
Does the NHS need more money and how could we pay for it?

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With thanks for contributions from:

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Key findings

- **Public spending on health has increased substantially over the history of the NHS, rising from 3.5% of national income in 1949–50 to 7.3% in 2016–17.** Spending increases have varied considerably over time, and spending has grown at a historically slow pace since 2009–10 (1.4% per year on average). Even so, after taking account of inflation, we spend twice as much on health today as we did 20 years ago.
- **Despite the recent slowdown in funding growth, health has been favoured compared with other services.** In 2016–17, health accounted for £1 in every £5 spent by the government, or almost £1 in every £3 spent on public services. These shares have grown at a rapid pace since 2009–10.
- **Additional funding will be required for the NHS if it is to meet a range of pressures. These include a growing and ageing population, changes in morbidity, and cost pressures associated with new technologies and pay.** Spending increases since 2009–10 have only just been sufficient to cover demographic pressures. However, these changes only account for about a third of the pressures faced by the NHS.
- **Borrowing more can only be a short-run policy option and is not a sustainable long-term solution.** Previous increases in health spending have largely been achieved by reducing the share of spending on other services. This will be much harder in future, particularly given cuts to other services since 2009–10.
- **Fully meeting pressures by raising additional tax revenue would mean substantial tax rises, but would still leave the UK's tax burden below most European countries'.** New polling, commissioned by the Health Foundation and carried out by Ipsos MORI for the NHS at 70 project, indicates a majority of people think that if additional funding is given to the NHS then it should be raised through taxes. However, it is not clear which specific taxes should increase or whether people would be willing to pay enough to fund large increases in public spending.
- **A recent announcement by the government will provide additional funding for frontline NHS services over the next 5 years.** Funding for day-to-day spending will increase by 3.4% per year up to 2023–24, higher than recent funding growth but below the long-run average. Details for spending on capital, public health and staff training are yet to be revealed.
- **Hypothecation might generate support for tax rises in the short run, but it risks introducing complexity and opacity rather than the reverse.**

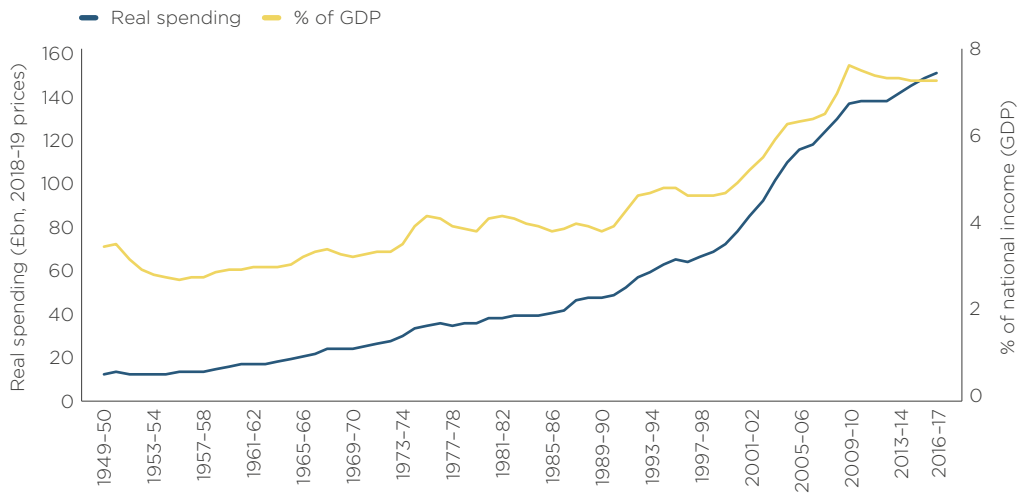
Introduction

The UK government spends £150 billion every year on health. This includes day-to-day funding for frontline NHS services, in addition to capital investments, staff training and public health activities. Even after taking account of inflation, this spending is twice what we spent less than 20 years ago at the start of the 2000s. But might the NHS still require more funding and, if it does, how could we find more money?

What do we spend on the NHS?

Figure 1 shows how UK public spending on health has grown in real terms (accounting for economy-wide inflation) since 1949–50 from just £12.9 billion a year to nearly £149.2 billion in 2016–17 (in 2018–19 prices).^a Spending increases have also outstripped growth in the wider economy such that the share of national income spent on health (shown by the yellow line in Figure 1) has more than doubled, from 3.5% to 7.3%.

Figure 1: Annual UK public spending on health in real terms (2018–19 prices) and as a percentage of national income



Source: Nominal health spending data from Office of Health Economics (1949–50 to 1990–91) and HM Treasury Public Expenditure Statistical Analyses (1991–92 to 2016–17). Real spending refers to 2018–19 prices, using the GDP deflator from the Office for Budget Responsibility in March 2018.

Over the entire period, real public spending on health grew at an average rate of 3.7% a year, but with a lot of variation over different periods. Most recently, spending grew at 6.0% a year between 1996–97 and 2009–10, but at just 1.4% a year since then. So the last eight years have seen health spending grow at a historically slow pace. Within this spending, the majority of money has been targeted towards frontline services while spending on other parts of the health budget (including public health and training) and related services (such as social care) has been cut, which may create problems for the health service in future.¹

Health spending now accounts for nearly a fifth of all public spending and 30% of spending on public services (that is, essentially, spending on things other than debt interest and social security benefits).^b These shares have risen over time. Even in recent years, health spending has grown as a share of total public spending. Indeed, as a result of the decision to ‘protect’ health spending while other areas of public spending have been cut, the share

a All figures refer to UK-wide public spending on health in 2018–19 prices unless otherwise stated.

b Author’s calculations using data from Figure 1. Public spending and public service spending calculated from the Office for Budget Responsibility’s Public Finances Databank and Department for Work and Pensions benefit expenditure tables.

of service spending accounted for by health actually rose at a faster annual rate between 2009–10 and 2016–17 (2.1% per year) than it did throughout the 2000s (1.1% per year) when health spending (and total public spending) rose considerably.

Since 1999, decisions on health spending have been devolved to the separate administrations in Scotland, Wales and Northern Ireland. Table 1 shows how per-person spending varied in 2015–16, with spending highest in Scotland and lowest in England. It also shows how health spending has changed since 2009–10. These changes reflect differences in policy decisions and demographic pressures in each location. Over the period, England had both the strongest population growth and the quickest growth in real per-person health spending (0.7% per year). Per-person spending grew by 0.6% per year in Northern Ireland and 0.3% per year in Scotland, and fell in Wales over this period by an annual average of 0.1%.

Table 1: Changes in health spending, population and per-capita health spending between 2009–10 and 2015–16 in England, Scotland, Wales and Northern Ireland

	Real per-person health spending in 2015–16 (£)	% change between 2009–10 and 2015–16		
		Real health spending	Population	Real per-person health spending
England	2,226	9.6	5.0	4.4
Scotland	2,387	4.3	2.7	1.6
Wales	2,249	1.1	2.0	-0.9
Northern Ireland	2,302	7.0	3.3	3.6
UK	2,249	8.6	4.6	3.8

Note: Population data from Office for National Statistics mid-year population estimates, 2009 and 2015; accessed through NOMIS on 23 March 2018. Nominal health spending from HM Treasury *Public Expenditure Statistical Analyses 2017*. Real spending refers to 2018–19 prices, using the GDP deflator from the Office for Budget Responsibility in March 2018. The changes in UK real health spending and real per-capita health spending only include UK health spending that takes place inside the UK.

A pattern of increasing health spending is not unique to the UK, with spending rising in most developed countries over the past couple of decades.

In 2016, UK combined public and private spending on health was 9.7% of national income.² This compares with an EU-14 average of 9.5%, or 10.2% when weighting spending by the national income of each country.^c So, UK health spending is around the European average. However, spending in the UK is considerably lower than in countries such as France (11.0% of national income) and Germany (11.3%), and additional spending of around £35 billion would be required to meet the current German level of health spending. This reflects broader differences in the overall levels of tax and spending in these countries. While the UK spends less on health than Germany and France, it also raises significantly less tax. In 2015, the UK raised 38.1% of national income in tax, while Germany raised 44.5% and France 53.5%.^{d,4}

c This is also similar to the 10.2% average in the 18 countries studied in 'How good is the NHS?'.³ The 'health' spending figures used for international comparisons and in 'How good is the NHS?' differ from the wider public spending on health figures used in the rest of this report. This is because the international figures include private spending, and spending on some elements of social care.

d This refers to 'general government revenue', the only internationally comparable measure of tax receipts available.

Does the NHS need more money?

Despite the recent squeeze on funding, the amount of care the NHS delivers has continued to rise. For example, the number of inpatient admissions per person in the UK still increased by 7.0% between 2009–10 and 2016–17.⁵ There is increasing evidence though of strain, with lengthening waiting times, increasing numbers of cancelled operations and widespread provider deficits.⁶ NHS providers reported a deficit of £960 million in 2017–18.⁷ Analysis by the Nuffield Trust suggests that the NHS provider sector has an underlying deficit, which is even larger than the reported deficit.⁸

Over the coming years, all research suggests that the NHS's budget will need to rise substantially just to maintain the current level of service. Recent estimates from the Health Foundation and the Institute for Fiscal Studies (IFS) suggest that spending would need to increase by an average of at least 3.3% a year up to 2033–34 just to meet these pressures (or 'maintain the status quo'). Increases of more like 4% a year would be needed to provide any improvement in services and to invest in priorities such as mental health, cancer and general practice.⁹ These larger increases would increase health spending in the UK from £154 billion in 2018–19 to £278 billion in 2033–34, a rise of around 2.5 percentage points of national income. Table 2 shows how health spending could evolve as a share of national income over the next 15 years under these two scenarios.

Table 2: UK public spending on health as a share of GDP, 2018–19 to 2033–34⁹

	Health spending as a share of national income	
	'Status quo'	'Modernised' NHS
2018–19	7.3%	7.3%
2023–24	8.2%	8.6%
2028–29	8.6%	9.3%
2033–34	8.9%	9.9%

These figures are consistent with projections from the Office for Budget Responsibility (OBR), which look even further ahead and suggest that UK public spending on health could continue to rise over the next 50 years, increasing to 12.6% of national income by 2066–67.¹⁰

But where exactly do these pressures come from? One factor is just that as the country gets richer, we can afford more care, and our expectations for the quantity and quality of public services rise. This is common across most countries, with many developed countries choosing to spend more on health over time. The OECD, for example, estimated that 42% of health spending growth in OECD countries between 1995 and 2009 was explained by **income growth**.¹¹

Another factor is **demographic changes**. The population is growing and ageing. The number of people aged between 65 and 84 is expected to grow by 29% over the next 15 years and the number aged 85 and over is expected to grow by 67%. This compares with expected growth in the number of people aged 15–64 of just 1.5%.¹² The OBR estimates that in 2017 spending on the average 80-year-old was five times higher than spending for an average 30-year-old.¹⁰ IFS estimates indicate that NHS funding in England would need to increase

by 1.3% a year between 2009–10 and 2019–20 simply to keep pace with population growth and ageing over this period, with larger increases required in the following years due to larger demographic pressures.¹³

Notably, while such demographic changes clearly have a meaningful impact on the NHS budget, pressures of 1.3% per year only account for around a third of the overall estimated pressure. The majority of pressures instead arise from other, non-demographic factors, including changes to population health (and, in particular, a rise in multimorbidity),¹⁴ technology, pay and policy decisions. For example, the number of people with multiple long-term conditions is expected to increase as are the costs associated with treating these patients.⁹ Trends in public health, including rising rates of obesity and the declining prevalence of smoking, will also have important impacts on population health in future.

In addition to growth in the demand for health care over time, the **cost of providing NHS services also changes**. Hospital staff costs in England accounted for 40% of the Department of Health budget in 2016–17.¹⁵ Over time, wages for NHS staff will have to keep up with wages in the rest of the economy. If they are not accompanied by equivalent improvements in productivity then the costs of providing health care will rise. In recent years, wage growth in the NHS has been limited by public sector pay caps. Such pay restraint may be harder to continue into the future, as signalled by the recent pay deals for NHS staff on Agenda for Change contracts.

In addition to wage pressures, **technological improvements may add further cost pressures** to the NHS budget. While the ability to treat more conditions over time is good news for patients, it does expand the cost of providing care – either because some conditions now receive more treatment, or because patients survive for longer and require more care in future.

One key unknown is what will happen to productivity in the NHS over time. Better productivity growth could reduce the magnitude of funding pressures. It is possible that transformative new treatments, technologies or organisational innovations could increase productivity substantially, but history suggests that productivity growth in health provision lags that in the wider economy (though the last eight years have been a partial exception to that rule). In any case, all the estimates of future costs assume some increased productivity, and cost pressures would only be reduced substantially if the future were to look very different from the past.

What do government announcements mean for NHS funding?

In June 2018, Theresa May announced a new five-year funding settlement for the NHS in England. This promised to increase spending on frontline services in England by a little over £20 billion (in today's prices) between 2019–20 and 2023–24. This would be equivalent to an average annual real increase of 3.4% for day-to-day NHS spending in England. In addition, there is an extra £1.25 bn of nominal spending on NHS pensions in each year of the period. There would also be money on top of this for Scotland, Wales and Northern Ireland.

This growth in funding is larger than the increases seen over the past eight years, and will help to address many of the immediate challenges facing the NHS. However, the funding announcement does not provide any details on future capital spending, including investments in NHS estates and new machines, spending on public health or money to pay for staff training. While further details will not be available until the 2018 Autumn Budget, a real freeze in this spending would mean that the annual increases in funding would be closer to 3% instead of 3.4%.¹⁶ This would make funding increases substantially below the 4% annual increases that most estimates suggest is required to make improvements in the quality of care provided.

In any case, cuts in capital spending could seriously impact the ability of the NHS to provide high quality care in future, and could add to future funding pressures. Reducing spending in these areas now to fund frontline services is therefore a false economy.

Potential ways to raise money for the NHS

All of this raises an obvious question: how can we pay for more NHS funding? This is an important issue not only in the short run – with a government attempting to balance increases for NHS funding and manifesto commitments on cutting the deficit while also avoiding particular tax rises – but also in the longer term too.

Theresa May has suggested that much of the additional money over the next five years will come from a 'Brexit Dividend'. But given that the government's own official forecaster (along with almost all economic forecasts) suggest that Brexit will have serious negative consequences for the UK public finances this will make funding decisions for the NHS and other services even harder rather than providing additional revenues.¹⁷

Three broad options exist:

- increasing government borrowing;
- diverting money from other areas of public spending to the NHS;
- raising more revenue from taxes.

Borrowing can only be a short-term solution. Given that spending needs to rise over time, we cannot simply borrow more and more as pressures grow. So while government might decide to run a bigger deficit for a while – and hence accept higher levels of debt – this clearly cannot be a long-term solution.

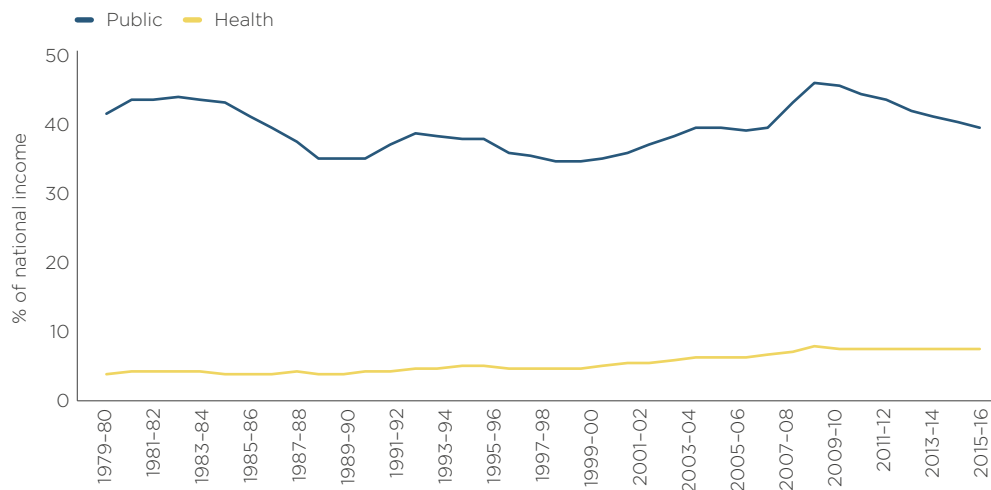
A second option is to spend more on the NHS without changing the total level of government spending, by reducing spending in other areas. To a significant degree, this is what has happened in recent decades. Figure 2 shows how total government spending and public spending on health have changed as shares of national income since 1979–80. Total public spending has fluctuated over time, but accounted for a smaller share of national income in 2016–17 (38.9% of national income) than it did at the beginning of the period (41.0%). Public spending on health has meanwhile increased by 3.4 percentage points.

This has been achieved by reprioritising spending across different areas. For example, the share of public spending devoted to health increased by over 9 percentage points over the same period, while the share devoted to defence spending fell by over 5 percentage points.¹⁸ Spending on other areas, such as housing and roads, has also fallen sharply over time. Similar reprioritisations in future look difficult, not least given the very sharp cuts in many areas of public spending seen over the last eight years.

This leaves higher taxes as probably the main potential source of additional money for the NHS in the medium term. New polling, commissioned by the Health Foundation and carried out by Ipsos Mori, shows that 79% of respondents either agree or strongly agree with the statement that the NHS is underfunded, and a majority thought any additional spending should be funded through additional tax revenues.¹⁹ That said, such polling does not always translate into support for particular tax rises, and while people may be willing to pay some additional tax, it is less clear that they would support tax rises of the magnitude required to fully fund the sort of increases in public spending discussed above.

In addition, the polling suggests that there is a lot of variation in views on which taxes should be increased, with 24% suggesting income tax, 22% a new, earmarked tax and 16% an increase in National Insurance. It is also important to note that the tax burden in the UK is at a historically high level (although not especially high by continental European standards, as noted above).

Figure 2: Total public spending and public spending on health as a share of national income



Source: Author's calculations based on various HM Treasury Public Expenditure Statistical Analyses, UK National Accounts and the Office for Budget Responsibility's Public Finances Databank.

Fully meeting pressures would require substantial increases in revenue. It is hard to see how we could raise the requisite tens of billions of pounds without increases in some or all of income tax, National Insurance and VAT, which between them account for almost two-thirds of all tax revenues. Recent Health Foundation and IFS estimates suggest that if the additional funding required to meet pressures on the NHS over the next 15 years were met through tax increases, the additional tax burden would be equivalent to £1,200 per household in 2033–34 compared with 2018–19.²⁰ Of course, this does not mean that each household would have to pay £1,200 – richer households would pay more, while poorer households would pay less. Different choices over which taxes to increase in order to raise the revenue would mean affecting different households differently.

In recent months, there has been much discussion of 'hypothecation' – creating a new tax, or ring-fencing specific tax revenues to pay for the NHS and social care. 'Pure' hypothecation means that health spending would be tied to the total amount of revenue raised from a specific tax (e.g. a 'health tax'). 'Partial' hypothecation would nominally allocate revenues from a tax towards health spending, with the remainder of funding coming from general taxation.

The arguments for and against hypothecation have been discussed extensively in recent publications.²¹ Broadly, advocates argue for hypothecation for political economy reasons: recent polling suggests that the public would be willing to pay more in tax if they could be sure that the money went to the NHS.²² Raising taxes could therefore be easier if they were tied specifically to the health service.

On the other hand, tying health spending to any particular source of revenue could be difficult as needs rise over time. One would never want to tie spending to the actual amount raised by any specific tax. For example, National Insurance contributions were almost equal to NHS spending in 2007–08, but two years later, following a recession, NHS spending was £24 billion higher. Topping up spending from other revenue then raises the question of what purpose the hypothecation would have served in the first place – how do we know that the government would not have spent this amount on the NHS all along?

There is also a political risk. It is almost inevitable that the link between any tax and actual health spending will not be one-for-one. This risks further loss of public faith in government. In addition, any hypothecated tax would need to account for the interaction between devolution, taxes and spending decisions, and the degree to which social care is also covered by the tax.

In the end, the choice over whether to go down the route of a hypothecated tax is a political one. Is this the only way to raise additional resources? If so, how can it be made as honest and transparent as possible?

Discussion

Despite already being the largest item of government spending, the NHS will require more funding in future if it is to maintain its current standards. These increases will be larger if we also want to improve the quality and scope of health care provided in the UK. Such expectations would require additional funding increases of 2 to 3 percentage points of national income over the next 15 years.

Such increases are not unheard of – indeed, these increases would symbolise a return to the sort of average annual increases in funding that the NHS has received over the past 70 years. However, past increases have been largely achieved while avoiding massive increases in the overall levels of tax or government spending as a share of national income. Such a task seems harder now, given long-run trends in the share of government spending that already goes on health rather than other services, and the particularly tight squeeze experienced by other areas of spending since 2009–10.

Recent government announcements mean that there will be increases of 3.4% per year for frontline NHS services over the next five year, although how they will be paid for remains unclear. In the short term, some of these funding pressures could be met by additional borrowing. However, in the longer term, this is not a sustainable solution and it seems difficult to look past tax rises if we choose to increase funding for the NHS. Ultimately, then, the public are faced with a choice about the sort of health service that they want in future and what tax they are willing to pay towards providing it.

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To mark the BBC's coverage of the NHS's 70th birthday in July 2018, researchers from the Health Foundation, Institute for Fiscal Studies, The King's Fund and the Nuffield Trust have joined forces for the first time, using combined expertise to shed light on some of the big questions on the NHS.

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