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**Research Report**

## UK health spending

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# UK health spending

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## Executive summary

Funding the National Health Service is the biggest single thing the government does, so it is not surprising that it is at the forefront of the election campaign. In this briefing note, we look at how health spending has changed over the last 70 years and place funding increases since 2010 in the context of the pressures associated with an ageing population. We then compare existing spending plans for the NHS to those implied by the political parties' manifestos at the 2017 general election and examine capital spending on the health service. Finally, we consider the longer term outlook for health spending.

## Key findings

**Health spending has grown rapidly over the past 70 years but the rate of growth has varied substantially over time.** UK public spending on health grew in real terms by an average annual rate of 3.6% between 1949–50 and 2018–19. Since 2009–10 it has grown at the much slower rate of 1.3% pa. This followed a period of unusually sharp increases at 6.0% pa between 1996–97 and 2009–10, such that the average growth between 1996–97 and 2018–19 was 4.1% pa (above the long-run average). Increases were particularly low under the coalition government (2009–10 to 2014–15) at just 1.0% pa, while spending increased at a rate of 1.6% pa between 2014–15 and 2018–19.

**Health is now the largest single item of government expenditure and accounts for a steadily increasing share of all public spending.** Public spending on health increased from 7.7% of total public spending in the mid-1950s (and 10.4% of public service spending) to 13.4% in 1999–00 (20.2% of public service spending), to 17.9% in 2018–19 (25.9% of public service spending).

**Department of Health and Social Care spending has only just met demographic pressures since 2009–10.** After accounting for the growth *and* ageing of the population, DHSC spending was broadly flat between 2009–10 and 2016–17, before rising over the three years to 2018–19. Therefore while recent funding increases have been sufficient to meet demographic pressures, they are unlikely to have been sufficient to also meet all other pressures (such as changes in population health, new medical technology and treatments, and wage pressures).

**The path for future NHS spending now looks considerably more generous than that implied by all parties' plans at the last election.** Recent NHS funding pledges are far more generous than those made in the Conservative 2017 manifesto. The current government's spending plans imply total DHSC spending in 2019–20 (the year in progress) similar to that implied by Labour's 2017 manifesto; current plans are considerably more generous for future years but are still only broadly enough to keep pace with demand and cost pressures on the NHS. These plans should be viewed as a lower bound on future NHS spending, as such plans are almost always topped up.

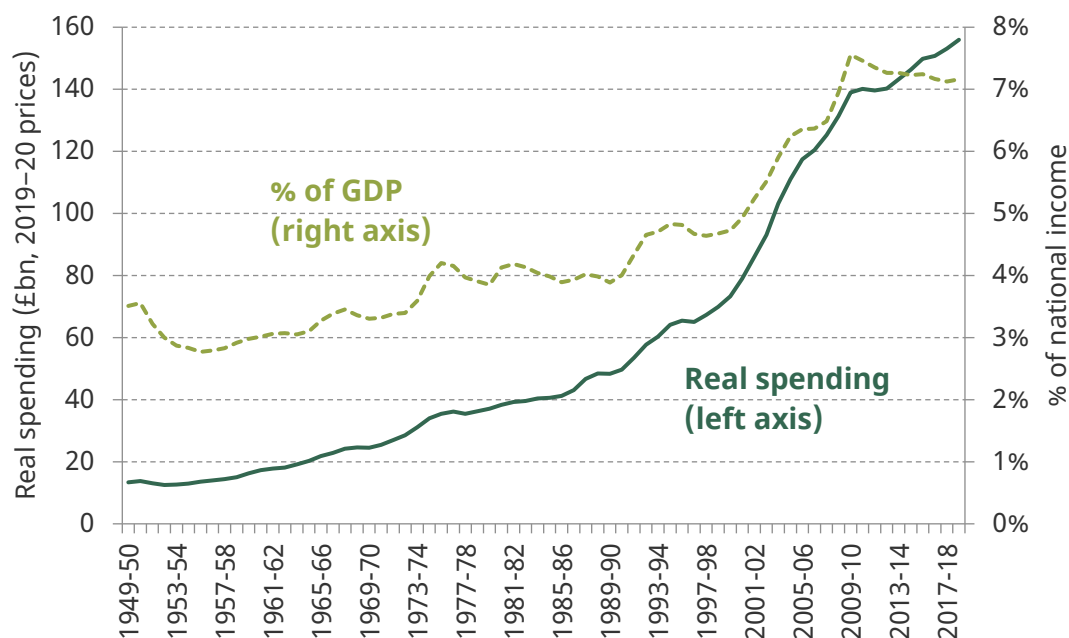
**The government's approach to capital spending on the NHS in recent years has left a great deal to be desired.** Repeatedly siphoning money out of capital budgets to fund day-to-day spending, and making ad hoc capital spending announcements outside of the usual budgetary process, is unlikely to lend itself to effective planning and delivery of investment in the health service.

**Health spending is almost certainly going to have to take a growing share of national income over time.** In the years and decades to come, a combination of demographic and other cost pressures are set to push health spending ever upwards. Recent OBR projections imply that on current policy spending on health would increase from around 7.2% of national income today to 10.2% in 20 years' time (equivalent to an extra £66 billion in today's terms). Finding a sustainable way to fund health care will be a key challenge in the years and decades to come.

## UK public spending on health has grown rapidly over the past 70 years but the rate of growth has varied substantially over time

Figure 1 shows public spending on health in the UK in each financial year between 1949–50 and 2018–19, both in real terms (after adjusting for economy-wide inflation) and as a percentage of national income. Health spending has increased considerably over time, rising from £13.4 billion in 1949–50 to £156.0 billion in 2018–19 (2019–20 prices). This growth in health spending has outstripped growth in the wider economy. As a result health spending has also increased as a share of national income, more than doubling from 3.5% in 1949–50 to 7.2% in 2018–19. Health spending has also grown more quickly than the population over this period. Health spending per capita has therefore increased over time, increasing from £266 per person in 1949–50 to £2,340 per person in 2018–19.

**Figure 1. Annual UK public spending on health in real terms (2019–20 prices) and as a percentage of national income, 1949–50 to 2018–19**



Notes and sources: see end section.

Growth in health spending has fluctuated over time, with periods of strong growth often followed by periods of smaller increases. Table 1 shows the annual average real growth rate in public spending on health for different periods. UK health spending increased by an annual real average of 3.6% per year between 1949–50 and 2018–19. Spending increased sharply during the late 1990s and 2000s, growing by an average of 6.0% per year during the Blair and Brown governments as part of a wider growth in public service spending. Since 2009–10, health spending growth has slowed sharply. Between 2009–10 and 2018–19, real spending grew by an annual average of 1.3%. Average increases of 1.0% per year under the coalition government (2009–10 to 2014–15) were the smallest five year average seen under any government. However, it is important to note that these increases took place during a period of time during which most areas of public spending

experienced large reductions. Indeed, spending on areas such as education, defence and public order and safety has fallen, while spending on health has continued to rise – albeit at a slower rate than has tended to be the case historically. NHS activity also continued to rise during this period: for example, inpatient admissions in England rose by 21.4% between 2009–10 and 2014–15 (and by 28.9% between 2009–10 and 2018–19).<sup>1</sup>

**Table 1. Annual average real growth rates in UK public spending on health, selected periods**

Header text	Financial years	Average annual real growth rate
Whole period	1949–50 to 2018–19	3.6%
Pre-1997 (various governments)	1949–50 to 1996–97	3.4%
Post-1997 (various governments)	1996–97 to 2018–19	4.1%
Pre-1979 (various governments)	1949–50 to 1978–79	3.5%
Thatcher and Major Conservative governments	1978–79 to 1996–97	3.3%
Blair and Brown Labour governments	1996–97 to 2009–10	6.0%
Coalition government	2009–10 to 2014–15	1.0%
Conservative government	2014–15 to 2018–19	1.6%

Notes and sources: see end section.

## Health spending has continued to grow as a share of all public spending even during a period of relative slow growth

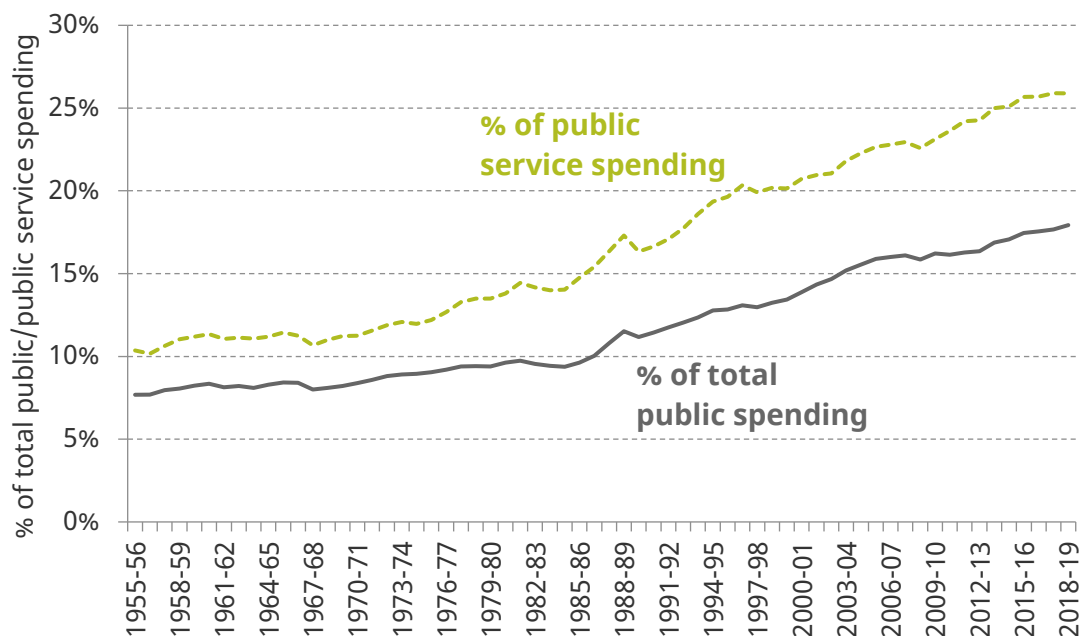
The relative protection offered to health spending since 2010 means that the share of public spending accounted for by health has continued to grow despite the slowdown in the annual health spending growth. This continues a long-run trend stretching back over 50 years. Figure 2 shows public spending on health as a share of total public spending and public service spending. Public spending on health increased from 7.7% of total public spending (and 10.4% of public service spending) in the mid-1950s to 17.9% of total public spending (and 25.9% of public service spending) in 2018–19. This now makes health the single biggest item of government expenditure.

The repeated protection and prioritisation of the NHS budget has also led to health spending accounting for a greater share of *departmental* spending than ever before. By

<sup>1</sup> Authors' calculations using NHS England 'Quarterly Hospital Activity Data: NHS inpatient elective admission events and outpatient referrals and attendances, June 2008 to June 2019', <https://www.england.nhs.uk/statistics/statistical-work-areas/hospital-activity/quarterly-hospital-activity/qar-data/>

2020–21, the Department of Health and Social Care is planned to account for 42% of total day-to-day spending by departments, up from 33% in 2010–11 and 26% at the turn of the millennium.<sup>2</sup>

**Figure 2. UK public spending as a percentage of total public and public service spending, 1955–56 to 2018–19**



Notes and sources: see end section.

**Health spending in England in the past decade has grown at roughly the same pace as demographic pressures but this is unlikely to be sufficient to meet all other pressures going forward**

The Department of Health and Social Care (DHSC) is responsible for the vast majority of health spending in England. DHSC budgets are set centrally in Westminster, with decisions on health spending in Scotland, Wales and Northern Ireland taken by the devolved administrations. DHSC spending is set to be £139.3 billion in 2019–20.

Figure 3 shows the changes in real-terms DHSC spending since 2009–10. The black line shows that spending increased by 19.1% in real terms over the past decade, an average annual increase of 1.8%. However, the demands on DHSC spending have increased over time. Over this period, the English population grew by 4.1 million people. This is equivalent to an increase of 7.9%, or an average increase of 0.7% per year. This means that spending would need to increase by 0.7% per year just to meet the pressures associated with population growth.

In addition, the population has also aged. For example, the number of people aged 85 years and older increased by 22.5% between 2009 and 2019. Older people use more care

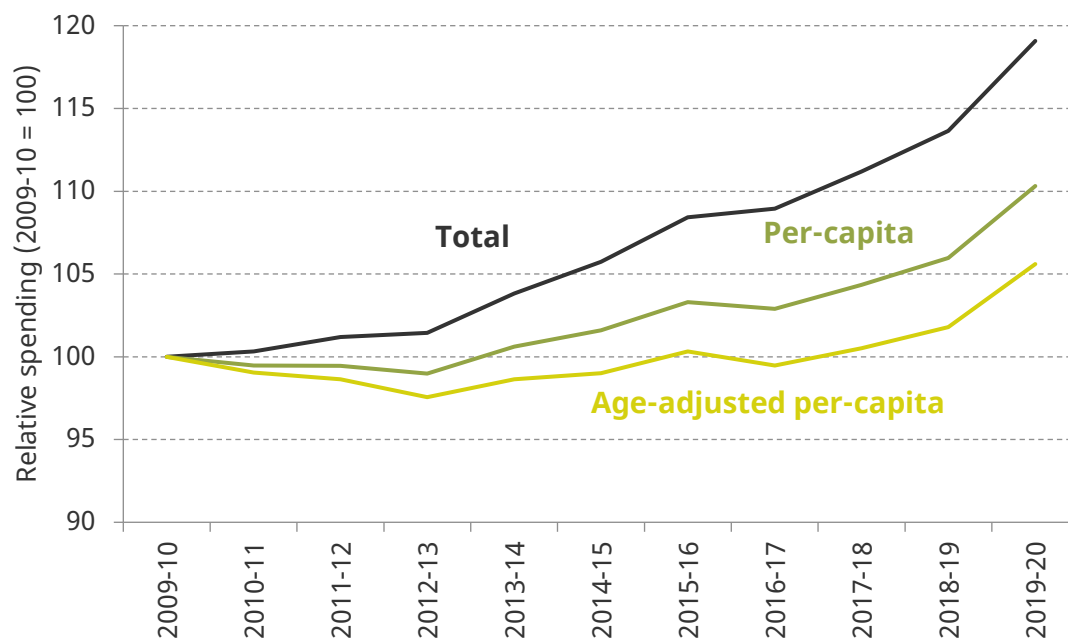
<sup>2</sup> R. Crawford and B. Zaranko, 'Spending Round 2019: keeping perspective', in C. Emmerson, C. Farquharson and P. Johnson (eds), *The IFS Green Budget: October 2019*, <https://www.ifs.org.uk/publications/14424>



than younger people, and require additional spending to meet their needs. This means that spending increases have been required just to keep up with these demographic changes over the past decade. Factoring in the changes in both population size and age composition would have required DHSC spending to rise by an average of 1.2% per year just to meet these additional pressures.

Figure 3 therefore also shows how the changes in real-terms DHSC spending since 2009–10 compare to these demographic pressures. The green line shows how per-capita DHSC spending has changed since 2009–10, while the yellow line shows changes in spending after accounting for the growth *and* the ageing of the population. Between 2009–10 and 2016–17, spending increases were roughly in line with the pressures associated with demographic changes (meaning that age-adjusted per capita spending was broadly flat), before rising more sharply in the final three years of the period. This means that per-capita spending will be 10.3% higher in 2019–20 than in 2009–10, while age-adjusted spending will have grown by 5.6% over this period.

**Figure 3. Real-terms Department of Health and Social Care spending (2009–10=100), 2009–10 to 2019–20**



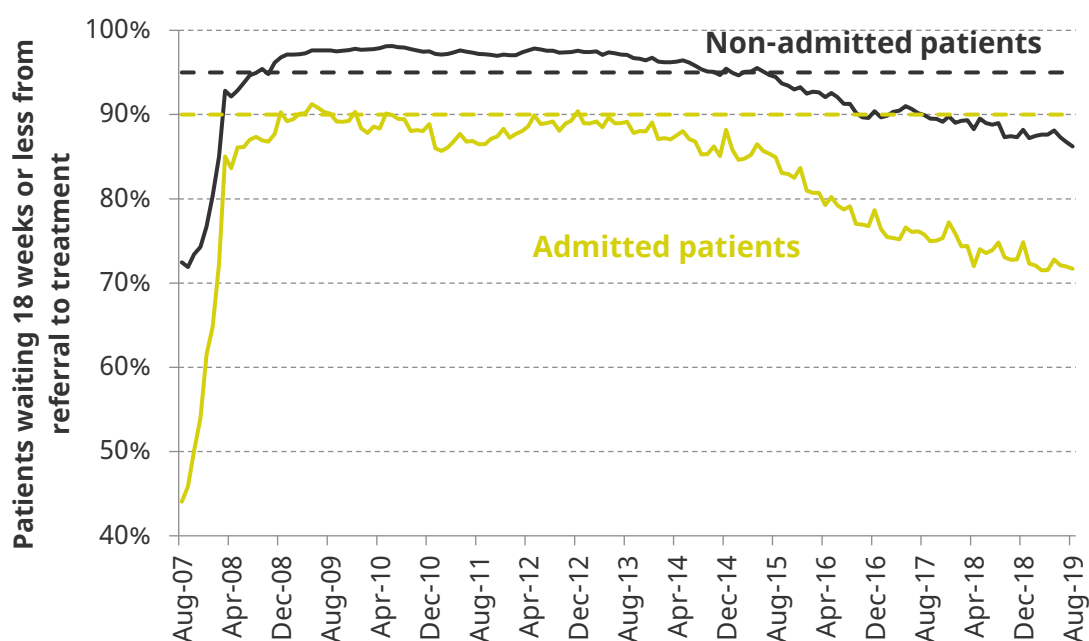
Notes and sources: see end section.

Demographic changes are not the only pressures on health spending, however. Changes in population health over and above the ageing of the population (such as a growing number of people living with multiple chronic conditions), new technology and treatments, and wage pressures all place significant burdens on the health service. Recent estimates suggest that to meet all these pressures fully, funding increases of 3.3% per year up to 2033–34 would be required just to maintain current levels of NHS provision.<sup>3</sup> These estimates suggest that while recent funding increases have been sufficient to meet demographic pressures they are unlikely to be sufficient to also meet all other pressures.

<sup>3</sup> A. Charlesworth and P. Johnson (eds), *Securing the Future: Funding Health and Social Care to the 2030s*, Institute for Fiscal Studies and Health Foundation Report, 2018, <https://www.ifs.org.uk/publications/12994>.

These pressures may partly explain the fall in some measures of NHS performance in recent years. One often cited indicator of NHS performance is the waiting time for elective (pre-planned) surgery. Since 2008, there have been targets that 90% of admitted patients and 95% of non-admitted patients should wait no more than 18 weeks between an initial referral from a GP and the end of their treatment. Figure 4 shows that performance against this target by NHS hospitals has dropped markedly since the beginning of 2015. As a result, only 71.7% of admitted patients and 86.2% of non-admitted patients were treated within 18 weeks in August 2019. While waiting times remain considerably below historical waiting times for NHS patients (these were much longer before waiting time targets were implemented), performance against this metric has clearly fallen in recent years – one indication that increases in resources have failed to keep pace with demand.

**Figure 4. Percentage of inpatients and outpatients waiting no more than 18 weeks following referral**



Notes and sources: see end section.

### The path for future NHS spending looks far more generous than that implied by all parties’ plans at the last election

In June 2018, then-Prime Minister Theresa May announced a five-year NHS funding settlement, promising an extra £20.5 billion (£34 billion in cash terms) by 2023–24 relative to 2018–19. As a result of the announcement, funding for frontline services in England is set to increase at an average real rate of around 3.3% over the five years between 2018–19 and 2023–24: slightly slower than the rate at which UK health spending has grown historically, but certainly at a faster rate than has been the case since 2010.

It is important to note that the June 2018 funding settlement does not cover all of government health spending. For a start, it relates only to the English NHS.<sup>4</sup> Non-NHS

<sup>4</sup> Higher spending on the NHS in England does, however, mean a corresponding increase in the grants allocated to Scotland, Wales and Northern Ireland, as a result of the Barnett formula.

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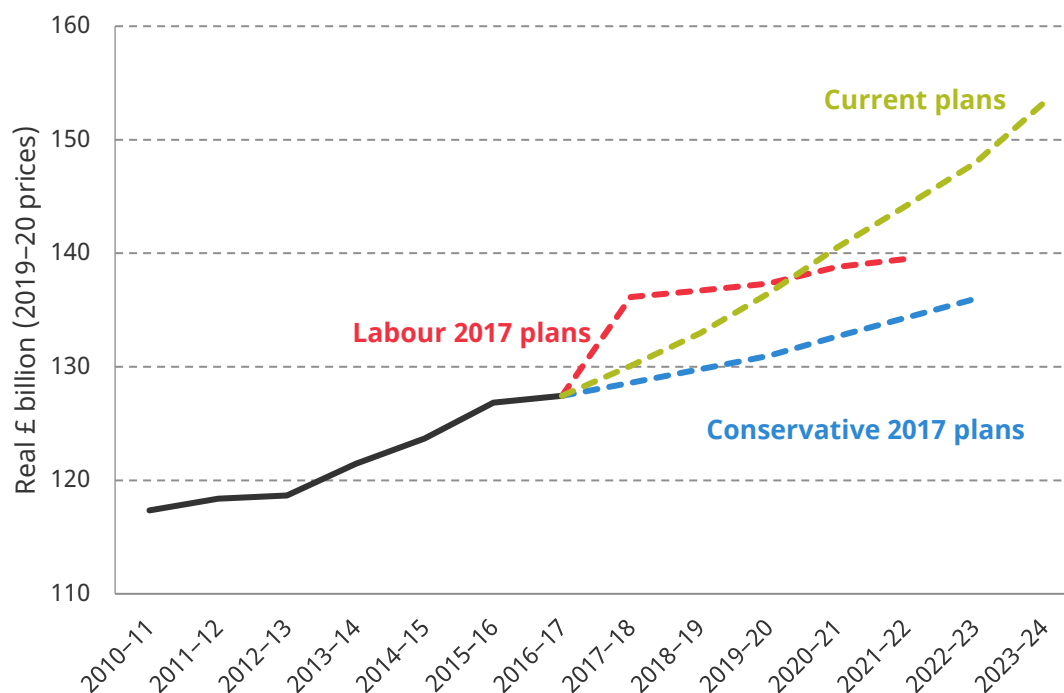
areas of the Department of Health and Social Care budget (such as public health initiatives, and education and training) were not covered and do not have budgets set for the years beyond 2020–21. And the June 2018 announcement related to day-to-day spending only; capital (investment) budgets were not covered and do not exist for the years beyond 2020–21.

While we do not yet have full details of how all elements of the health budget will evolve over the coming years, what is clear is that recent NHS funding pledges are far more generous than those made in the Conservative Party's 2017 manifesto. Figure 5 shows the path for total DHSC spending up to 2023–24, assuming that all elements other than the day-to-day NHS England budget are frozen in real terms after next year. By 2022–23, total DHSC spending is set to be £12 billion higher (in today's prices) than the Conservatives promised at the last election. Labour's 2017 plans implied a sharp increase between 2016–17 and 2017–18, followed by modest real growth in the following years. Current spending plans imply total DHSC spending in 2019–20 (the year in progress) similar to that implied by Labour's 2017 manifesto but set spending in future years on a much more generous path.<sup>5</sup>

The NHS England day-to-day budget is set to grow by 3.3% per year in real terms between now and 2023–24. If all other components of the health budget are frozen, the total DHSC budget will grow by 2.9% per year over that period. To achieve 3.3% annual growth in overall DHSC budget over that period (to keep pace with projected demand) would require an additional £2.2 billion of spending by 2023–24, in today's prices (an extra £2.3 billion in cash terms). To achieve 3.6% real growth (the long-run average growth rate) would require an additional £4.0 billion in today's prices in 2023–24 (£4.3 billion in cash terms). Election promises to spend above and beyond what is currently planned should be seen in this context.

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<sup>5</sup> Note that for the purposes of projecting current plans beyond 2020–21 we have assumed that non-NHS and capital elements of the DHSC budget are frozen in real terms. Were they instead to be increased in real terms, the gap between current plans and both Labour and Conservative 2017 manifesto plans would be greater.

**Figure 5. Real terms Department of Health and Social Care spending**

Notes and sources: see end section.

### New spending plans for the NHS should be viewed as a lower bound

Both recent and historical experience teaches us to view the government's health spending plans as something of a lower bound. Governments of all political stripes virtually always end up topping up the NHS budget. This is shown clearly for the current Conservative government in Figure 5. But it was also true under the Coalition government: even while making cuts elsewhere, in the 2014 Autumn Statement George Osborne managed to announce an extra £2 billion for front-line NHS services in 2015-16.<sup>6</sup> It was also true under the previous Labour government, with health spending rising at a faster rate than planned between 1998-99 and 2005-06.<sup>7</sup> And looking back to the 1980s and 1990s, growth in health spending repeatedly outstripped what was planned.<sup>8</sup> Whoever wins this election, we therefore ought not to be surprised if NHS spending actually ends up being above what is pledged in the general election manifesto(s) of whoever forms the next government.

<sup>6</sup> HM Treasury, Autumn Statement 2014, December 2014, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/382327/44695\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/382327/44695_Accessible.pdf)

<sup>7</sup> R. Crawford, P. Johnson and B. Zaranko, *The planning and control of UK public expenditure, 1993-2015*, IFS Report R147, July 2018, <https://www.ifs.org.uk/publications/13155>

<sup>8</sup> See Figure 3.6 of A. Dilnot and P. Johnson (eds.), *IFS Election Briefing 1997*, <https://www.ifs.org.uk/comms/election1997.pdf>

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## On the other hand, NHS capital spending plans have rarely been delivered

The government recently announced a £1 billion in-year increase to the DHSC capital budget for 2019–20, along with £850 million of capital funding over the next five years for hospital upgrades.<sup>9</sup> Following that announcement, the DHSC capital budget is set to be frozen in real terms between this year and next, at around £7 billion in today's prices. This will leave the DHSC capital budget 16% higher in 2020–21 than in 2010–11, in real terms. We assume in Figure 5 that this real-terms freeze between 2019–20 and 2020–21 continues up to 2023–24, and that the £2.7 billion recently promised by the government between 2020 and 2025 to build six new hospitals<sup>10</sup> is found without a real increase in the overall capital budget. That is, we interpret the September announcement as an *allocation* of the future capital budget, rather than an increase in the *level* of that future budget.

More generally, the government's approach to capital spending on the NHS in recent years has not lent itself to the effective planning and delivery of investment in the health service.

Since 2014–15, the Department of Health and Social Care has repeatedly shifted money from its capital budget into its resource budget to pay for day-to-day running costs. These transfers – which are not supposed to be possible under the Treasury's spending control framework – amounted to £0.6 billion in 2014–15, £1.2 billion in 2015–16 and 2016–17, £1 billion in 2017–18 and £0.5 billion in 2018–19.<sup>11</sup> In the years to come, more generous increases in day-to-day NHS funding may ease the pressure for capital budgets to be siphoned off in this way. But it does raise questions over the ability or willingness of the DHSC to spend capital budgets in the desired manner – even as the NHS estates maintenance backlog has risen from £4.0 billion in 2013–14 to £6.5 billion in 2018–19 (more than £1 billion of which is classified as “high risk”).<sup>12</sup>

There are particular concerns over ad hoc announcements made outside of the usual budgetary process, such as the £1 billion of capital spending announced in August for the financial year in progress. Whether this will be spent well at such short notice – or indeed spent at all – remains to be seen.

## Health spending is almost certainly going to have to take a growing share of national income over time

Current day-to-day spending plans for the NHS in England run to 2023–24; plans for other components of health spending do not go beyond 2020–21. In their respective manifestos,

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<sup>9</sup> HM Government press release, 5 August 2019, <https://www.gov.uk/government/news/pm-announces-extra-18-billion-for-nhs-frontline-services>. For a discussion of whether or not this represents 'new money', see B. Gershlick, 'The excluded middle: is the new money new or not?', Health Foundation blog, 5 August 2019, <https://www.health.org.uk/news-and-comment/blogs/the-excluded-middle-is-the-new-money-new-or-not>

<sup>10</sup> Conservative Party press release, 29 September 2019, <https://press.conservatives.com/post/188018242195/conservatives-embark-on-biggest-hospital-building>

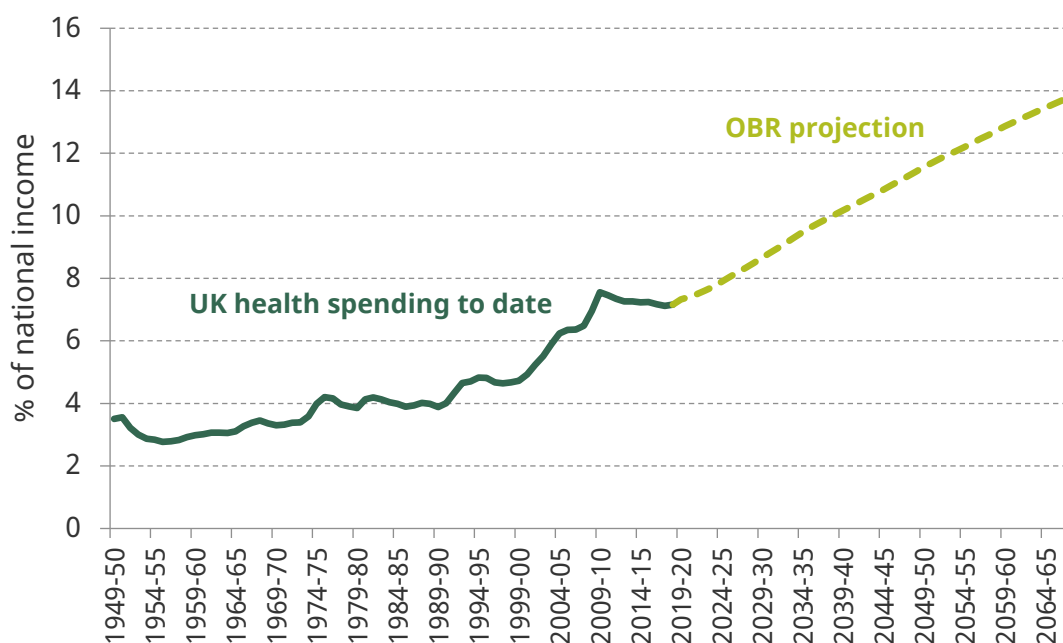
<sup>11</sup> See Chapter 3 of respective HM Treasury Public Expenditure Statistical Analyses between 2015 and 2019.

<sup>12</sup> NHS Digital, Estates Return Information Collection (ERIC), <https://digital.nhs.uk/data-and-information/publications/statistical/estates-returns-information-collection>

we expect each political party to flesh out their plans for health spending over the next few years. But it is also important to consider the longer term outlook for health spending.

In the years and decades to come, a combination of demographic and other cost pressures are set to push health spending ever upwards. In its July 2018 Fiscal Sustainability Report, the Office for Budget Responsibility (OBR) projected that, on current policy, spending on health would increase from around 7.2% of national income today to 10.2% in 20 years' time (equivalent to an extra £66 billion in today's terms), as shown in Figure 6. Absorbing an increase in costs on this scale would pose considerable challenges – as a country, we will need to consider fundamental changes to the delivery and generosity of the health care system, and/or deep cuts in other areas of public spending, and/or substantial tax rises to plug the gap. So, while generous pledges for the NHS remain a vote winner, and demographic and cost pressures make spending increases all but inevitable, we should be mindful of the challenges coming down the road. Key amongst them will be finding a sustainable means of funding health care.

**Figure 6. UK health spending under OBR projections**



Notes and sources: see end section.

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## Notes and sources

### Figure 1 and Table 1

Source: UK health spending for 1995–96 to 2018–19 from HM Treasury Public Expenditure Statistical Analyses 2019; for 1982–83 to 1994–95 the growth rate in UK health spending is taken from previous PESAs and applied backwards from the PESA 2019 series; for 1978–79 to 1981–82 the growth rate from the Statistical Supplement to FSBR 1994–95 is applied backwards to PESA figures, NHS spending prior to 1978 from Office for Health Economics. GDP and GDP deflator from Office for Budget Responsibility Public Finances Databank, accessed November 2019.

### Figure 2

Note: Public service spending is here defined as total managed expenditure less social security less gross debt interest.

Source: As for Figure 1, with social security spending taken from DWP benefit expenditure tables 2019, <https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2019>, and gross debt interest from ONS series JW2P.

### Figure 3

Source: Authors' calculations using Department of Health and Social Care total departmental expenditure limits from HM Treasury Public Expenditure Statistical Analyses (various), ONS population projections, and age spending weights from the Office for Budget Responsibility *Fiscal Sustainability Report*, January 2017.

### Figure 4

Source: NHS England, 'Consultant-led Referral to Treatment Waiting Times Data 2019-20', <https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2019-20/>

### Figure 5

Note: Figures refer to Department of Health and Social Care total departmental expenditure limits (TDEL). To project current plans beyond 2020–21, we have assumed that non-NHS England RDEL (which includes both non-NHS resource spending and DHSC capital DEL) is frozen in real terms between 2020–21 and 2023–24. From 2019–20 onwards, we strip out additional spending relating to the change in the discount rate used to calculate employer contributions to public service pension schemes. For more detail on the assumptions underlying Labour and Conservative 2017 plans, see R. Crawford and G. Stoye, '*Challenging times ahead for the NHS regardless of who wins the election*', (cited below).

Source: HM Treasury Public Expenditure Statistical Analyses (various), Spending Round 2019 (<https://www.gov.uk/government/publications/spending-round-2019-document>), Labour Manifesto 2017 (<http://labour.org.uk/wp-content/uploads/2017/10/Funding-Britains-Future.pdf>), Conservative Manifesto 2017 (<https://s3.eu-west-2.amazonaws.com/conservative-party-manifestos/Forward+Together+-+Our+Plan+for+a+Stronger+Britain+and+a+More+Prosperous....pdf>) and R. Crawford and G. Stoye, '*Challenging times ahead for the NHS regardless of who wins the election*', IFS Observation, 30 May 2017 (<https://www.ifs.org.uk/publications/9262>), and HM Treasury September 2019 GDP deflators.

### Figure 6

Source: Data underlying Figure 1 and OBR *Fiscal Sustainability Report*, July 2018, <https://obr.uk/publications/fiscal-sustainability-report-july-2018/>