 Obesity is classified as a body mass index of 30 or over.
- 6 Figures are rounded.

Source: National Audit Office analysis of the Health Survey of England and Annual Population Survey data

1.9 CVD is strongly linked to health inequalities. Many of the modifiable risk factors are more prevalent in deprived communities. In 2022:

- 17% of adults from the most deprived households had diabetes, compared with 7% from the least deprived households;
- 21% of adults from the most deprived households smoked, compared with 9% from the least deprived households; and
- 36% of adults from the most deprived households were obese, compared with 22% from the least deprived households.

1.10 The burden of CVD is much greater in the most deprived areas. In 2020, the under-75 mortality rates from CVD in the most deprived areas of England were four times that of the least deprived areas (**Figure 6** overleaf).⁹ There are also regional and geographic disparities (**Figure 7** on page 23). For example, CVD mortality was 51% higher in the North-West than in the South-East.

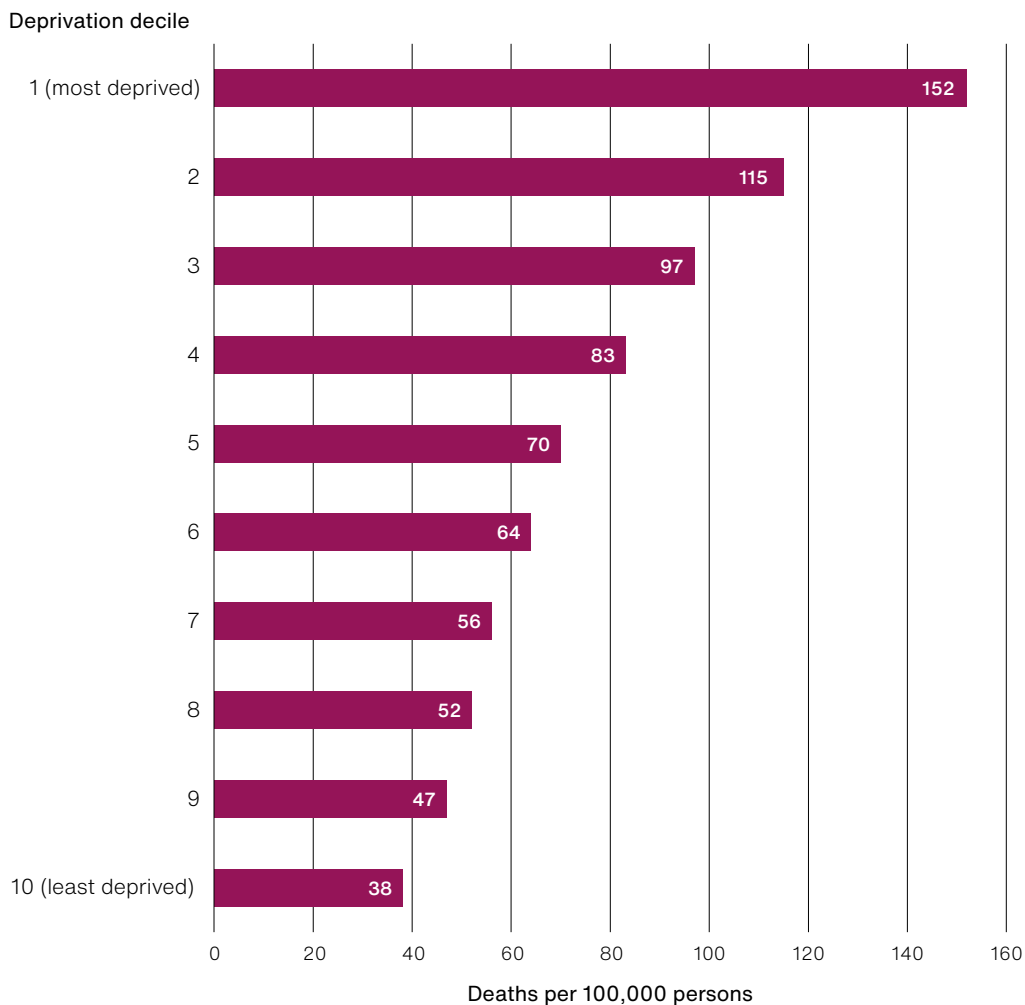
1.11 There are also non-modifiable risk factors, such as age and ethnicity, that affect the risk of CVD, further contributing to health inequalities. For example, PHE noted that CVD is more common where a person is male, older, has a severe mental illness or whose ethnicity is South Asian or African Caribbean.

⁹ We have used the dataset of Lower Super Output Areas from 2020 as this provides more granular data than local authority data, albeit not as up to date.

Figure 6

Mortality rates from cardiovascular disease (CVD) in the under-75s by deprivation in England, 2020

In 2020, people living in the most deprived areas were four times as likely to die prematurely from CVD than those living in the least deprived areas



Notes

- 1 Deprivation is measured by the Index of Multiple Deprivation.
- 2 Areas of England have been divided into Lower Super Output Areas (LSOAs). LSOAs are geographic areas used for the census and typically comprise a resident population between 1,000 and 3,000 people. This provides more granular data than local authority data.
- 3 These areas are ranked by deprivation and divided into deciles, where deciles are one tenth of the total number of areas.
- 4 The mortality rate is age standardised to allow for comparability over time and across areas.

Source: National Audit Office analysis of Public Health England's data

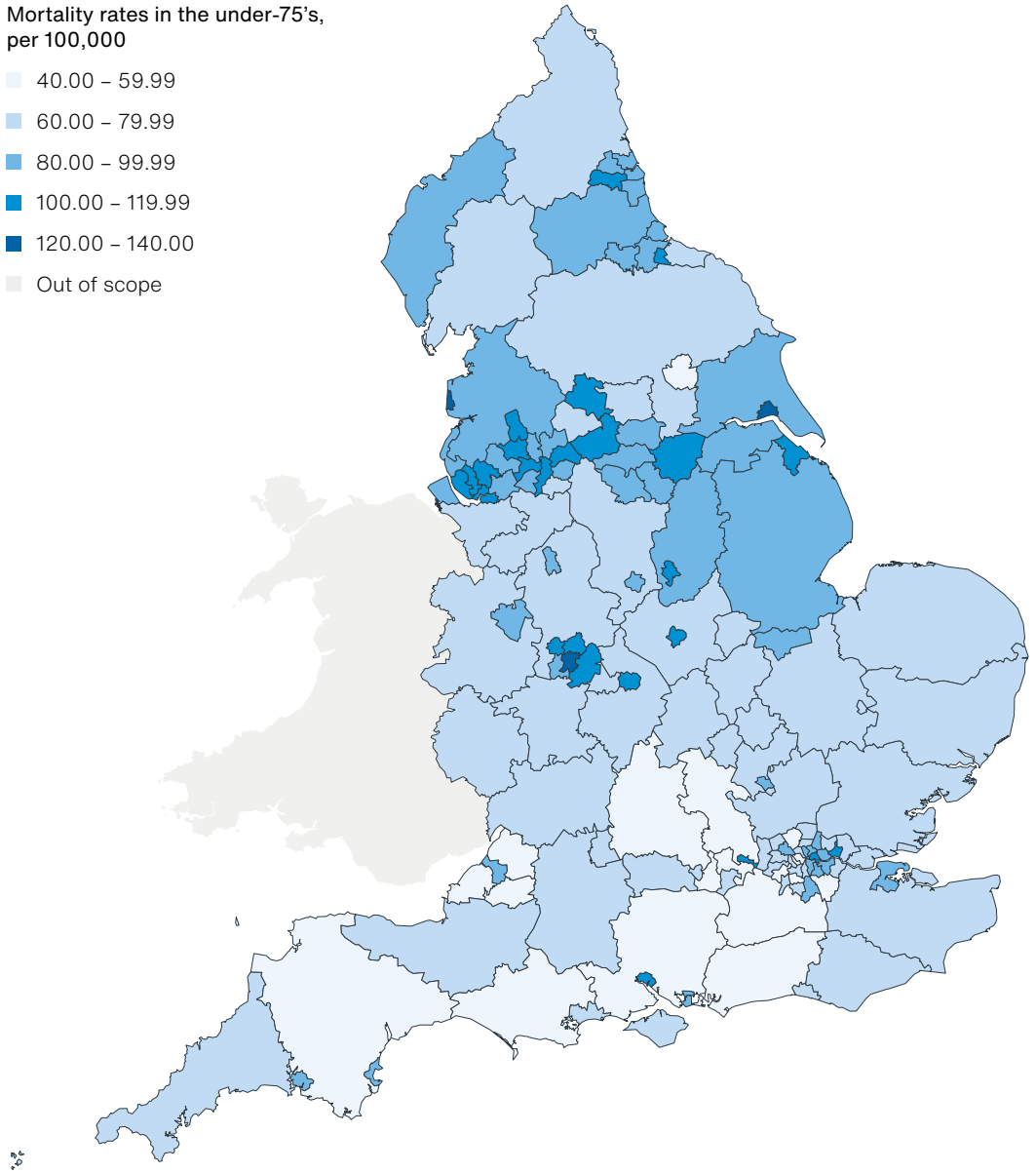
Figure 7

Mortality rates from cardiovascular disease (CVD) in the under-75s in England by upper tier local authority, 2023

Mortality in people under the age of 75 varies across England

Mortality rates in the under-75's, per 100,000

- 40.00 – 59.99
- 60.00 – 79.99
- 80.00 – 99.99
- 100.00 – 119.99
- 120.00 – 140.00
- Out of scope



Notes

- 1 The mortality rate is age standardised to allow for comparability over time and across areas.
- 2 The Isles of Scilly and City of London data have been aggregated with Cornwall and Hackney, respectively.

Source: National Audit Office analysis of data from the Office for Health Improvement and Disparities and the Office for National Statistics

Part Two

Primary care and preventing CVD

2.1 This section of the report assesses how effectively primary care reduces the risk of cardiovascular disease (CVD) through clinical treatment and by supporting people to change behaviours. It looks at government strategies to reduce CVD and how NHS England (NHSE) incentivises primary care and general practice to meet targets to prevent CVD.

Role of primary care in CVD prevention

2.2 NHSE has set targets and provided guidance to primary care and general practice on identifying and then treating people at risk of CVD. Public Health England (PHE) guidance to front line healthcare professionals sets out several opportunities to identify people at risk of CVD and to support them to manage these risks. These include offering blood pressure and cholesterol checks opportunistically as individuals present themselves at general practices. Healthcare professionals are also encouraged to discuss with patients how factors such as smoking, physical inactivity, obesity and alcohol consumption increase the risk of CVD, and to support them with behaviour change. Primary care can help identify people opportunistically who are at risk of CVD, for example, as people access primary care in response to other health concerns or problems. However, this approach will not address undiagnosed people who may not otherwise interact with health services.

NHSE's objectives for preventing CVD

2.3 Through the NHS Long Term Plan, NHSE has set long-term objectives to prevent 150,000 heart attacks, strokes and dementia cases by 2028-29 by identifying people at risk and providing better support to manage those risks through clinical treatments, for example, using statins to reduce cholesterol. It cascades these objectives to organisations in the NHS (including primary care) through several mechanisms, including national directives, guidance and payment structures.

The NHS Long Term Plan’s ambition to prevent 150,000 heart attacks, strokes and dementia cases

2.4 In 2019, NHSE published the NHS Long Term Plan, which set out its ambitions for the next decade to deal with pressures related to funding, staffing, increasing inequalities and pressures from a growing and ageing population. The Plan states that CVD is the “biggest area where the NHS can save lives over the next 10 years”. It focuses on better treatment for people who already have CVD as well as preventing people developing CVD.

2.5 The NHS Long Term Plan details NHSE’s aim to prevent 150,000 heart attacks, strokes and dementia cases by 2028-29. NHSE has set the NHS five ambitions based on detecting and treating people with risk factors of developing CVD by 2028-29:

- a** Detect 85% of the population estimated to have atrial fibrillation.
- b** Treat 90% of people detected with atrial fibrillation.
- c** Detect 80% of the population estimated to have high blood pressure.
- d** Treat 80% of people detected with high blood pressure.
- e** Treat 45% of people with a 20% or greater 10-year-risk of developing CVD with statins.

2.6 NHSE has forecast the numbers of cases of each condition that would be prevented as a result of such primary care activity, with most cases resulting from efforts to detect and manage people with high blood pressure.

2.7 In 2022, in response to the impact of the COVID pandemic, NHSE and the Department of Health & Social care (DHSC) revised and made more challenging the timescales in the NHS Long Term Plan to remain on track to prevent 150,000 heart attacks, strokes and dementia cases by 2028-29. To meet these ambitions requires the NHS and specifically primary care to detect and treat people with atrial fibrillation, high blood pressure and high cholesterol in shorter timeframes. The NHS must also treat a greater percentage of people with high cholesterol with statins or lipid-lowering therapy. **Figure 8** overleaf sets out the NHS Long Term Plan’s original and revised ambitions and performance against these ambitions as at June 2024.

Figure 8

Ambitions and performance for detecting and treating risk factors for cardiovascular disease (CVD) in the 2019 NHS Long Term Plan

NHS England has revised the CVD-related ambitions and made them more challenging

Condition	Original ambition in the NHS Long Term Plan (2019)		Revised ambition (2022)		Performance as at June 2024	
	Detect	Treat	Detect	Treat	Detect	Treat
Atrial fibrillation	Detect 85% of the population estimated to have atrial fibrillation by 2028-29	Treat 90% of those detected with atrial fibrillation by 2028-29	Detect 90% of the population estimated to have atrial fibrillation by 2025-26	Treat 90% of those detected with atrial fibrillation by 2025-26	No data available	92% of people diagnosed with atrial fibrillation treated
High blood pressure	Detect 80% of the population estimated to have high blood pressure by 2028-29	Treat 80% of those detected with high blood pressure by 2028-29	Detect 80% of the population estimated to have high blood pressure by 2024-25	Treat 80% of those detected with high blood pressure by 2024-25	No data available	67% of people diagnosed with high blood pressure treated
High cholesterol (statins)	N/A	Treat 45% of people with a 20% or greater 10-year-risk of developing CVD with statins by 2028-29	N/A	Treat 60% of people with a 20% or greater 10-year-risk of developing CVD with statins by 2025-26	N/A	62% of people identified as having a 20% or greater 10-year-risk of developing CVD on treatment to lower lipids

Note

1 For high blood pressure the ambition is to treat to target as per National Institute for Health and Care Excellence (NICE) guidelines.

Source: data from CVDPREVENT, June 2024, and National Audit Office analysis of documents from NHS England

2.8 NHSE cannot fully assess ongoing performance against its goal to prevent 150,000 heart attacks, strokes and dementia cases by 2028-29. Figure 8 shows that, as at June 2024, the NHS was exceeding its ambitions for 2025-26 for atrial fibrillation and *treating* people identified as having a greater than 20% risk of CVD with lipid lowering therapies (high cholesterol). It had some way to go to meet the ambition for *treating* people who have high blood pressure by 2024-25. It cannot measure progress against the specific ambitions to *detect a proportion* of the estimated population who have atrial fibrillation or *detect a proportion* of the estimated population who have high blood pressure. It has data that show the numbers of people who have been detected as having atrial fibrillation and high blood pressure.¹⁰ However, these numbers may also reflect increasing numbers of people with these conditions as well as performance in detecting them.

2.9 There is considerable variation across integrated care systems. As at June 2024, the percentages of people treated:

- for atrial fibrillation varied from 89% to 94%;
- for high blood pressure varied from 63% to 71%; and
- with lipid-lowering therapy performance varied from 57% to 69%.

2.10 NHSE cascades the NHS Long Term Plan's 10 year ambitions on CVD to primary care, through annual national objectives, targets and priorities, which are set out in NHSE's priorities and operational planning guidance. The guidance is focused on annual priorities for the NHS which are wider than delivering the ambitions of the NHS Long Term Plan. As such, targets in the guidance do not always match those in the Plan. For 2024-25, the NHS's priorities and operational planning guidance has made CVD targets more challenging. Its targets are to:

- increase the percentage of patients aged between 25 and 84 years with a CVD risk score greater than 20% on lipid-lowering therapies to 65% by March 2025; and
- increase the percentage of patients with high blood pressure treated as per National Institute for Health and Care Excellence (NICE) guidance to 80% by March 2025.

¹⁰ Between 2019-20 and 2023-24, the NHS identified 836,000 more people with high blood pressure, bringing the total number of people diagnosed to 9.4 million. Over the same period, an additional 512,000 people with high blood pressure were treated according to National Institute for Health and Care Excellence (NICE) guidance.

Primary care incentives for CVD prevention

2.11 NHSE uses voluntary mechanisms to incentivise primary care to identify people at risk of CVD and support them to manage those risks through clinical treatments and/or through behaviours:

- **The Quality and Outcomes Framework:** Introduced in 2004 as a voluntary pay for performance scheme and has almost universal uptake. NHSE pays general practices to meet specified ranges of performance targets based on national priorities. NHSE may add, remove or change Quality and Outcomes Framework targets depending on annual priorities. Therefore, the targets may not match those in the NHS Long Term Plan. In 2023-24, the Quality and Outcomes Framework indicator that incentivises clinically effective prescribing for people with atrial fibrillation was amended to align with updated NICE guidance. As part of this change the achievement thresholds were assessed and set at a different level to the previous indicator. A new indicator was added to treat patients at high risk of CVD with lipid-lowering therapy. Revising and improving indicators based on feedback and changing clinical guidelines regularly allows NHSE to incentivise primary care to engage with changing priorities but can make it difficult to track comparable performance over time.
 - Practices are not paid extra if they exceed achievement thresholds for payment and so are not incentivised to target under-served populations who are less engaged with health services. However, these under-served populations are often most at risk from CVD and may benefit from a more focused approach to incentivising their local health services. These services may need additional or different incentivisation mechanisms to achieve this focus.
- **The Network Contract Directed Enhanced Service:** Introduced in 2019 to establish Primary Care Networks of GPs. The service specification states that primary care networks should use the 'Core20PLUS5' approach to proactively identify CVD risk, high blood pressure and high-lipid levels according to national guidance.¹¹
- **The Community Pharmacy Blood Pressure Check Service:** Introduced in 2021, identifies people aged 40 and over with high blood pressure to be referred and managed in general practice as appropriate. It also takes referrals from general practices to provide ad-hoc blood pressure measurement and promote healthy behaviours. Pharmacies can choose to sign up to deliver these services. As at May 2024, 9,422 pharmacies had registered for the service, with 90% actively delivering services. In March 2024, DHSC launched a new effort to encourage people to have blood pressure checks, particularly in pharmacies through the 'no clues' media campaign.

¹¹ Core20PLUS5 is a national NHS England approach to inform action to reduce healthcare inequalities at both national and system level. The approach defines a target population – the most deprived 20% of the national population as identified by the Index of Multiple Deprivation, along with locally-identified groups such as ethnic minority communities – the 'Core20PLUS' – and identifies five ("5") focus clinical areas requiring accelerated improvement. One of these five areas is CVD-related, hypertension case-finding and optimal management and lipid optimal management.

Part Three

The NHS Health Check programme

3.1 This part of the report examines the aims of the NHS Health Check programme, established in 2009. It looks at the Department of Health & Social Care's (DHSC's) oversight of the programme, its governance, performance and attributable outcomes.

Why it is important to identify people at risk of CVD

3.2 A significant number of people at risk of developing cardiovascular disease (CVD) – either because they have conditions that could lead to CVD or have the risk factors for CVD – are likely to remain unidentified or untreated. In 2018, Public Health England (PHE) noted that a gap in the diagnosis and treatment of conditions such as high blood pressure and atrial fibrillation, is limiting preventing CVD. In 2022, the Health Survey of England estimated that 30% of people in England over 16 years had high blood pressure and that just under half of these were untreated.

The NHS Health Check programme

3.3 DHSC introduced the NHS Health Check programme in 2009 with the aim of reducing CVD through a national and universal programme to assess and manage the risks of CVD not identified through primary care. The purpose of the programme was to establish a systematic, integrated approach to assessing the risk of CVD for people aged between 40 and 74 who do not have pre-existing heart conditions. This would be followed by the offer of personalised advice, treatment and individually tailored management to help individuals manage their risk more effectively and help support behaviour change. NHS Health Checks (Health Checks) are not an NHS screening programme. People who are already diagnosed with certain health conditions are not eligible for a Health Check as they would already be identified as at high risk of CVD and expected to receive appropriate treatment already.

3.4 The NHS Health Check programme is DHSC's systematic way of identifying and managing risk factors that increase the likelihood of individuals developing CVD. In contrast to primary care, which aims to find people at risk opportunistically as they present at surgeries or other healthcare services such as pharmacies, DHSC established Health Checks to identify people who may not regularly or routinely use healthcare services.

3.5 The programme was informed by modelling which estimated that it had the potential to:

- prevent at least 9,500 heart attacks and strokes a year (2,000 of which would be fatal);
- prevent at least 4,000 people a year from developing diabetes; and
- detect at least 25,000 people a year earlier with diabetes or kidney disease.

In 2013, responsibility for commissioning Health Checks was transferred from the NHS to local authorities through legislation, as part of the transfer of responsibility for elements of public health. This transfer gave local authorities a statutory duty to commission NHS Health Checks that meet the health needs of their local population. Local authorities are required to ensure that Health Checks are provided and to monitor offers (invites) and uptake (attendance).

3.6 Through the programme, people are eligible to attend a Health Check every five years if they are aged between 40 and 74 and do not have a pre-existing heart condition. This equates to one in five or 20% of the eligible population every year over the course of the five years. The Health Check assesses the risk of developing a heart or circulatory condition such as heart disease, kidney disease, type 2 diabetes and stroke within 10 years through measures such as body mass index (BMI), blood pressure and cholesterol tests and questions about lifestyle such as smoking and levels of physical activity. The health professional conducting the Health Check must tell the patient their level of risk, and depending on that risk, discuss options to reduce that risk, for example, weight management. This could include referrals to local authorities or NHS services or individual behaviour changes, as well as clinical interventions such as medication to lower cholesterol (**Figure 9**). The content of Health Checks is set out in legislation.

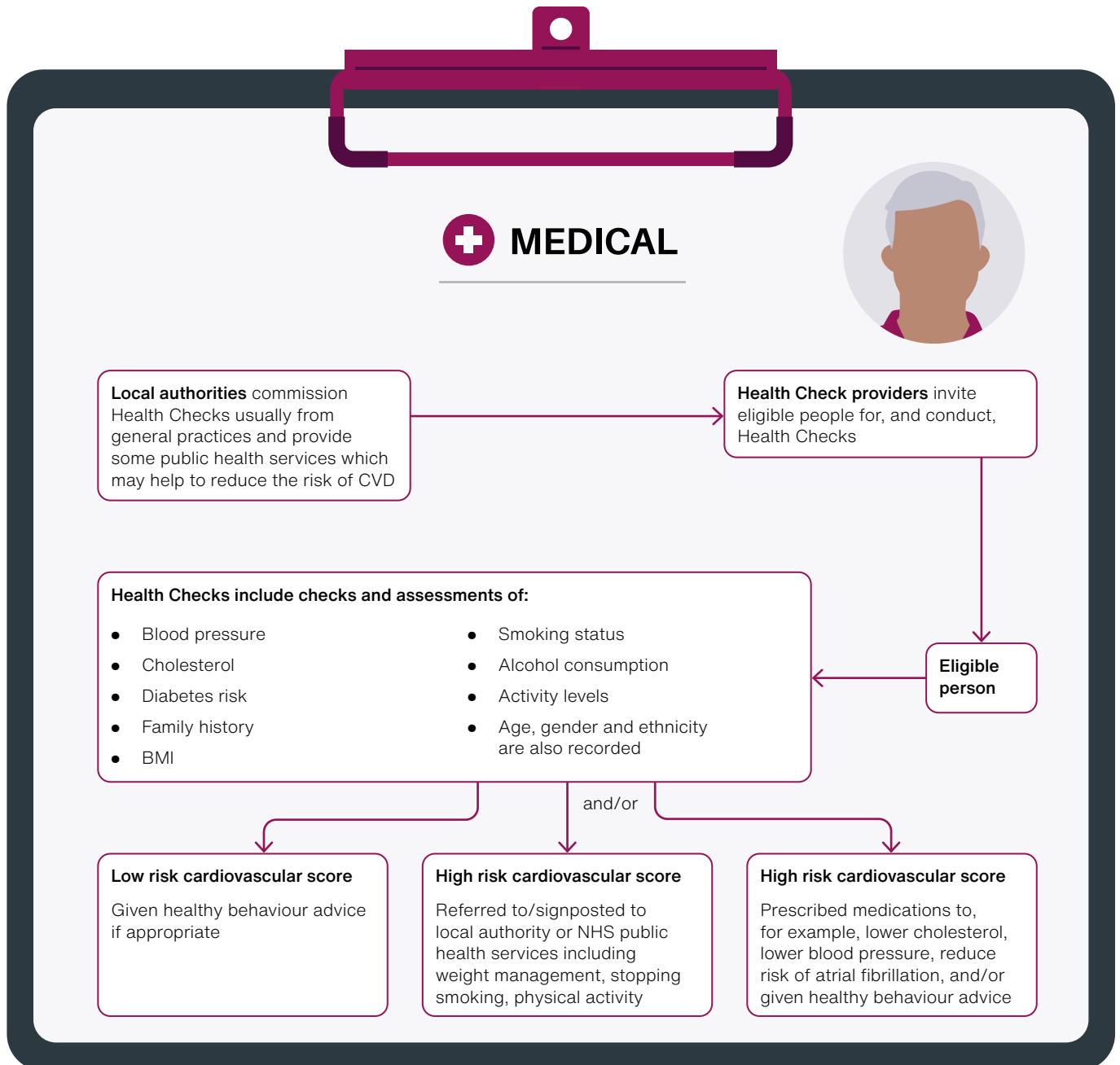
3.7 DHSC provides local authorities funding for Health Checks through the annual public health grant. The grant is ringfenced funding that local authorities must spend on delivering public health services, although they have discretion over the proportion of spending on different public health services. Offering Health Checks is a statutory responsibility for local authorities but they have discretion on how much they spend each year on Health Checks. The amount local authorities have spent on Health Checks has decreased in real terms from £78 million in 2013-14 to £62 million in 2023-24. Over the same period the number of Health Checks conducted increased from 1.38 million to 1.42 million (see **Figure 10** on page 32). The amount local authorities have spent in real terms per Health Check has decreased from £56 in 2013-14 to £43 in 2023-24.¹²

¹² The figures on spend on health checks have been rounded.

Figure 9

How the NHS Health Check programme works in England

NHS Health Checks (Health Checks) assess the risk of a person developing cardiovascular disease (CVD) and offers support to help them reduce that risk



Notes

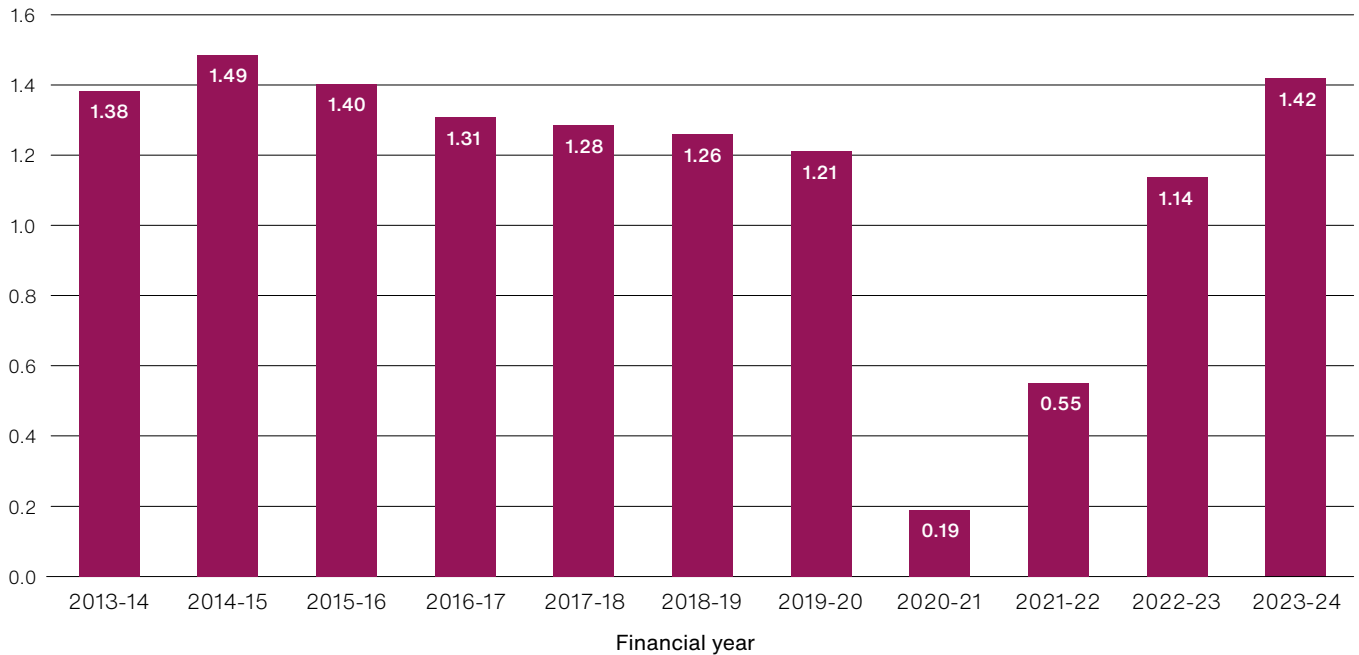
- 1 Local authorities have discretion over which health care professionals they commission Health Checks with, as long as they meet the Department of Health & Social Care-specified levels of competence. This could be general practices, pharmacies or commercial or community providers. A Public Health England survey of local authorities in 2021 found general practices were the most common providers of Health Checks.
- 2 Eligible people are aged between 40 and 74 with no pre-existing heart conditions.

Figure 10

Numbers of people attending an NHS Health Check (Health Check) from 2013-14 to 2023-24

The numbers of people attending Health Checks have recovered from the impact of the COVID pandemic

Number of Health Checks attended (mn)



Note

1 NHS Health Checks were suspended during the COVID pandemic.

Source: National Audit Office analysis of the Office for Health Improvement and Disparities' data

Performance of Health Checks

3.8 Legislation specifies that local authorities should commission a Health Check for every eligible person once every five years or make arrangements to invite them to attend one. The legislation did not specify that local authorities must meet targets for the numbers or percentages of eligible people to attend Health Checks and DHSC has not subsequently stated any expectation for attendance. PHE had stated a good practice aspiration that local authorities should aim for 75% of the eligible population to attend a Health Check over five years (which equates to approximately 15% of the eligible population each year). The legislation also required that local authorities secure continuous improvement in the percentage of people participating in Health Checks.

3.9 The data on the number of invites to Health Checks are too problematic to use with confidence so there is no accurate picture of how many people have been invited. There is no definition of what an invite is, and, in some instances, data on invites do not align with the data for attendances. For example, in some local authorities, the number of invites is the same as the number of attendances, suggesting a highly unlikely performance of everyone invited then attending their Health Check.

3.10 It is difficult to assess performance over the latest five year period as the COVID pandemic had a substantial impact on Health Checks and the service was suspended in line with NHS guidance. However, annual data show that the numbers of people attending Health Checks decreased, as a result of the COVID pandemic, but had recovered in 2023-24 to 2015-16 levels (Figure 10). Despite this, the proportion of the eligible population who attended Health Checks is far short of the level of attendance needed to cover the eligible population over five years. In 2023-24, just under half of the annual eligible population attended a Health Check (**Figure 11** overleaf) (i.e. 8.8% of the 20%, or one in five people eligible in each year). Scaled up, this equates to a five-year coverage of 44% of the eligible population attending Health Checks. Only 3% of local authorities had delivered Health Checks for all of their annual eligible population in 2023-24.¹³

3.11 A review of Health Checks in 2021 commissioned by DHSC concluded that the Health Check programme had “largely achieved its aims” and that, overall, 41% (6,466,090) of eligible people had a Health Check between 2015 and 2020, even though this fell far short of the numbers of people eligible for a Health Check. However, it noted that there were “multiple opportunities” to improve Health Checks. It made six recommendations for improvement:

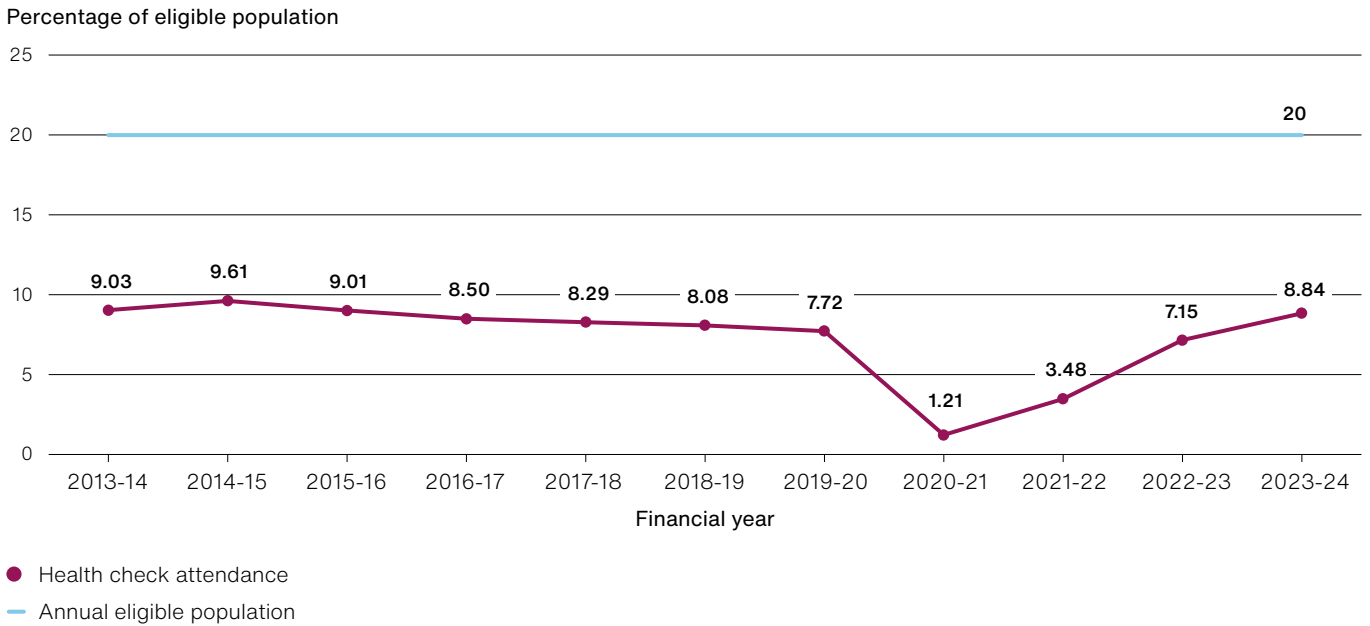
- build sustained engagement;
- launch a digital service;
- start younger;
- improve participation;
- address more conditions; and
- create a learning system.

¹³ Local authorities may invite more than the year’s eligible cohort in that year. DHSC monitors performance on invites and attendances generally over a five year period. We have chosen to reflect annual performance as the COVID pandemic makes assessing performance over five years problematic.

Figure 11

Percentage of eligible people attending NHS Health Checks (Health Checks) in England, 2013-14 to 2023-24

Just under half of the annual eligible population had a Health Check in 2023-24



Notes

- 1 The total eligible population is estimated by the Office for Health Improvement and Disparities using the Office for National Statistics estimates for the population of England aged between 40 and 74 minus the Office for Health Improvement and Disparities' estimates of the number of people on existing disease registers.
- 2 NHS Health Checks were suspended during the COVID-19 pandemic.
- 3 Since 2019-20 the total eligible population has been adjusted to remove prisoners serving a sentence of six months or more.
- 4 Local authorities may invite more than the year's eligible cohort in that year. The Department of Health & Social Care monitors performance on invites and attendances generally over a five year period. We have chosen to reflect annual performance as the impact of the COVID pandemic makes assessing performance over five years problematic.

Source: National Audit Office analysis of the Office for Health Improvement and Disparities' data

3.12 The review was published in December 2021. As of August 2024, DHSC was making progress with two of the six recommendations: to launch a digital service and improve participation. It is piloting a digital NHS Health Check app. In March 2024, it launched a pilot to work with local authorities to provide Health Checks in the workplace. With DHSC funding of £6.67 million, it aimed to provide up to 150,000 workplace Health Checks by the end of March 2025. The pilot was put on hold temporarily during the pre-election period in summer 2024 but was underway by autumn. In September 2023, DHSC published research that aimed to help local authorities communicate, design and deliver Health Checks so they are more likely to engage people who are underrepresented and at greater risk of having a heart attack or stroke. The research identified several groups defined by how they engage with Health Checks (e.g. 'struggling hesitant' and 'curious concerned') and suggested ways to increase their attendance.

Regional variations in performance

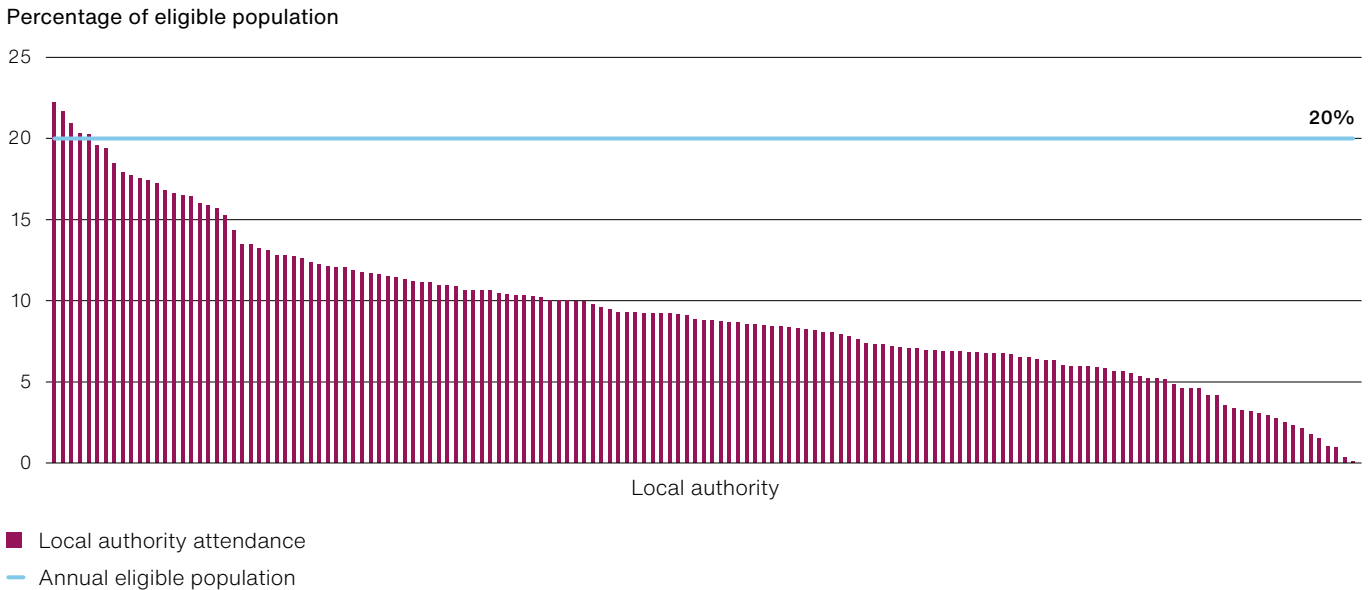
3.13 There are wide variations in the percentages of eligible people who attend a Health Check across local authorities. In 2023-24, in England, just under half of the annual eligible population attended a Health Check. However, there was considerable variation among local authorities (**Figure 12** overleaf). Five local authorities delivered Health Checks to all of their eligible population in that year, while the lowest level of Health Checks delivered was just 0.1% (compared with approximately 20% of people eligible to attend in that year). The wide variation in performance indicates different levels of capacity or appetite for Health Checks at local level or may signify different local needs and priorities as assessed by the commissioning local authority. DHSC told us that after discussing these variations with Directors of Public Health, it considers some of the differences were accounted for by the post-COVID pandemic recovery.

3.14 DHSC has stipulated that Health Checks should be offered to all eligible people between 40 and 74 years old. Although it is well known that people from some ethnic groups or from more deprived economic backgrounds are at higher risk of developing CVD, DHSC has not set local authorities a requirement to focus more specifically on these groups. The DHSC-commissioned review in 2021 noted that the likelihood of attending a Health Check increased with age and was higher for women, the most affluent, and non-smokers, with attendance being broadly representative of the general population across ethnic groups.

Figure 12

Percentage of the eligible population who attended an NHS Health Check (Health Check) in England by local authority, 2023-24

There are wide variations across local authorities in the percentages of eligible people who attended Health Checks



Note

1 Health checks should be conducted once every five years. Thus, to cover the entire eligible population over five years would entail 20% of the population attending per year on average.

Source: National Audit Office analysis of the Office for Health Improvement and Disparities' data

Accountability and managing performance

3.15 Local authorities have a statutory duty to commission NHS Health Checks for their local eligible population. While DHSC provides funding to local authorities for Health Checks through the public health grant, and retains policy responsibility, local authorities are accountable to their local population for the delivery of Health Checks. Local authorities choose how to prioritise their public health grant. DHSC's governance of the NHS Health Check programme is through the Office for Health Improvement and Disparities' (OHID) national and regional teams. This approach aims to provide oversight, guidance and support. National and regional teams can raise performance issues with local authority Directors of Public Health. The legislation did not provide DHSC with levers to influence local authorities' performance. DHSC considers that local ownership and leadership in the programme is important to success.

3.16 Local authorities have discretion over which healthcare professionals they commission Health Checks with, as long as they meet DHSC-specified levels of competence. This could be GP surgeries, pharmacies or community providers. A PHE survey of local authorities published in 2021 found general practices were the most common provider of Health Checks. Of the local authorities who responded to the survey:

- 93% used general practice to deliver at least some checks;
- 27% used community outreach providers; and
- 19% used pharmacy providers.

3.17 Local authorities have no levers to require or direct general practices to sign up to conduct Health Checks. General practices have no obligation or requirement to deliver Health Checks to their patients. They can choose to enter a contractual agreement with a local authority to deliver Health Checks. Local authorities pay providers to deliver Health Checks. However, checks are not part of the mechanisms or systems that NHSE routinely uses to pay for general practices services, such as the Quality and Outcomes Framework or the GP contract. Some of the work that general practices do as part of the GP contract or the Quality and Outcomes Framework is aligned with the aims of Health Checks. Local authorities are free to use different payment methods. The 2021 PHE survey found that local authorities paid most providers based on activity. Other payment methods included a lump sum, or were performance based, for instance, the number of invites issued. The survey found that local authorities paid most providers between £21 and £40 per Health Check.

3.18 We found mixed views on how best to engage with and incentivise general practices to do more Health Checks. Some felt that the payment from local authorities was insufficient, others noted that, in their area, general practices were committed to Health Checks as they believed it was the right thing to do, and there was support from the Local Medical Committee. We heard in our case study visits that some people in general practices considered the local authority's payments for Health Checks to be too low, but DHSC has no plans to change the way local authorities pay for Health Checks as it is up to local authorities how they use the Public Health Grant.

3.19 There is increasing pressure on general practice services which may limit their capacity to do Health Checks. While many people we spoke to during our case study visits were positive and passionate about the value of Health Checks, they had concerns about the capacity of local general practices to conduct them. We have not set out to assess capacity in general practices in this study, but our report on emergency and unplanned care set out these pressures. Data show that there were 353 million appointments in general practice in 2023-24 compared with 290 million in 2018-19.¹⁴

¹⁴ Data for 2018-19 were published in September 2019, data for 2023-24 were published June 2024. Both sets of data are based on actual appointments.

Data limits

3.20 DHSC has very limited data on Health Checks. Local authorities are only required to report the numbers of invites and numbers of Health Checks attended. They are not required to provide more detailed information on the age, gender, ethnicity or socio-economic status of people who are invited to and attend Health Checks. Furthermore, DHSC is not routinely able to access primary care data or data from other providers of Health Checks to get a more detailed picture of who is having a Health Check and what happens after the Health Check. The lack of data prevents DHSC from having a national understanding of whether people who are most at risk of CVD are those attending Health Checks and whether people are accessing services or clinical support to help them reduce that risk.

3.21 DHSC and PHE have commissioned some research on how Health Checks are delivered. For example, PHE conducted two surveys of local authorities published in 2015 and 2021 which provided snapshots of how local authorities commissioned and delivered Health Checks. In addition, the DHSC-commissioned review in 2021 also provided in-depth data on the risk factors for people attending Health Checks, including ethnicity, obesity and whether they smoked.

3.22 There are no formal national data-sharing agreements between local authorities and primary care. As a result, local authorities lack routine access to primary care data which prevents them having a detailed picture of who is having a Health Check in their area and what happens after the Health Check. Some local authorities have set up local arrangements to access these data. We saw some good examples in Bolton, Blackburn with Darwen, and Tower Hamlets of analysis of detailed Health Check data at local level that was being used to improve how Health Checks were delivered in those areas.

3.23 Health Checks are usually, but not always, conducted in general practice. They may also be done by community providers, the private sector or in community pharmacies. Non-GP providers are required to forward a record of the Health Check they perform to a patient's GP. However, these providers do not routinely have links to general practice IT systems, which creates a disconnect in the flows of data between the two. For example, if a pharmacy found someone had high blood pressure, they would need a manual route to inform the person's GP to trigger treatment and support.

3.24 A national audit tool, CVDPREVENT, provides the public with anonymised quarterly data on prevalence, treatment, and outcomes for a number of high-risk CVD conditions. Data are available at practice, primary care network, integrated care board, and regional level. CVDPREVENT provides demographic breakdowns by age, sex, ethnicity, and deprivation and data are available to anyone. However, CVDPREVENT does not include Health Check data so cannot be used to show links between Health Checks and age, gender and ethnicity or location of patients or general practice.

Part Four

Public health and preventing cardiovascular disease

4.1 This part of the report looks at the public health services that can help people to reduce their risk of cardiovascular disease (CVD) by adopting healthier behaviours, such as stopping smoking. It also sets out a summary of the government's actions at population level to reduce those risk factors.

Public health services to support people to change their behaviours to reduce risk

4.2 As part of their statutory responsibility for public health, local authorities commission services which can help people manage their risks for CVD, including services for stopping smoking, adult obesity and adult physical inactivity. Some support services are also provided by local charities or voluntary community groups that offer support to people at risk of CVD.

4.3 **Figure 13** overleaf shows spending on public health-related services by local authorities, including stop smoking services, adult obesity and adult physical activity. In 2015-16, total spend in real terms was £340 million, while in 2023-24 total spend had fallen to £262 million, 23% lower. Over the same period, the Public Health Grant, which funds local public health activities, has fallen in real terms. Between 2015-16 and 2023-24 the total public health grant fell from £4.48 billion to £3.53 billion in real terms, a reduction of 21%.¹⁵

4.4 In detail, real terms spending on individual services changed from 2015-16 to 2023-24:

- Stop smoking services fell from £151 million to £83 million.
- Adult physical activity promotion increased from £105 million to £108 million.
- Adult obesity services decreased from £84 million to £71 million.

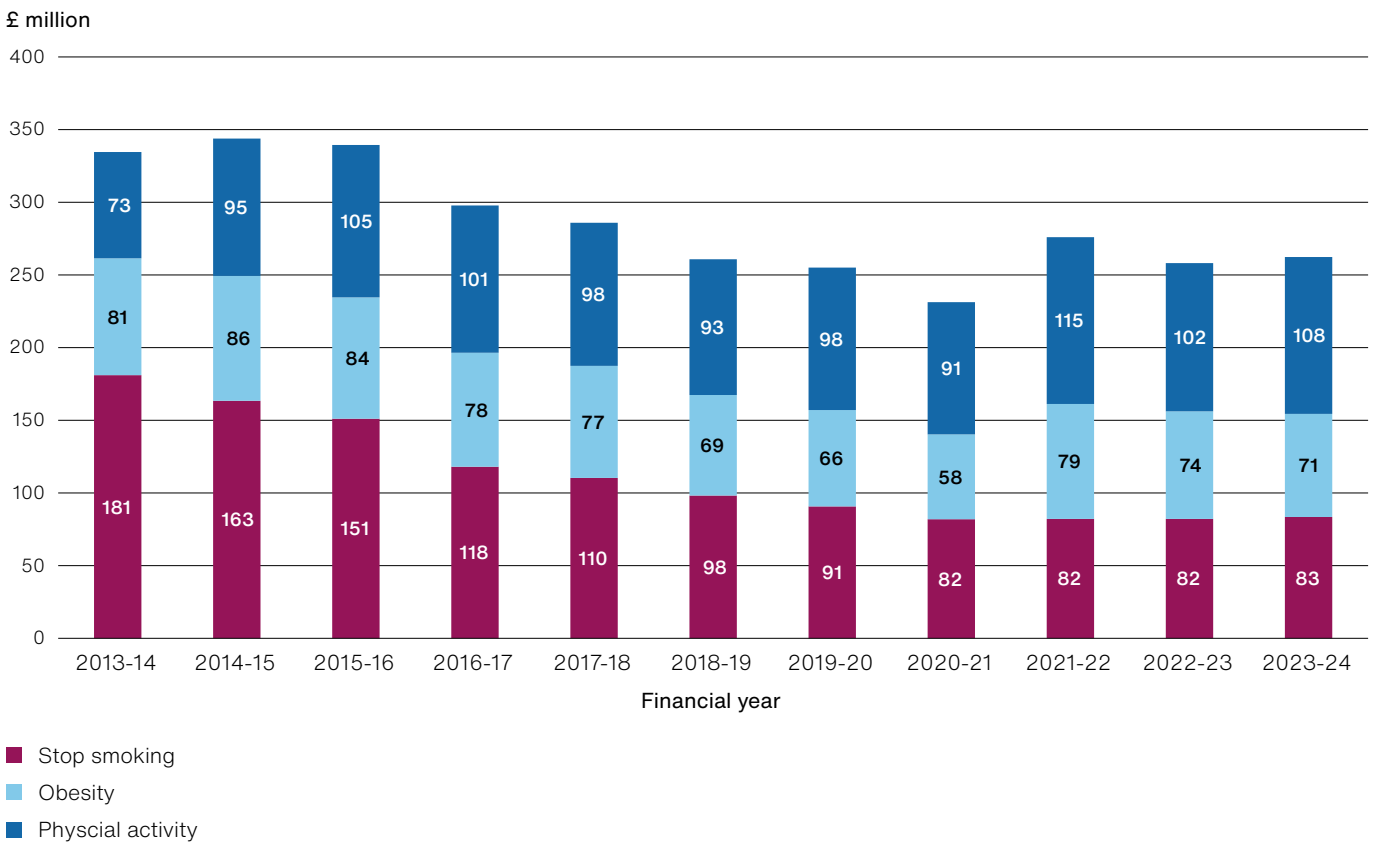
Our case study local authorities expressed concern at the longer-term effects of the real terms reduction in the public health budgets on the local population and the capacity of prevention services.

¹⁵ Comparison of the Public Health Grant in 2014-15 to subsequent years is not possible due to changes in the services covered by the Public Health Grant. Up until October 2015, health services for children aged 5 and under were the responsibility of the NHS not local authorities. After October 2015 this became the responsibility of local authorities and the Public Health Grant was amended accordingly.

Figure 13

Local authority spending on services for adult obesity, stop smoking and adult physical activity from 2013-14 to 2023-24

Real terms total expenditure in 2023-24 on services for adult obesity, stop smoking and adult physical activity was lower than in 2013-14



Notes

- 1 Figures are corrected for inflation using the GDP deflator with 2023-24 as the price base year.
- 2 These figures do not include the additional £70 million per year to support stop smoking services announced in November 2023.

Source: National Audit Office analysis of data from the Ministry of Housing, Communities & Local Government

4.5 Local authorities do not routinely collect data on the numbers of people who access public health related services other than some data on stop smoking services and a small number of weight loss services. As a result, there is no complete national understanding of the numbers of people who are benefitting from these services or whether the services provided are adequate to meet demand. Many local authorities cannot routinely access patient-level primary care data. As a result, they cannot assess or track the impact of these services on the long-term health of people or understand how effective their services are at reducing the risk of CVD. The Department of Health & Social Care (DHSC) and local authorities have told us that it is extremely difficult to have routine access to primary care data because of issues including data governance and resources.

4.6 In addition to clinical management, the NHS also provides services to support people to better self-manage their health. These services help reduce the risk of CVD and bring other health benefits. NHS England (NHSE) set out its objectives for these services in the NHS Long Term Plan, which included tobacco and alcohol dependency programmes, a weight management programme and a diabetes prevention programme.

4.7 The weight management enhanced service for general practice or primary care networks aims to increase activity in primary care to reduce obesity and ensure those living with obesity who want support for weight loss are offered it if eligible. General practices are paid for referrals of anyone on an obesity register into any one of the:

- NHS digital weight management services;
- certain types of local authority, or NHS weight management services; and
- NHS Diabetes Prevention or Path to Remission Programmes if more appropriate.

The weight management service has £7.2 million funding for 2024-25. Practices who sign up will have a total referral allocation within which they will be entitled to £11.50 per referral per patient.

4.8 NHSE is piloting a digital weight loss programme which it launched in April 2021. To access the programme, people must be referred by their GP and have a body mass index equal to, or higher than, 30 (or 27.5 for people from Black, Asian, and minority ethnic groups) and have a diagnosis of diabetes or hypertension or both.¹⁶ The programme lasts 12 weeks and has three levels of intensity of support, with some one-to-one human support available for the more intense levels. A review of the programme from April 2021 to March 2022 found that, of the 63,937 referrals from general practice, 31,861 people (50%) chose to take up the 12-week programme. The mean weight loss of people who completed the programme was 3.9 kilogrammes. The review did not assess whether the weight loss was maintained after the programme.

4.9 Public health interventions to reduce modifiable risk factors can target the population as well as individuals. The more recent key measures were:

- Obesity
 - 2018: Introduction of the Soft Drinks Industry Levy (known as the sugar tax) to reduce sugar levels in soft drinks.
 - 2020: ‘Tackling obesity’, strategy to reduce obesity, including expansion of NHS weight management services.
 - 2021: £100 million to support people to achieve and maintain a healthier weight (£30 million to local authorities, £70 million to NHS weight management services).
- Physical activity
 - 2020: ‘Gear change’ strategy and £2 billion funding to boost cycling and walking.
 - 2023: ‘Get active’ strategy for sports and physical activity with an ambition for over 2.5 million more adults and over 1 million more children to be classed as ‘active’ in England by 2030.
- Smoking
 - 2023: Strategy to create a ‘smokefree generation’, making it illegal to sell tobacco products to anyone born after January 2009. In July 2024, the new government stated its intention to re-introduce the legislation proposed by the previous government but not enacted.

¹⁶ The NHS notes that the body mass index (BMI) threshold is lowered for people from these ethnic backgrounds as they are at increased risk of conditions such as type 2 diabetes at a lower BMI.

Appendix One

Our audit approach

Our scope

1 The evaluative criteria considered the scale of cardiovascular disease (CVD) in England, and how primary care identifies and treats people at risk of CVD through routine work with patients and the operation of the NHS Health Check programme (Health Checks) which local authorities are responsible for commissioning. The study team's independent conclusions on NHS England's (NHSE's) and the Department of Health & Social Care's (DHSC's) progress with preventing CVD were reached by analysing evidence collected between December 2023 and July 2024.

Our evidence base

Interviews

2 The study team conducted interviews with relevant stakeholder groups and organisations during scoping and fieldwork to inform our findings and conclusions:

- Government bodies: Officials from NHSE and DHSC responsible for overseeing or managing the strategy, commissioning, delivery or evaluation of CVD policy and interventions to understand the current issues, challenges and future plans for CVD prevention.
- Health think tanks and charities: For instance, the British Heart Foundation and the King's Fund, to understand perspectives from outside the healthcare service, including those of patients.
- Sector bodies: Local Government Association and Association of Directors of Public Health to better understand the local government and public health interface with the NHS on CVD prevention.
- Third parties: These included individual experts in the field of CVD or delivering population health such as public health leads.

Document review

3 The study team reviewed more than 350 published and unpublished documents, including those provided by NHSE, DHSC, local authorities and integrated care boards, local NHS organisations and third sector organisations.

4 These documents included financial returns, performance indicator reports, policy and strategy documents, internal briefings and progress reports, priorities and operational planning guidance, best practice guides, terms of reference for networks and working groups, academic papers, previous National Audit Office reports, think tank and charity reports, board papers and minutes.

Case studies

5 The study team conducted six local authority and primary care case studies to provide local insight into how Health Checks and interventions to reduce risks of CVD such as weight management and stop smoking services are working on the ground. For each area, we explored rates of CVD and modifiable risk factors such as obesity and smoking; the main interventions to tackle CVD, including Health Checks and blood pressure monitoring; and the barriers to reducing CVD. The study team spoke with Directors of Public Health and other commissioners of Health Checks and other relevant public health services; integrated care board primary care leads; providers of Health Checks; and, in some instances, providers of other relevant public health services such as weight management.

6 The case study selection criteria focused on local authorities with high rates of CVD, but differed in terms of geographical spread, rurality, and the CVD-related socio-demographics of the local population, which the study team considered alongside age, ethnicity and deprivation. The team also considered information from scoping interviews about areas which were working in innovative ways with local partners in delivering Health Checks and programmes for improving CVD outcomes.

The case studies were Blackburn with Darwen, Bolton, Hull, Leicester, Torbay and Tower Hamlets.

Quantitative analysis

7 The study team analysed publicly available data, such as through the public health 'fingertips' tool, and the CVDPREVENT audit to understand trends in modifiable risk factors and outcomes for CVD. The team sub-analysed how these metrics differed regionally, and by socio-demographics such as age, gender, ethnicity and deprivation. Other sources of data included socio-demographics from the Office for National Statistics (ONS), data on general practices' engagement and achievement of Quality and Outcomes Framework targets, and data on local authority funding.

8 Real terms prices have been corrected for inflation using GDP deflator data published in the September 2024 ONS, Quarterly National Accounts. All real terms prices use 2023-24 as the price base year.

This report has been printed on Pro Digital Silk and contains material sourced from responsibly managed and sustainable forests certified in accordance with the FSC (Forest Stewardship Council).

The wood pulp is totally recyclable and acid-free. Our printers also have full ISO 14001 environmental accreditation, which ensures that they have effective procedures in place to manage waste and practices that may affect the environment.



National Audit Office

Design and Production by NAO Communications Team
DP Ref: 013914-001

£10.00

ISBN: 978-1-78604-580-5