National Audit Office

REPORT

Progress in preventing cardiovascular disease

Department of Health & Social Care, NHS England

SESSION 2024-25
13 NOVEMBER 2024
HC 304

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.