8. Challenges for health spending

Rowena Crawford and George Stoye (IFS)

Summary

- The Department of Health (DH), which funds the National Health Service (NHS) in England, has been protected from the large ongoing cuts to departmental spending. The DH budget is currently planned to increase in real terms by an average of 1.2% per year between 2010–11 and 2015–16, compared with a real cut of 3.3% per year to other departmental spending over the same period.
- The NHS, however, faces a number of pressures that tend to increase demand for healthcare over time. The population is both growing and ageing, and older individuals on average demand more, and more expensive, healthcare. Real increases in health spending of 1.2% per year could be required to keep pace with population growth and the changing age structure of the population.
- Demand will also increase over time as a result of the rising prevalence of some chronic conditions, improvements in access to care, and improvements in technology combined with government policy increasing the range of healthcare treatments available. NHS England and the Nuffield Trust estimate that the combined impact of demographic and other pressures could increase demand by around 3% per year.
- The NHS also typically faces pressures from rising costs – in particular from wages and high-cost drugs. The DH has been assisted in dealing with its small real budget increases since 2010–11 as government policies have been able to restrain public sector pay. Low private sector earnings growth will probably have helped to contain any adverse effects of this pay restraint on the recruitment, retention and motivation of high-quality NHS workers. However, as private sector wages recover, continuing pay restraint without adverse effects is likely to be harder.
- NHS England estimates that demand pressures and rising costs could create real financial pressures of around 3.5% per year and that it needs real budget increases or improvements in productivity amounting to around £30 billion (2020–21 prices) annually by 2020–21 to meet these pressures without a decline in service quality.
- These factors may argue for a more favourable spending settlement for the DH in future than it received over the current parliament, but such a choice cannot be made lightly. There will almost certainly be further real cuts to overall departmental spending in the years after 2015–16, regardless of who forms the next government. A more beneficial outcome for the DH would mean more spending overall or harder budgetary pressures for other departments.
- The Autumn Statement forecasts, for example, imply departmental spending cuts averaging 3.7% per year between 2015–16 and 2019–20. Even if the NHS achieves the productivity improvements of 2.4% per year it is aiming for (reducing the financial pressures from around £30 billion to £8 billion), the DH budget would still need to increase by 0.8% a year in real terms to meet demand and cost pressures. This would imply the cuts to other departments need to average 6.1% per year.

8.1 Introduction

Spending on health accounted for around 18% of all public spending in the UK in 2013–14 and 31% of spending on public services. Despite the government's fiscal consolidation entailing large-scale cuts to departmental spending (averaging 9.5% in real terms between 2010–11 and 2015–16; see Chapter 7 for more detail), to date the National Health Service (NHS) has been relatively protected. The budget of the Department of Health (DH), which pays for the NHS in England, is forecast to increase by 6.2% in real terms between 2010–11 and 2015–16 (an average increase of 1.2% per year).

The period beyond 2015–16 will be one of continued austerity for departmental spending, with real cuts expected regardless of who forms the next government.[1] The next government will have to make difficult decisions about how to allocate a tight spending settlement between departments. These decisions will be made in the next Spending Review, which will presumably occur sometime in 2015 and will set departments' budgets for 2016–17 and potentially subsequent years.

The settlement for the DH will be a contentious decision. On the one hand, the NHS faces a considerable challenge in providing high-quality healthcare in the face of rapid demographic changes, while at the same time containing overall spending. NHS England recently estimated that, compared with 2013–14, it would face additional demand and cost pressures amounting to an annual £27 billion in real terms by 2020–21 (in 2015–16 prices; around £30 billion in 2020–21 prices).[2] To satisfy rising demand without reducing quality would require increases in real funding or increases in productivity or both. On the other hand, a relatively generous settlement for the NHS would either require higher spending overall or significantly reduce the funds available for other departments.

In this chapter, we discuss both sides of this debate. However, one potential way of increasing NHS funding that we do not consider is to increase existing user charges or introduce new charges for some NHS services. This is an option, but since none of the main political parties has proposed introducing or increasing such charges as a way of boosting NHS funding, we do not consider it here.

We start in Section 8.2 by describing trends in health spending. In Section 8.3, we examine some of the potential pressures on NHS spending, in particular from demographic change and rising costs. In Section 8.4, we take some of the scenarios published by NHS England for meeting demand and cost pressures through different combinations of productivity growth and real funding increases, and highlight the implications of these choices for other departments' budgets given a set overall spending envelope. Section 8.5 concludes.

[1] R. Crawford, C. Emmerson, S. Keynes and G. Tetlow, 'Fiscal aims and austerity: the parties' plans compared', IFS Briefing Note BN158, 2014, http://www.ifs.org.uk/publications/7495.

[2] The exact figure in the NHS England calculations is £29 billion in 2020–21 prices, but this is presented rounded to £30 billion. Source: NHS England, 'The NHS belongs to the people: a call to action', 2013, http://www.england.nhs.uk/wp-content/uploads/2013/07/nhs_belongs.pdf and NHS England, 'The NHS belongs to the people: a call to action – the technical annex', http://www.england.nhs.uk/wp-content/uploads/2013/12/cta-tech-Annex.pdf.

8.2 Past and current health spending

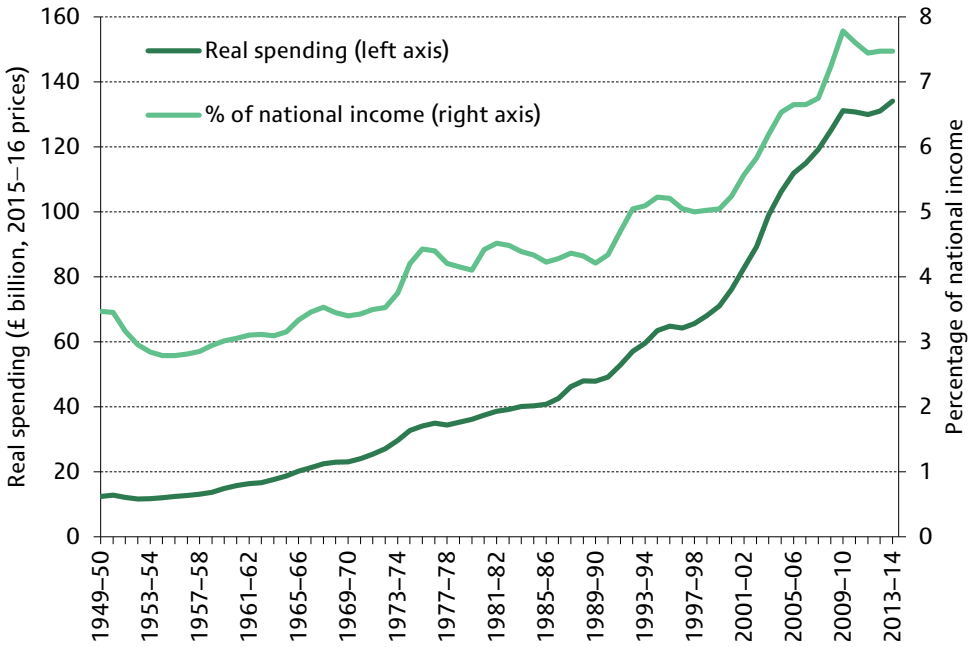
Historical health spending

Figure 8.1 shows annual UK public health spending between 1949–50 and 2013–14.[3] It presents spending both in real terms (adjusting for economy-wide inflation using the GDP deflator) and as a share of national income. Real health spending has grown significantly over the last 65 years, rising from £12.5 billion in 1949–50 to £134.1 billion in 2013–14 (in 2015–16 prices). This is equivalent to an average real increase of 3.8% in each year. This is much larger than the growth in the size of the economy over the same period, so health spending as a share of national income has more than doubled, growing from 3.5% of national income in 1949–50 to 7.5% in 2013–14.

Growth in health spending has varied over time. This variation reflects both differences in the objectives of different governments and differences in the wider economic situation:

- From the inception of the NHS in 1948 until the late 1990s, real spending increased gradually, with large rises in some years often followed by a slowdown in others. Between 1949–50 and 1978–79, health spending grew by an average of 3.7% each

Figure 8.1. Annual UK public health spending in real terms and as a share of national income, 1949–50 to 2013–14



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 2013–14). Real spending refers to 2015–16 prices, and uses a GDP deflator. Nominal (realised and forecast) GDP and GDP deflators from the Office for Budget Responsibility, *Economic and Fiscal Outlook December 2014*, http://cdn.budgetresponsibility.independent.gov.uk/December_2014_EFO-web513.pdf.

[3] Long-run data on UK NHS spending is not easily obtainable. 'Health spending' is somewhat broader than 'NHS spending' as it includes public spending on health delivered outside the NHS – for example, a small amount of spending done by local authorities – and some publicly-funded medical research conducted by non-NHS bodies. However, it is reasonable to assume the series are very similar – in 2008–09, 99% of 'health spending' was conducted by the Department of Health and the devolved administrations of Scotland, Wales and Northern Ireland.

year. This was followed by the period between 1978–79 and 1996–97 under the Conservative governments of Margaret Thatcher and John Major, during which health spending grew by an average of 3.4% a year.

- Under the last Labour government, real health spending grew at an average rate of 5.6% between 1996–97 and 2009–10. Spending as a share of national income increased from 5.0% in 1996–97 to 6.7% by 2007–08 (and further to 7.8% in 2009–10 as national income fell during the recession). These increases were in part driven by the explicit goal set in 2000 to close the gap between total health spending (as a share of national income) in the UK and in the remainder of the EU15 (see Box 8.1 for further international comparisons),[4] while the conclusion of the Wanless Review in 2002 further supported increases in health spending (the then Labour government initially approved these recommendations for five years up to 2007–08 in the 2002 Budget).[5]

- In contrast, the three-year period between 2010–11 and 2013–14 presents a very different pattern, with average real growth in health spending of just 0.8% per year. Aside from the three-year period 2009–10 to 2012–13 (over which average growth in UK health spending was 0.0% per year), this is the tightest three-year period of real UK health spending since the period 1951–52 to 1954–55 (when it was cut by an average of 0.3% per year as a result of the introduction of prescription charges and dental fees in 1952).

Table 8.1 summarises the average annual growth of health spending over these periods.

These increases in real spending have led to spending on health accounting for an increasingly large proportion of total UK public spending (and of spending on UK public services) over time. This is illustrated in Figure 8.3. Shortly after the inception of the NHS, spending on health accounted for around 15% of all spending on public services in the UK and under 10% of all public spending. By 1985–86, health spending amounted to around 18% of UK public service spending and 10% of total public spending. The rapid real increases in health spending that followed saw these shares increase markedly: by 2013–14, health spending amounted to 18% of all public spending in the UK and over 30% of public service spending.

Table 8.1. Average annual real change in UK public health spending

Time period	Years	Average annual real growth
Whole period	1949–50 to 2013–14	3.8%
Previous governments	1949–50 to 1978–79	3.7%
Last Conservative government	1978–79 to 1996–97	3.4%
Last Labour government	1996–97 to 2009–10	5.6%
Coalition government	2009–10 to 2013–14	0.6%
Spending Review 2010 period	2010–11 to 2013–14	0.8%

Source: Authors' calculations. See Figure 8.1 for further details.

[4] This goal was set by Tony Blair in 2000, with his original comments made when interviewed on the BBC in January 2000, and repeated in *Hansard*, 19 January 2000, column 837.

[5] D. Wanless, *Securing Our Future Health: Taking a Long-Term View*, HM Treasury, London, 2002, http://www.yearofcare.co.uk/sites/default/files/images/Wanless.pdf.

Box 8.1. International comparisons of health spending

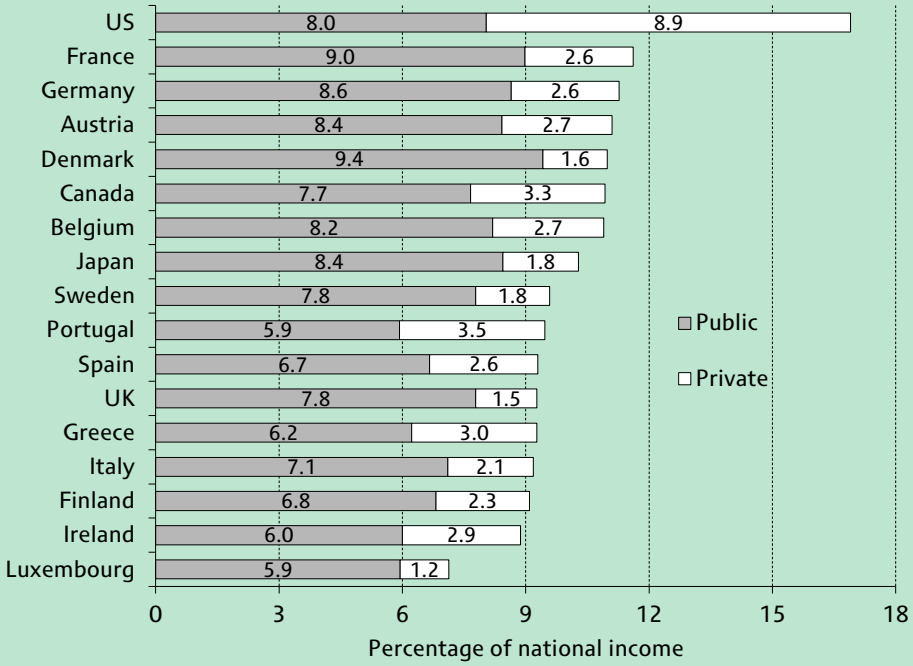
In 1998, UK health spending (measured on an internationally comparable basis, including both public and private spending), at 6.8% of national income, was lower than health spending in all other G7 countries and 12 of the EU15 states (only Luxembourg and Ireland had smaller shares). This compared with an unweighted EU15 average (excluding the UK) of 8.0%.[a]

Figure 8.2 shows how total health spending (as a share of GDP) varied across the EU15 and G7 countries in 2012. Considerable variation exists across countries, both in the overall share spent on healthcare and in the proportion spent through public channels.

UK health spending has grown significantly since 1998, reaching 9.3% of national income in 2012. The UK spent a larger share of GDP on healthcare than five other EU15 countries. The UK remains considerably below France (11.6%), Germany (11.3%) and the unweighted EU15 average excluding the UK (10.0%). It is important to note that comparisons in spending do not take account of the quality of care provided in each country. Rather than aiming for parity in spending, a more important priority is to focus on the standard of healthcare delivered and the efficiency with which it is provided.

In 2012, 84% of the UK's health spending was comprised of public spending – the second-highest share, behind Denmark.

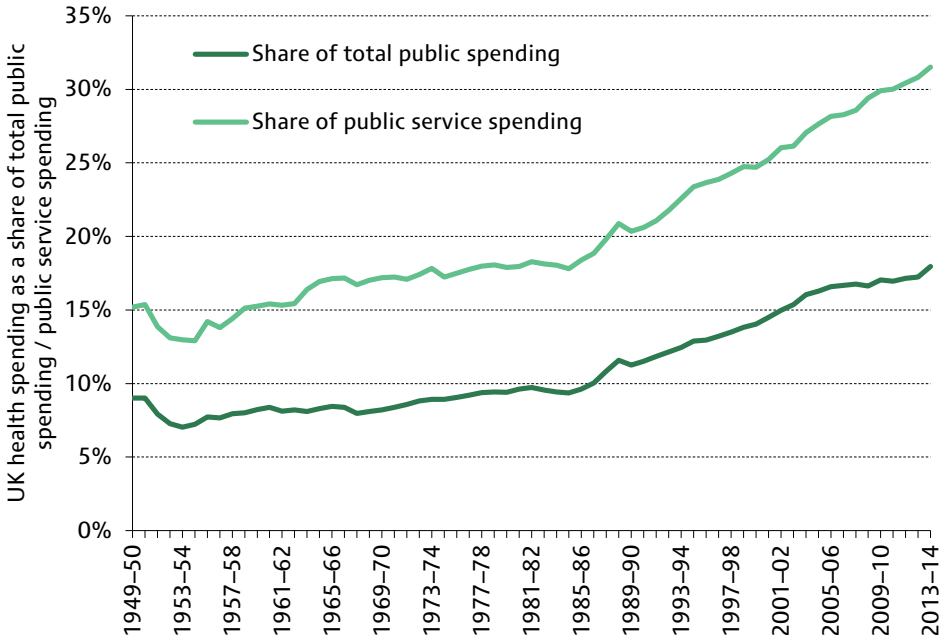
Figure 8.2. Public and private health spending as a percentage of national income across the EU15 and G7 countries, 2012



Source: OECD Health Statistics (database available at http://www.oecd.org/els/health-systems/health-data.htm). Figures for the UK differ from those in Figure 8.1 as health spending (as reported by the OECD) is measured on an internationally comparable basis. The Netherlands is omitted from the figure as the public–private split is not available, but is included in the calculation of average EU15 total health spending.

[a] C. Emmerson, C. Frayne and A. Goodman, 'How much would it cost to increase UK health spending to the European Union average?', IFS Briefing Note BN21, 2001, http://www.ifs.org.uk/bns/bn21.pdf.

Figure 8.3. UK health as a share of total public spending and public service spending, 1949–50 to 2013–14



Note: Public service spending defined here as total public spending less spending on gross debt interest and benefits and tax credits.
Source: Health spending data as Figure 8.1. Public spending and public service spending calculated from Office for Budget Responsibility, *Public Finances Databank* and Department for Work and Pensions, *Benefit Expenditure Tables*.

Recent spending on health in England

In England, spending on the NHS is the responsibility of the Department of Health. Table 8.2 sets out how the DH budget for the period 2010–11 to 2015–16 has changed since allocations for these years were first given.[6] The department did not spend its entire allocated budget in 2010–11, 2011–12, 2012–13 or 2013–14. The DH underspend was particularly large in 2012–13, which makes the DH budget appear to increase by a comparatively large amount in 2013–14. The only explicit policy change HM Treasury has made to the overall DH budget is to the 2015–16 settlement (originally set in the July 2013 Spending Review). In the Autumn Statement 2014, the government announced it was reallocating £1.2 billion from the reserve to NHS spending, and allocating additional spending of £0.3 billion per year over the four years 2015–16 to 2018–19 to investment in GP services. No new departmental budget figures were published, but we estimate that in 2015–16 around £1.3 billion of that is likely to be allocated to the DH (the rest being allocated to the devolved administrations).

Given the estimated latest plans, over the five years up to 2015–16 the DH budget is forecast to increase by 6.2% in real terms, equivalent to an average increase of 1.2% per

[6] The NHS in England accounts for around 90% of the budget of the Department of Health. The rest is comprised of DH programme and administration expenditure, spending by Health Education England, spending by special health authorities, spending by Public Health England and non-departmental public bodies, and grants to local authorities. Source: Department of Health, *Annual Report and Accounts 2013–14*, 2014.

Table 8.2. Department of Health budget, 2010–11 to 2015–16

	2010–11	2011–12	2012–13	2013–14	2014–15	2015–16
Nominal, £ billion						
Spending Review 2010[a]	101.5	104.5	107.0	110.0	113.0	
Pre-Autumn Statement 2014	100.4	102.8	105.2	109.7	113.0	115.1
Estimated latest plans[b]	100.4	102.8	105.2	109.7	113.0	116.4
Estimated latest plans						
Real, £ billion, 2015–16 prices	109.6	110.2	110.9	113.6	114.6	116.4
% real increase on previous year		0.6%	0.6%	2.4%	0.9%	1.5%
Cumulative % real increase since 2010–11		0.6%	1.3%	3.7%	4.6%	6.2%

[a] The Spending Review 2010 figure for 2010–11 is the actual DH budget for that year at the time of the Spending Review, not the '2010–11 baseline' used in the Spending Review which excludes 'one-off and time-limited' expenditure'. Spending Review 2010 settlements reported here are £1.4 billion per year lower than those published at the time to be consistent with later DH budget figures, which exclude this amount to reflect the movement of the Learning Disability and Health Reform Grant to the Department of Communities and Local Government.
[b] The DH budget in 2015–16 is estimated post-Autumn Statement 2014 by assuming that 84.3% of the £1.5 billion cost to HM Treasury of the additional UK NHS spending is allocated to the DH.
Source: HM Treasury – *Spending Review 2010*, *Spending Review 2013*, *Autumn Statement 2014* and *Public Expenditure Statistical Analyses 2011 to 2014*.

year. (In the absence of the additional money allocated in the 2014 Autumn Statement, these figures would be 5.1% and 1.0% respectively.) This is considerably greater growth than for virtually all other departments over this period; the average change in departmental spending excluding the DH is a cut of 15.3% over the five years (an average cut of 3.3% per year) – see Chapter 7 for more details.

However, 1.2% per year real increase in spending is lower than the average growth in UK health spending in the past, and much lower than the average growth in UK health spending under the previous Labour governments. On the one hand, this might make the current period of funding restraint feel tough for the NHS if it has got used to working with large real increases in funding each year. On the other hand, one could argue that the previous spending increases have left the NHS relatively well placed to deal with a period of small budget increases. Part of the motivation for the large funding increases under the last government was explicitly that the NHS needed to 'catch up', increase activity and increase quality, with the intention that funding increases would be lower once the NHS only had to maintain service levels. The Wanless Review concluded that, under its 'solid progress' scenario for productivity, real UK health spending would need to increase by 7.1% per year between 2002–03 and 2007–08, but by only 4.7% per year over the following five years and only 3.1% per year over the 2012–13 to 2017–18 period.[7] The NHS could therefore be reasonably expected to operate without a continuation of the largesse of the previous Labour government. However, there are pressures on the NHS budget that mean it might be difficult to maintain existing levels of service quantity or quality with increases in real spending averaging 1% per year. These are discussed in the next section.

[7] D. Wanless, *Securing Our Future Health: Taking a Long-Term View*, HM Treasury, London, 2002, http://www.yearofcare.co.uk/sites/default/files/images/Wanless.pdf.

8.3 Pressures on English NHS spending

The NHS faces a number of pressures that would tend to require increasing real health spending over time in order to maintain current service levels and quality. These include both pressures that increase demand for healthcare (and would therefore, all else equal, increase the total cost of providing the same proportion of demanded healthcare) and pressures that increase the cost of providing a given level of healthcare.

Demand pressures

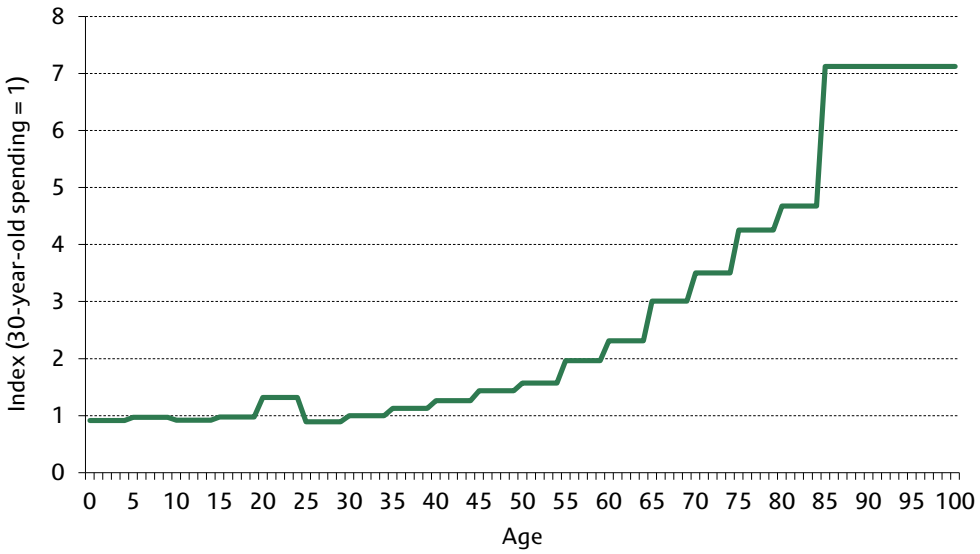
Demographic change

The most obvious pressure increasing demand for healthcare is that presented by demographic change: the growing and ageing of the UK population.

An increasing population means that for a given amount of health spending, resources must be divided among a greater number of individuals. For example, between 1996–97 and 2009–10, the population increased by an average 0.5% per year. Therefore while real spending increased by an average 5.6% per year, real spending *per capita* increased by an average 5.1% per year.

Furthermore, the ageing of the population also puts additional pressure on healthcare, since older people on average demand more, and more expensive, healthcare services than younger people. Figure 8.4 shows estimated public health spending on individuals of different ages (expressed as a ratio relative to spending on an average 30-year-old) in 2011. Spending on an average individual aged between 60 and 65 was over twice the amount spent on an average 30-year-old in 2011. This rises to over three times higher for an individual aged between 70 and 75, and seven times higher for individuals aged 85

Figure 8.4. Age profile of English health spending, 2011



Note: The age profile for health spending is aggregated from age profiles for Hospital and Community Health Services, Primary Care and prescriptions, weighted according to the share of each of these components of spending within total health spending. The age profiles for the components of spending are based on data published by the Department of Health and therefore relate to healthcare use in England.
Source: Authors' calculations based on Department of Health, *Resource Allocation: Weighted Capitation Formula*, 7th edition, 2011, https://www.gov.uk/government/publications/resource-allocation-weighted-capitation-formula.

and over. This suggests that as the proportion of elderly patients within a given total increases, the demand for spending on healthcare will increase.

Exactly how much pressure the changing size and composition of the population will place on the NHS is difficult to estimate. In part, the ageing of the population is the result of past variation in birth rates. For example, between 1946 and 1950 the total fertility rate in England and Wales was an average 2.4 children per woman, compared with an average 1.8 children per woman over the period 1971 to 2013.[8] This 'baby-boomer' generation are now in their mid to late 60s, and there are therefore an unusually large number of people starting to reach a relatively expensive period of life from the point of view of the health service. However, the ageing of the population is also arising from improvements in life expectancy meaning that people are living for longer, and the impact of this on demand for health services is much less certain. If individuals are enjoying more years in good health then, for example, the average 70-year-old in 2018 may be healthier than the average 70-year-old in 2011 – in which case using the age profile of spending in Figure 8.4 to estimate the impact of the changing age structure of the population on demand for health services would *overstate* the future increase in demand. On the other hand, if improvements in life expectancy mean that people who would previously have died have now not done so, but are alive in relatively poor health, then average health at older ages may decline over time – in which case using the age profile in Figure 8.4 would *understate* the future increase in demand for health services.

To keep pace with the changing size of the population (i.e. to keep real spending per person constant), real health spending would need to increase by 0.7% per year between 2015–16 and 2019–20, or 2.7% in total over the four years. In Table 8.3, we also set out how much health spending would need to increase in order to keep pace with both the changing size and age composition of the population, under the assumption that the relative levels of spending by age remain as set out in Figure 8.4. To maintain the current levels of average real spending per person at each age would require real increases in spending of 1.2% per year, or 4.9% in total over the four years up to 2019–20.

Table 8.3. Spending increases required to keep pace with demographic change

	Real increase in health spending required to keep pace with:	
	Population growth	**Population growth and changing age structure**
2010–11 to 2015–16	3.5% (0.7% per year)	5.8% (1.1% per year)
2015–16 to 2019–20	2.7% (0.7% per year)	4.9% (1.2% per year)
2010–11 to 2019–20	6.3% (0.7% per year)	11.0% (1.2% per year)

Note: These figures are calculated assuming that the real level of spending per person does not change over time and that the age profile of spending does not change from that estimated in 2011 (described in Figure 8.4). To the extent that older individuals become relatively more (less) costly over time, these figures will understate (overstate) the required spending increases.
Source: Authors' calculations based on 2012-based UK population projections from the Office for National Statistics and the age profile of spending described in Figure 8.4.

[8] Authors' calculations based on Office for National Statistics, 'Births in England and Wales 2013', Statistical Bulletin, 2014, http://www.ons.gov.uk/ons/dcp171778_371129.pdf. The boom in the birth rate can be seen in figure 1.

Other demand pressures

The demand for healthcare also changes over time for reasons other than the changing size and age structure of the population. In particular, there is evidence that the prevalence of some chronic conditions is on the increase, even after controlling for demographic change. For example, the proportion of the adult population with diabetes is forecast to grow from 7.4% in 2013 to 9.5% by 2030.[9]

Changes in healthcare technology may improve the treatments that exist for certain conditions, and changes in government policy may change the availability of certain treatments through the NHS. These factors, combined with rising expectations, would also increase demand for healthcare, even in the absence of demographic change or changing prevalence of disease.

Estimating the likely impact of these factors on health demand is difficult, and studies that have done so have typically based projections on historic growth rates in healthcare use after demographic factors have been controlled for. Using this approach, the Nuffield Trust (2012) estimates that the increase in hospital admissions for patients with chronic conditions would increase demand for acute services in England by 1–2% per year between 2010–11 and 2021–22.[10] NHS England (2013) estimates that non-demographic demand pressures could amount to 1.6% per year between 2013–14 and 2020–21.[11] However, this is a difficult exercise and there are limitations to using the approach of extrapolating historical trends that need to be borne in mind. In particular, increases in NHS activity over the last decade may have been partly or largely *the result of* increased funding, rather than driven by demand pressures that are independent of funding levels. Therefore, in the absence of such large real increases in funding going forwards, demand pressure may turn out to be lower than the estimates of the Nuffield Trust and NHS England suggest.

Summary

Demand for healthcare services is increasing as the size of the population increases, the age structure of the population changes, and the prevalences of many chronic conditions increase. We have not produced new estimates of the total impact of all these pressures on the demand for healthcare. Existing estimates from the Nuffield Trust (2012) and NHS England (2013) suggest the combined impact of demographic changes and other pressures could increase demand by around 3% per year. For this rising demand to be satisfied without the quality of the care provided deteriorating, either the NHS would need an associated increase in its budget or productivity would need to increase in order to reduce the average cost of providing healthcare (or some combination of the two). Alternatively, the increased demand could not be satisfied, in which case careful consideration would need to be given to the most appropriate form of rationing.

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[9] Adults are classified as 16 years and older. Public Health England (2014), *Adult Obesity and Type 2 Diabetes*, 2014, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/338934/Adult_obesity_and_type_2_diabetes_.pdf.

[10] Nuffield Trust, *A Decade of Austerity? The Funding Pressures Facing the NHS from 2010/11 to 2021/22*, 2012, http://www.nuffieldtrust.org.uk/sites/files/nuffield/121203_a_decade_of_austerity_full_report_1.pdf.

[11] Note that this includes an estimate of demand growth due to the Integration Transformation Fund (which may effectively reallocate some NHS funds to activity not previously funded by the NHS) and seemingly an estimate of cost pressure from the revaluation of pensions. In the absence of these, the non-demographic demand pressures would be estimated at around 1.2%. Source: NHS England, 'The NHS belongs to the people: a call to action – the technical annex', 2013, http://www.england.nhs.uk/wp-content/uploads/2013/12/cta-tech-Annex.pdf.

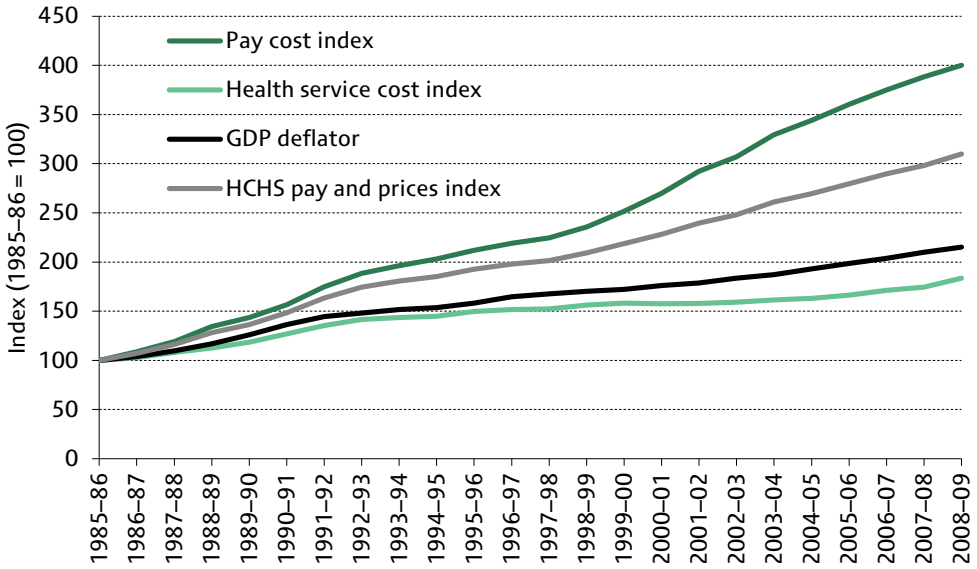
Cost pressures

The NHS also faces a number of pressures that tend to increase the real cost of providing a given level of healthcare over time. Figure 8.5 shows how the cost of NHS Hospital and Community Health Services (HCHS) in England has changed since 1985–86, compared with economy-wide inflation (as measured by the GDP deflator).[12] The health service cost index (HSCI) is an index that measures the change in the price of non-labour goods and services, the pay cost index (PCI) is an index that measures the change in the price of labour, and the HCHS pay and prices index is the weighted average of the two (taking into account the relative proportions of HCHS spending on non-labour and labour inputs).

In general, the change in the cost of non-labour goods and services purchased by the NHS has not been very dissimilar from the change in economy-wide prices. In contrast, the cost of HCHS labour has increased significantly faster than economy-wide inflation – by an average 2.7% per year in real terms between 1985–86 and 2008–09 (and 3.0% per year over the decade 1998–99 to 2008–09).

However, to the extent that these increases in the average cost of labour reflect improvements in the average productivity of the HCHS workforce, they do not really reflect a *pressure* on the NHS budget (since the increase in cost will be offset by an increase in productivity). But if, for example, these pay increases are driven by improvements in productivity elsewhere in the economy not matched in the NHS, with the NHS simply having to increase wages in order to recruit and retain a sufficient

Figure 8.5. NHS (Hospital and Community Health Services) pay cost index and health service cost index, 1985–86 to 2008–09



Note: The pay cost index is a weighted average of increases in unit staff costs for each of the staff groups within the Hospital and Community Health Services sector. Pay cost inflation tends to be higher than pay settlement inflation because of an element of pay drift within each staff group (that is, there is a tendency for there to be a gradual shift up the incremental pay scales). The health service cost index measures the price change for 41 sub-indices of goods and services purchased by the NHS Hospital and Community Health Services, weighted according to the proportion of total expenditure that they represent.
Source: Department of Health.

[12] Note that the HCHS excludes primary care services (GPs).

number and quality of workers, then rising wages would represent a pressure for the NHS.

For example, over the period 1998–99 to 2008–09, the average increase in the real cost of labour was 3.0% but the average basic pay settlement set by the Department of Health was around 1% in real terms.[13] Therefore around 2 percentage points of the average increase in pay observed arose from compositional changes in the workforce (e.g. increased average seniority and substitution between different types of workers). This may have reflected improvements in average productivity – i.e. increases in the relative prevalence of more productive workers – in which case a better estimate of the financial pressure faced by the NHS over this period from wage pressures may be around 1% per year rather than 3% per year.

Assuming pay accounts for 70% of the NHS budget, each 1% increase in pay would imply upward pressure on average real costs across the NHS of 0.7%.[14] Over the period 2015–16 to 2019–20, the Office for Budget Responsibility (OBR) is forecasting average earnings growth across the whole economy of 2.0% per year in real terms (deflated using the GDP deflator). To the extent that the NHS has to keep pace with this wage growth but there is no associated increase in productivity of NHS workers, this could result in cost pressure for the NHS of around 1.4% per year.

NHS England has also pointed to the rising real cost of high-cost drugs for specialist services (such as cancer treatment) adding to the financial pressures facing the NHS. These cost increases would reflect a financial pressure, rather than being perfectly offset by a productivity improvement, if the average increase in the cost of the drugs is greater than the improvement in the quality-adjusted health outcomes arising from use of the drugs. Furthermore, even if the rise in the cost of drugs did reflect an improvement in health outcomes (and therefore cost pressure was theoretically matched by an increase in productivity), this may still result in pressure for additional financial resources. For example, consider a more expensive drug that improves the quality of life of someone with a given condition relative to an existing drug. The new drug would improve productivity (since the quality-adjusted health outcome is better), but would still require greater financing to be devoted to treating that particular condition – either requiring funding to be transferred from elsewhere or increasing financial pressures overall.[15]

Productivity

Increases in demand and/or pressure from rising costs could be met without increases in the budget of the NHS if productivity were increased, i.e. if more efficient use of inputs could result in improved health outcomes for the same level of inputs.

Productivity in the NHS is notoriously difficult to measure, in particular because quantifying the 'output' of the health service, and particularly the *quality* of that output, is very difficult. The estimates that exist vary – highlighting the uncertainty about NHS

[13] This is calculated as a weighted average of the settlements for the component staff groups that make up the HCHS workforce. See NHS England, 'The NHS belongs to the people: a call to action – the technical annex', 2013, http://www.england.nhs.uk/wp-content/uploads/2013/12/cta-tech-Annex.pdf.

[14] In 2013–14, pay accounted for 71% of the cost of acute NHS care. Source: NHS England, 'The NHS belongs to the people: a call to action – the technical annex', 2013, http://www.england.nhs.uk/wp-content/uploads/2013/12/cta-tech-Annex.pdf.

[15] By contrast, a more expensive drug that reduced the need for some other intervention would improve productivity (since the same health outcome could be achieved with fewer inputs), and also the higher cost of the drug could be met by reallocating spending from the intervention that is no longer required.

productivity – but in general suggest productivity improvements have proved hard to come by in the past. The latest Office for National Statistics (ONS) estimate is that NHS productivity increased by an average 0.4% per year between 1995 and 2010 (0.6% between 2004 and 2010).[16] On the other hand, recent analysis from the Centre for Health Economics estimates that NHS productivity increased by an average 1.3% per year between 2004–05 and 2010–11.[17] There are limited data on NHS productivity prior to 1995 – this is discussed in more detail by the OBR in appendix B of its 2012 Fiscal Sustainability Report – but the estimates that do exist suggest productivity growth of less than 1% per year over the longer term.[18]

Even if productivity improves over a given time period, this does not necessarily imply that the average cost of healthcare declines over that period, since the productivity improvement may not be enough to offset the pressure from rising costs. For example, the ONS estimates that over the period 1995 to 2010 the average real cost of providing healthcare output increased by 0.2%, despite productivity increases of an average 0.4% per year.

Pressures since 2010–11

As early as 2009, the NHS in England was looking ahead to the period from 2010–11 onwards when tight financial settlements were expected as part of the government's overall fiscal consolidation. In his 2008–09 NHS Chief Executive's Annual Report, the then Chief Executive of the NHS in England, Sir David Nicholson, challenged the NHS to find £15–20 billion of annual efficiency savings by 2014 (compared with 2011).[19] This resulted in the 'QIPP (Quality, Innovation, Productivity and Prevention)' initiative that planned to find such savings while at the same time improving quality of care. The intention is that efficiency savings will be sufficient for the NHS both to meet increased demand and to improve quality, despite the small increase in real spending since 2010.

The NHS has been considerably assisted over this period by the fact that, in stark contrast to the period illustrated in Figure 8.5, since 2010–11 the real cost of labour has been declining. The government has restrained pay across the public sector: in 2011–12 and 2012–13, the government froze the level of public sector pay scales (in nominal terms) for all but the lowest-paid workers (those earning a full-time equivalent wage of £21,000 or less received a pay rise of £250 over the two years – an increase of at least 1.2% per year). In both 2013–14 and 2014–15, the average increase was constrained to 1%, and this is planned to be repeated in 2015–16. Furthermore, the Department of Health decided not to accept the 1% increase in the pay scales recommended by the NHS Pay Review Body for 2015–16. Originally, DH planned to freeze pay scales (with the proviso that those who would not receive a pay rise through incremental progression would receive a pay rise of 1%); however, recent reports suggest negotiations between the government and the unions representing NHS workers will result in increases to some

[16] Office for National Statistics, 'Public service productivity estimates: healthcare, 2010', 2012, http://www.ons.gov.uk/ons/dcp171766_289768.pdf.

[17] C. Bojke, A. Castelli, K. Grasic, A. Street and P. Ward, *NHS Productivity from 2004/05 to 2010/11*, Centre for Health Economics, Research Paper 87, 2013, http://www.york.ac.uk/media/che/documents/papers/researchpapers/CHERP87_NHS_productivity.pdf.

[18] Office for Budget Responsibility, *Fiscal Sustainability Report July 2012*, 2012, http://budgetresponsibility.org.uk/fiscal-sustainability-report-july-2012/.

[19] NHS, *The Year: NHS Chief Executive's Annual Report 2008–09*, 2009, http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_099700.pdf.

parts of the pay scales.[20] Over the period September 2010 to September 2015, household inflation – as measured by the consumer price index – is expected to average 2.5% per year.

These reductions in the real pay of the NHS HCHS workforce do not appear to have made it harder for the NHS to recruit or retain high-quality workers: the 2014 report of the NHS Pay Review Body reported 'We do not see any current signs of general recruitment and retention issues, and staff turnover is generally low'.[21] This is most likely because real wages have been declining on average across the economy since 2008,[22] and therefore the relative attractiveness of working in the NHS compared with other occupations has not declined in the way that a decline in real NHS earnings in isolation would suggest. For example, in 2013, full-time nurses were on average at the 68th percentile of the hourly earnings distribution of full-time employees, compared with the 66th percentile in 2008.[23]

As real wages recover in the rest of the economy going forwards (the OBR forecasts this will be the case from 2014), it will probably become increasingly difficult for the Department of Health to restrain the growth of NHS wages without there being a detrimental impact on morale and the quality of labour input. If the employment composition remained as it was in 2013 but nurses' wages increased by 1% (nominal) each year from 2013 while all other employee wages increased by the average earnings growth forecast by the OBR (1.8% in 2014, 2.0% in 2015 and 3.1% in 2016), then the average position of full-time nurses in the earnings distribution would fall below the 2008 level in 2016. Wages are therefore more likely to put upward cost pressure on the NHS budget in future.

NHS England is optimistic about the prospects for increasing NHS efficiency going forwards. In its 'Five Year Forward View' published in October 2014, it stated: 'A 1.5% net efficiency increase each year over the next Parliament should be obtainable if the NHS is able to accelerate some of its current efficiency programmes. … Our ambition, however, would be for the NHS to achieve 2% net efficiency gains each year for the rest of the decade – possibly increasing to 3% over time'.[24] Such productivity increases are likely to be crucial if the NHS is to maintain levels of service quality and quantity going forwards, given the demand pressures it faces and the continued reductions in overall public spending that the government is planning.

Indicators of performance

Estimates of NHS productivity are not available for the period since 2010. An alternative way of trying to understand how the NHS is coping with its financial pressures is to examine indicators of NHS performance directly. Unsurprisingly, there has been considerable attention paid to such indicators in recent years. For example, 'QualityWatch' run by the Nuffield Trust and the Health Foundation tracks a range of

[20] http://www.bbc.co.uk/news/health-31009233.

[21] Page xii of NHS Pay Review Body, *Twenty-Eighth Report 2014*, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/288690/NHS_Pay_Review_28th_repot.pdf.

[22] Office for National Statistics, 'Annual Survey of Hours and Earnings, 2014 provisional results', Statistical Bulletin, 2014, http://www.ons.gov.uk/ons/dcp171778_385428.pdf.

[23] Authors' calculations using the Annual Survey of Hours and Earnings, 2008 and 2013. Note that these figures do not control for changes in the composition of the workforce.

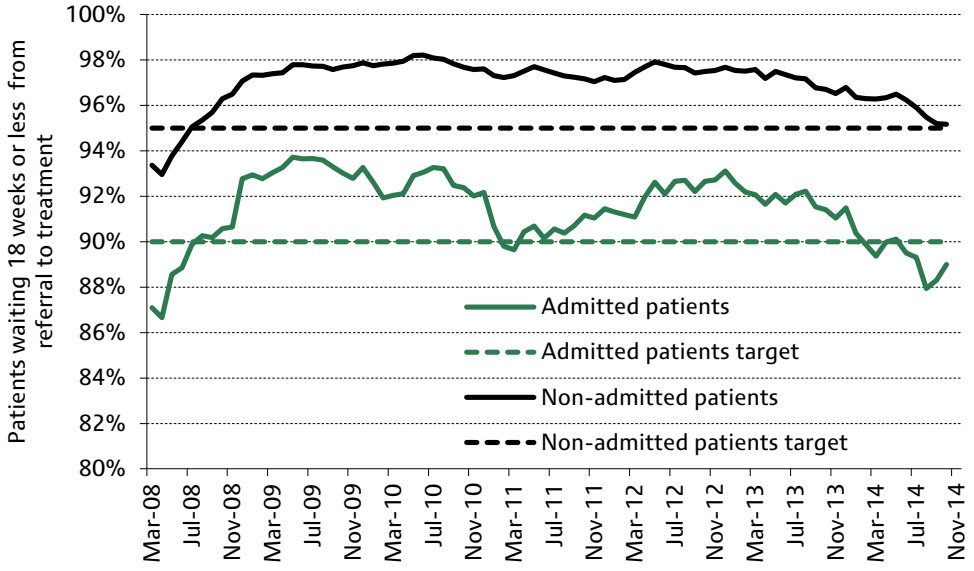
[24] Pages 35–36 of NHS England, *Five Year Forward View*, 2014, http://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf.

indicators to assess how quality in the health and social care sector is changing over time, while the King's Fund produce a Quarterly Monitoring Report that collates and comments on a range of NHS performance data.[25]

It is worth pointing out that many measures of NHS performance – particularly those for which the government has set explicit targets – have the disadvantage that they potentially inappropriately distort activity towards the outcome being measured, and away from other aspects of performance that are not measured but which might be as, or even more, important. Performance indicators should therefore be interpreted with caution, particularly when targets have been introduced, changed or removed, and as wide an array of indicators as possible should be considered.

Two often-cited indicators of NHS performance are described in Figures 8.6 and 8.7. Waiting times for elective procedures have attracted much attention over the last 15 years. Since 2008, there have been targets that 90% of admitted patients ('inpatients'), and 95% of non-admitted patients ('outpatients'), should wait a maximum of 18 weeks between referral and treatment.[26] Figure 8.6 compares the proportions of inpatients and outpatients who have waited no more than 18 weeks for treatment each month between March 2008 and October 2014. Since December 2012, the proportion of both inpatients and outpatients treated within 18 weeks has fallen. Moreover, the percentage of inpatients treated within 18 weeks was below the 90% target in March 2014 and between July 2014 and October 2014 (the latest data available at the time of writing). However, it is important to note that despite these recent declines in performance,

Figure 8.6. Percentage of inpatients and outpatients waiting no more than 18 weeks following referral



Source: NHS England, 'Consultant-led referral to treatment waiting times data', http://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2014-15/.

[25] QualityWatch can be accessed at http://www.qualitywatch.org.uk. The NHS performance data from the King's Fund's Quarterly Monitoring Report, October 2014, can be accessed at http://qmr.kingsfund.org.uk/2014/13/data.

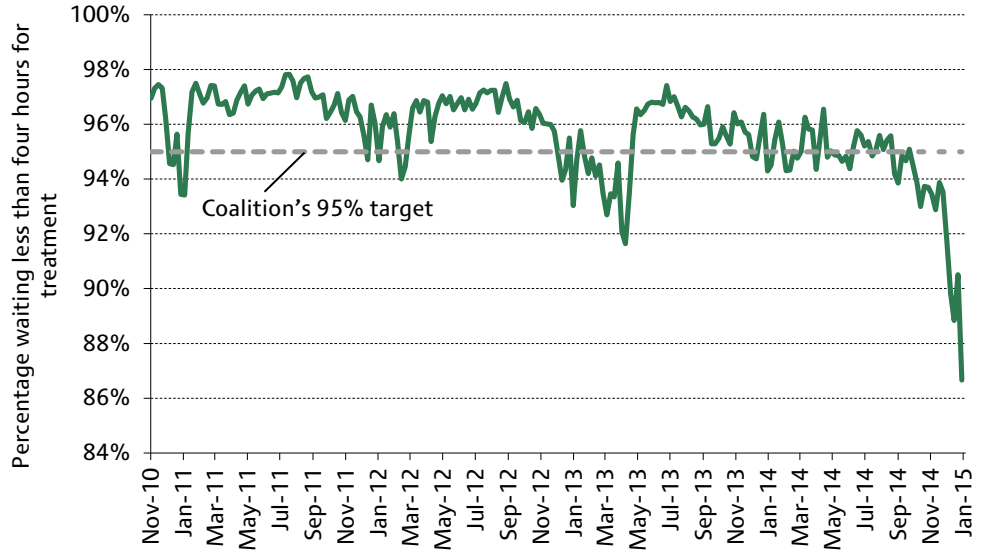
[26] The maximum 18-week wait refers to the period between the initial referral by a GP and either an inpatient admission (for admitted patients) or an outpatient appointment with a consultant (for non-admitted patients). These targets were introduced by the NHS Improvement Plan (2004), and replaced the (gradually strengthening) waiting times targets that had been first introduced by the Labour government in 2001.

waiting times for elective procedures are still performing well by historical standards, and remain vastly below waiting times prior to the introduction of the 18-week target in 2008.

A second target that has received much attention is waiting times for Accident and Emergency (A&E) care. In 2003, a target was set that 98% of patients should spend no longer than four hours waiting for admission, treatment or discharge in A&E, with this target coming into force at the end of 2005.[27] Performance on this measure improved with the introduction of this target, and the target was largely met throughout the period between January 2006 and April 2010.

This target was relaxed somewhat in 2010–11, with the new coalition government setting a target of 95%.[28] Figure 8.7 shows how waiting times have evolved on a weekly basis since November 2010.[29] The 95% target was generally achieved until December 2012, although the decrease in the proportion of patients treated within four hours is noticeable. Between December 2012 and April 2013, the target was frequently breached, before performance subsequently improved. However, recent months have seen a significant decline in the proportion of patients treated within four hours. The 95% target was breached in every week between the end of September 2014 and the beginning of January 2015, with only 86.7% of patients treated within four hours in the week ending 4 January 2015.

Figure 8.7. Percentage of patients who are treated, discharged or transferred within four hours of arrival at an Accident and Emergency department



Source: NHS England, 'A&E attendances and emergency admissions', http://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/weekly-ae-sitreps-2014-15/.

[27] The target is set at less than 100% to allow for a small number of patients with clinical needs requiring more than four hours in A&E. For more details, see http://www.nhs.uk/NHSEngland/thenhs/nhshistory/Pages/NHShistory2000s.aspx.

[28] I. Blunt, *Focus on: A&E Attendances: Why Are Patients Waiting Longer?*, QualityWatch, 2014, http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/140724_focus_on_ae_attendances.pdf.

[29] Weekly waiting times data are unavailable before this date. Quarterly data are available from April 2004 at http://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/weekly-ae-sitreps-2014-15/.

These data suggest that NHS performance initially held up reasonably well despite the budget freeze, but that recently performance – at least on these measures – has started to decline.

8.4 The outlook for English health spending

The combination of pressures illustrated above led NHS England to estimate that it faces combined demand and cost pressures of about 3.5% per year in real terms between 2013–14 and 2020–21, which would amount to real-terms funding pressures of an annual £27 billion (2015–16 prices) in 2020–21 (around £30 billion in 2020–21 prices).[30] To meet these pressures without reducing quality would require either increases in real funding or increases in productivity or both. The NHS England 'Five Year Forward View' published in October 2014 set out a number of different scenarios for how this could be achieved, including an increase in productivity of 0.8% per year and an annual real funding increase of £21 billion by 2020–21, and an increase in productivity of 1.5% per year and a funding increase of £16 billion by 2020–21.[31] The combination of productivity improvements and real funding increases championed by NHS Chief Executive Simon Stevens is an increase in the annual NHS England budget of £8 billion by 2020–21 and implied productivity improvements averaging 2.4% per year.[32]

Table 8.4 sets out for each of these scenarios the increase in the Department of Health budget that would be needed between 2015–16 and 2019–20, assuming that aspects of DH spending other than the NHS England budget are frozen in real terms over this period.[33,34] These figures are calculated assuming that the real budget for NHS England increases by £2.4 billion (2015–16 prices) between 2013–14 and 2015–16; this is equal to the real increase in the total NHS England budget over that period that was set out in the November 2014 Mandate to NHS England (£0.7 billion in 2015–16 prices) plus £1.7 billion that appears to have been allocated to NHS England in the 2014 Autumn Statement.[35] In other words, we are assuming that £2.6 billion (2020–21 prices) of the required increase in NHS England spending is already being planned to be achieved by 2015–16.

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[30] The figure in the NHS England calculations is £29 billion in 2020–21 prices, but this is presented rounded to £30 billion. Source: NHS England, 'The NHS belongs to the people: a call to action', 2013, http://www.england.nhs.uk/wp-content/uploads/2013/07/nhs_belongs.pdf and NHS England, 'The NHS belongs to the people: a call to action – the technical annex', http://www.england.nhs.uk/wp-content/uploads/2013/12/cta-tech-Annex.pdf.

[31] NHS England, *Five Year Forward View*, 2014, http://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf.

[32] As reported by, for example, *The Telegraph*: http://www.telegraph.co.uk/news/nhs/11181496/NHS-needs-8-bn-funding-boost-and-major-reforms-says-health-chief.html.

[33] The NHS in England accounts for around 90% of the budget of the Department of Health. The rest is comprised of DH programme and administration expenditure, spending by Health Education England, spending by special health authorities, spending by Public Health England and non-departmental public bodies, and grants to local authorities. Source: Department of Health, *Annual Report and Accounts 2013–14*, 2014.

[34] The DH budget would need to continue to increase at the same average annual rate for a further year (2020–21) in order to achieve the full funding increase that NHS England estimates it needs by 2020–21. We focus only on the period up to 2019–20 because this is the end of the current government forecast horizon.

[35] Department of Health, *The Mandate – A Mandate from the Government to NHS England: April 2014 to March 2015*, 2014, http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/383495/2902896_DoH_Mandate_Accessible_v0.2.pdf. Secretary of State for Health, Jeremy Hunt, announced the additional £1.7 billion for the NHS in a statement on the NHS 'Five Year Forward View', *Hansard*, 1 December 2014, column 47.

Table 8.4. Increases in Department of Health budget required for NHS England funding scenarios

Demand pressures met by: NHS productivity improvement of:	Real increase in NHS England budget by 2020–21 of: *(2020–21 prices)*	*(2015–16 prices)*	Implied annual % real change in DH budget needed from 2015–16
0.0% per year	£30 billion[a]	£27 billion	3.9%
0.8% per year	£21 billion	£19 billion	2.7%
1.5% per year	£16 billion	£15 billion	2.0%
2.4% per year	£8 billion	£7 billion	0.8%

[a] This is £29 billion in the NHS England calculations.

Note: Annual increase in DH budget from 2015–16 assumes that the DH budget in 2015–16 already encompasses a £2.4 billion real increase in NHS England spending relative to 2013–14 levels (in 2015–16 prices; £2.6 billion in 2020–21 prices).

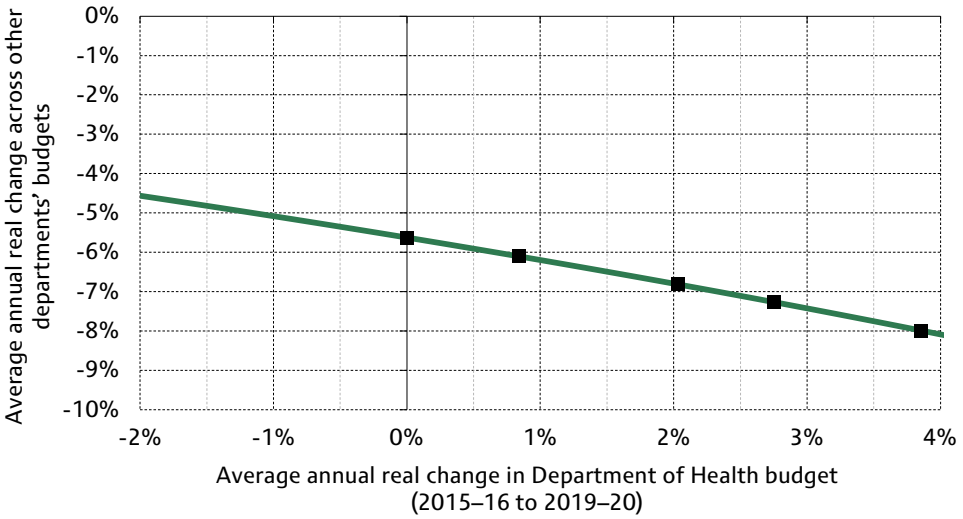
Some of the scenarios set out in Table 8.4 imply large increases in NHS productivity by historical standards (long-run productivity growth in the NHS has been estimated at less than 1% per year, while productivity growth over the latter half of the 2000s has been estimated to be less than 1.5% per year). To the extent that achieving such productivity increases is not deemed plausible, this might argue for larger real increases in the DH budget in the next Spending Review than over the current parliament (1.2% per year on average between 2010–11 and 2015–16). However, it is important to be clear what the implications of this would be for other public services.

Over the period 2015–16 to 2019–20 (which might form the period covered by the next Spending Review), overall departmental spending will almost certainly be cut in real terms. Under the coalition government's plans set out in the 2014 Autumn Statement, total departmental spending would be cut by an average of 3.7% per year (14.1% over the whole period). Increasing spending on the NHS, at a time when overall departmental spending is falling, would mean the cuts to other departments' budgets would need to be greater. This effect is particularly acute given the size of spending on the NHS – the DH budget is currently expected to take up almost one-third (32%) of all departmental spending in 2015–16.

Figure 8.8 illustrates the trade-off the next government would face between spending on the Department of Health and spending on other departments, assuming it sticks to the coalition's plan for total departmental spending. If the DH budget were frozen in real terms over this period, then the cuts to other departments would need to average 5.6%. Increasing the DH budget by 0.8% a year in order to be on course to spend £8 billion (2020–21 prices) extra on NHS England in 2020–21 would require the cuts to other departments to average 6.1%. If NHS productivity disappointed and greater increases in the DH budget were required to satisfy demand in the NHS, the cuts to other departments would be still greater (figures are provided in the first row of Table 8.5).

Of course, plans for overall departmental spending over this period are likely to change after the general election in May 2015, as the new government may have different preferences over borrowing, taxation and spending from the current coalition government. The three main UK parties have announced fiscal rules that would mean that they do not necessarily have to cut departmental spending as dramatically as the coalition government's plans imply. However, even the Labour and Liberal Democrat parties (whose fiscal rules allow for greater spending than the Conservative Party's) look likely to cut departmental spending to some extent. A recent IFS briefing note looked at

Figure 8.8. Trade-off between spending on the Department of Health and spending across other departments



Note: Based on 2014 Autumn Statement plans for total departmental spending.

Table 8.5. Trade-off between spending on the Department of Health and spending on other departments, given alternative party proposals

	Real change in other departments' budgets 2015–16 to 2019–20 if the Department of Health gets:				
	0.0% p.a. (real freeze)	**0.8% p.a.**	**2.0% p.a.**	**2.7% p.a.**	**3.9% p.a.**
	Average annual change				
Coalition plans	–5.6%	–6.1%	–6.8%	–7.3%	–8.0%
Parties:					
Conservatives	–2.6%	–3.0%	–3.6%	–4.0%	–4.7%
Labour	–0.5%	–0.9%	–1.5%	–1.9%	–2.5%
Liberal Democrats	–0.8%	–1.2%	–1.8%	–2.2%	–2.8%
	Cumulative change				
Coalition plans	–20.7%	–22.3%	–24.6%	–26.1%	–28.3%
Parties:					
Conservatives	–9.8%	–11.4%	–13.8%	–15.2%	–17.5%
Labour	–2.1%	–3.7%	–6.0%	–7.4%	–9.7%
Liberal Democrats	–3.1%	–4.7%	–7.0%	–8.5%	–10.7%
Change in DH budget:	*(2015–16 prices)*				
2015–16 to 2019–20	*£0bn*	*£4bn*	*£10bn*	*£13bn*	*£19bn*
Change in NHS budget:					
2015–16 to 2019–20[a]	*£0bn*	*£4bn*	*£10bn*	*£13bn*	*£19bn*
2013–14 to 2019–20[b]	*£3bn*	*£6bn*	*£12bn*	*£16bn*	*£21bn*
2013–14 to 2020–21[c]	*£3bn*	*£7bn*	*£15bn*	*£19bn*	*£27bn*

[a] Assumes all aspects of DH spending other than the NHS England budget are frozen in real terms between 2015–16 and 2019–20.

[b] Assumes NHS England budget increased by £2.4 billion (2015–16 prices) between 2013–14 and 2015–16.

[c] Assumes DH budget continues to grow at the same average annual real rate for a further year in 2020–21, and that aspects of DH spending other than the NHS England budget continue to be frozen in real terms in that year.

Note: The overall cut to departmental spending assumed for the Conservatives is 1.7% per year, for Labour is 0.4% per year and for the Liberal Democrats is 0.5% per year.

the parties' proposed fiscal rules and their policy announcements up to the time of its publication, and found that the Conservatives could reduce the cut to departmental spending over this period to 1.7% per year, the Liberal Democrats to 0.5% per year and Labour to 0.4% per year – if they chose to increase borrowing to the full extent allowed by their rule and they implemented the net tax rises and social security cuts announced as of December 2014.[36] If they aimed for a surplus rather than balance on their various targeted measures of borrowing, then the cuts to departmental spending would need to be greater.

Table 8.5 summarises some of the possible alternative choices between spending on the Department of Health and spending on other departments that would be possible given the overall budget constraint potentially implied by each party's plans. The plans of the Labour and Liberal Democrat parties suggest that they could increase NHS spending with considerably lower cuts to other departments than the Conservative Party could, but it is worth reiterating that this comes at the cost of higher borrowing and slower declines in public debt. This is discussed in more detail in the aforementioned briefing note.

8.5 Conclusion

The budget of the Department of Health is planned to increase by an average of 1.2% per year in real terms between 2010–11 and 2015–16. This is considerably more favourable than the average real cut of 3.3% per year experienced across other departmental spending, but it also much lower than the historical average increase in UK health spending of nearly 4% per year.

The NHS faces pressures on its budget over and above those posed by the general increase in prices. A 0.7% per year increase in spending would be required just to keep real spending per person constant between 2010–11 and 2019–20. The population is also ageing. Since older individuals on average consume more, and more expensive, healthcare, this will also tend to increase demands on the health service. A 1.2% per year increase in real spending would be needed to keep pace with both the changing size and the changing composition of the population. Demand will also increase over time as a result of the rising prevalence of some chronic conditions, improvements in access to care, and improvements in technology combined with government policy increasing the range of healthcare treatments available through the NHS. Estimates from the Nuffield Trust (2012) and NHS England (2013) suggest the combined impact of demographic changes and other pressures could increase demand by around 3% per year.

The NHS also typically faces pressure from rising costs – in particular from wage pressures and high-cost drugs. However, over the period since 2010–11, the NHS has been considerably assisted in its attempts to meet demand pressures despite small real increases in funding by the ability of the government to restrain pay growth across the public sector, which has reduced the real cost of labour. As private sector wages recover, however, it is unlikely that NHS wages can continue to be restrained without having adverse impacts on the recruitment, retention or motivation of the workforce, and therefore cost pressures are likely to be more important going forwards.

[36] Note that here we assume the Conservatives achieve their aspiration to reduce welfare spending by £12 billion even though they had not announced specific policies that would amount to that sum by December 2014. R. Crawford, C. Emmerson, S. Keynes and G. Tetlow, 'Fiscal aims and austerity: the parties' plans compared', IFS Briefing Note BN158, 2014, http://www.ifs.org.uk/publications/7495.

This all suggests that the NHS may struggle to continue providing high-quality healthcare in future in the absence of either significant improvements in productivity or greater real budget increases than have been provided over the current parliament. However, given the cuts to overall departmental spending that are still likely to be required in the years after 2015–16, real budget increases for the NHS would imply even greater cuts to other departments.

One way of increasing NHS spending without increasing the pressure on the public finances or other government departments would be to increase NHS funding from private sources – for example, by increasing existing charges or introducing new charges for some NHS services. The UK is unusual in an international context in that such a large proportion of total health spending is financed from public sources (84% in 2012). However, while increasing income from private sources could be one way of boosting the NHS's finances, it is not being proposed by any of the main UK political parties.

There are therefore no easy choices for whoever forms the next government. Difficult decisions will need to be made between now and the next Spending Review about the appropriate balance between the level of public and private financing of the NHS and between levels of borrowing, taxation, public spending on the NHS and other public spending.

The NHS for its part needs to focus on improving productivity, so that smaller funding increases are required. This point has been well understood by the current and former NHS Chief Executives, Simon Stevens and Sir David Nicholson, who have both challenged the NHS to improve quality whilst making efficiency savings. The extent to which the NHS is able to meet this challenge remains to be seen.