Securing the future: funding health and social care to the 2030s: Executive summary

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In association with
NHS Confederation
Securing the future: funding health and social care to the 2030s

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Executive summary

On 5 July this year the NHS will be 70. In all its 70 years it has rarely been far from the headlines. It has been through more than its fair share of reforms, crises and funding ups and downs. Over that period, the amount we spend on it has risen inexorably. Yet, today, concerns about the adequacy of funding are once again hitting the headlines, as the health and social care systems struggle to cope with growing demand.

Looking forward, funding pressures are only going to grow. The population is getting bigger and older, and expectations are rising along with the costs of meeting them. Our analysis suggests that UK spending on healthcare will have to rise by an average 3.3% a year over the next 15 years just to maintain NHS provision at current levels, and by at least 4% a year if services are to be improved. Social care funding will need to increase by 3.9% a year to meet the needs of an ageing population and an increasing number of younger adults living with disabilities. If the widely acknowledged problems with England’s social care system – of limited eligibility, low quality and the perceived unfairness of the current, uncapped, means test – did result in reform, spending on social care would need to increase at a faster rate.

If we are to have a health and care system that meets the expectations of the population, we need to understand how and why spending has risen over time, where the money is spent, how costs are likely to develop in the future, and how we might go about meeting those costs. That is the purpose behind this collaboration between the Institute for Fiscal Studies and the Health Foundation, in association with the NHS Confederation.

To start to grapple with those challenges, one needs first to grasp the sheer scale of the NHS and social care sector. Public spending on health in the UK in 2016–17 was £149.2 billion (2018–19 prices). That’s more than 7% of national income. The government spent an additional £21.2 billion on adult social care in the same year. Add in private spending, and the health and social care sector accounts for more than 10% of the entire UK economy.

If it is a large part of the economy, health and care spending represents an even larger fraction of what government does. 19% of all government spending and 30% of spending on public services goes on health, 1 21% and 34% if you include adult social care spending.

Along with almost all other countries, we have chosen as a nation to spend an increasing fraction of our national income on health and care because the benefits of doing so are so great. But we have not always done so in a well-planned or coherent way. Periods of feast tend to be followed by famine. The last two decades have been an extreme example of that. Planning for both feast and famine has been inadequate, and the consequences have been unnecessary costs, inefficiencies and uncertainty in the system. We hope this work will lay the basis for a more coherent system of planning going forward. To achieve that, we will need consensus both on the value of an effective health and social care system and on how to raise revenue to fund it as the economy grows. We can’t have

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1 We define spending on public services as public spending on everything other than debt interest and transfers through the social security system.
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it for free. If we are to raise spending as indicated by this analysis then taxes will have to rise.

The history

Annual public spending on health didn’t reach £20 billion (in today’s prices) until the mid 1960s. It hit £40 billion in the mid 1980s, was at £80 billion by the turn of the century and now sits at £150 billion. Not only has spending risen in real terms, it has taken a bigger and bigger chunk of the national economy, rising from around 3% of GDP in the early 1960s to 4% during the 1970s and 1980s, 5% by the year 2000 and more than 7% by 2008. It represents 7.3% of national income today.

Table 1 tells the story of increasing spending since the foundation of the NHS. Spending growth has averaged 3.7% a year. Following a period of very rapid growth between 1996 and 2009, over the last eight years health spending has grown more slowly than in any comparable period since the NHS was founded.

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

<table>
<thead>
<tr>
<th>Period</th>
<th>Financial years</th>
<th>Average annual real growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole period</td>
<td>1949–50 to 2016–17</td>
<td>3.7%</td>
</tr>
<tr>
<td>Pre 1979 (various governments)</td>
<td>1949–50 to 1978–79</td>
<td>3.5%</td>
</tr>
<tr>
<td>Thatcher and Major Conservative governments</td>
<td>1978–79 to 1996–97</td>
<td>3.3%</td>
</tr>
<tr>
<td>Blair and Brown Labour governments</td>
<td>1996–97 to 2009–10</td>
<td>6.0%</td>
</tr>
<tr>
<td>Coalition government</td>
<td>2009–10 to 2014–15</td>
<td>1.1%</td>
</tr>
<tr>
<td>Cameron and May Conservative governments</td>
<td>2014–15 to 2016–17</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Source: See Table 1.1 in the report.

The recent period has not, however, been one in which the relative priority attached to health spending has diminished. Relative to other areas of public spending, health spending has actually been more favoured since 2010 than it was in the previous decade. Health spending has been rising as a share of total public spending on services by 2.1% a year since 2009–10, compared with a rate of increase of 1.1% a year between 1999–2000 and 2009–10. Health accounted for 23% of public service spending in 1999–2000, 26% in 2009–10 and 30% in 2016–17.

Within the UK, health spending is a devolved responsibility. Funding for public services in Wales, Scotland and Northern Ireland is determined by the Barnett formula, whereby changes in public spending in England result in changes in public spending budgets in Wales, Scotland and Northern Ireland, based on population size. The devolved administrations can then choose how to prioritise spending across health and other public services. Health spending per head is marginally lower in England and Wales than in
Scotland and Northern Ireland. There has, however, been some convergence since 2010, with higher increases in England than elsewhere as the Westminster government has given a higher priority to protecting health spending than have the devolved parliaments.

Spending on social care has followed a different pattern. Across the UK as a whole, public spending on adult social care fell by nearly 10% between 2009–10 and 2016–17, despite significant real increases in spending in Scotland.

In fact, the growth in both health and social care spending has slowed even more dramatically than the headline figures would suggest, once one takes account of relatively rapid population growth. Per-capita health spending has increased by just 0.6% a year between 2009–10 and 2016–17, as compared with 5.4% a year between 1996–97 and 2009–10, and 3.3% per year over the whole period between 1949–50 and 2016–17. Taking account of the ageing of the population since 2010, and the fact that older people make heavier demands on the health service, even this growth almost disappears – age-adjusted per-capita health spending has risen by just 1% in total, or 0.1% a year, since 2009–10. Per-capita adult social care spending has fallen by 2.2% per year over the same period.

The UK is certainly not alone in experiencing growing health spending. Across the OECD between 2000 and 2015, healthcare spending per person increased in real terms and outpaced the growth in GDP. This is true in countries with tax-funded health services and social insurance models. UK spending as a share of GDP in 2015 was in line with the average of the EU15 countries.

**Where the money goes**

Over time, all aspects of NHS spending have risen. The biggest element is spending on staff – doctors, nurses and others. Over the last 20 years, there has been an increase of more than 70% in the number of hospital doctors, and of more than 10% in the number of nurses, health visitors and midwives, per 1,000 population. Even so, overall, the UK has fewer practising doctors per 1,000 people than any other EU15 country.

Despite the more general increase in staff and doctor numbers, there has been barely any increase in the number of GPs, and in fact the number of GPs per 1,000 population has been falling since 2010. This pattern reflects decisions over where in the system money has been spent. Spending on hospitals rose much faster than spending on primary care during the 2000s, and spending on primary care has actually fallen since 2010 in real terms.

It is unlikely that this rebalancing away from primary and community care makes sense in the long run. The NHS Five Year Forward View in 2014 set out a vision for the future of the health service in England. In response to population ageing and the rising burden of chronic disease, it argued for the NHS to provide more care closer to people’s homes. It sought to shift care towards earlier diagnosis and more proactive management of health problems to prevent rather than simply manage ill health and hospitalisation. A sustainable, high-quality healthcare system is likely to involve more focus on supporting primary and community services, not less.
One of the great successes of the NHS in England since 2010 is that, despite very tight spending settlements, activity has risen substantially. In other words, productivity has grown and, unusually, since 2010 measured productivity in the health service has been growing faster than productivity across the economy as a whole. Whether this could be sustained over a longer period is unclear.

This growth in activity over time is of course a key driver of additional costs. As Figure 1 shows over the last 20 years, in addition to a population that is growing and ageing, there has been an increase in the likelihood of people at any age having an inpatient admission. The time each person spends in hospital, though, has been coming down continually for decades, partly as a result of new drugs and new surgical procedures. Between 1997 and 2015, for example, the average time spent in hospital per year for people over the age of 75 dropped by more than half a day, despite a 30% increase in the likelihood of spending some time in hospital.

**Figure 1. Percentage of population (England) by age who had at least one inpatient admission in 1997 and 2015 (aged 0 omitted)**

![Graph showing percentage of population by age who had at least one inpatient admission in 1997 and 2015](image)

Source: See Figure 2.15 in the report.

As well as funding more activity, big increases in spending during the 2000s were accompanied by dramatic falls in waiting times. Tighter funding conditions in recent years mean that waiting times have been creeping up again, and targets are being missed. For example, by March 2018 only 74.4% of inpatients were treated within 18 weeks of referral, against a target of 90%.

This remains a far better performance than was achieved in the 1990s and, in general, the NHS continues to perform far better on most measures than it did 20 years ago. Recent increases in waiting times and other pressures on the service have started to mean that public satisfaction levels are beginning to fall. Even so, public satisfaction remains at historically high levels, far above where it was before the funding increases of the 2000s (Figure 2).
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Figure 2. Satisfaction with the NHS, 1983–2017

Effectiveness of treatment has also been rising over time, with mortality rates from, for example, cardiovascular disease falling dramatically in recent decades. **Survival rates for a range of cancers have also continued to improve, though the UK still lags behind many international comparators in this respect.**

**Future spending**

Looking forward, health spending is likely to continue to rise. Simply continuing to provide the services we currently expect will become more expensive as the population grows and ages, prevalence of chronic conditions increases, and the prices of inputs, including the costs of drugs and the wages of doctors and nurses, go up.

Central estimates suggest that by 2033–34 there will be 4.4 million more people in the UK aged 65 and over. The number aged over 85 is likely to rise by 1.3 million – that’s almost as much as the increase in the entire under-65 population.

The burden of disease is also increasing. The number of people living with a single chronic condition has grown by 4% a year while **the number living with multiple chronic conditions grew by 8% a year between 2003–04 and 2015–16.** Looking forward, more of the UK’s population will be living with a chronic disease and very many with multiple conditions. This is because while life expectancy has been increasing, healthy life expectancy has not kept pace and the period of people’s lives spent in poor health has increased; particularly for the poorest. As a result, without major progress on the vision set out in the *Five Year Forward View,* over the next 15 years spending in acute hospitals to treat people with chronic disease is expected to more than double.
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Tackling chronic disease is not just an economic issue. It has a substantial impact on quality of life and wider society. The NHS can do a lot, but progress on improving the population’s health will require action on obesity, smoking, alcohol and the wider social determinants of health.

As new treatments are introduced, the cost of drugs used in hospitals is also rising. Assuming new drug costs rise in line with recent experience, for each person treated in hospital, the cost of their drugs would increase by 5.5% a year going forward.

Pay will also need to rise at least in line with public sector average earnings if the NHS and the social care system are to recruit and retain the staff they need. The challenge for all healthcare systems is that, as a service sector, healthcare productivity over the longer term has traditionally lagged economy-wide productivity (the so-called Baumol effect). It is true of all healthcare systems, however they are funded (tax or social insurance) and however they are delivered (public, private or not-for-profit). The gap between earnings growth and productivity is a key driver of spending pressures.

Put all these pressures together and UK health spending is likely to need to rise by around 3.3% a year over the next 15 years just to maintain current service levels. That would mean an increase in spending of around £95 billion, from £154 billion today to £249 billion in 2033–34. This would increase health spending as a share of GDP from 7.3% to an estimated 8.9%. Figure 3 illustrates the importance of the different factors in pushing up spending over the period to 2033–34.

Figure 3. Contribution of different demand and cost pressures to overall spending projections for England under the status quo scenario, 2018–19 to 2033–34

![Figure 3. Contribution of different demand and cost pressures to overall spending projections for England under the status quo scenario, 2018–19 to 2033–34](source: See Figure 3.8 in the report.)
This rate of increase would be below the long-term rate of increase in health spending. It is nevertheless substantially above projected GDP growth. This reflects the importance of ageing and increased chronic disease over the next 15 years.

While spending will need to increase in each of the next 15 years, the scale of funding pressures is greater in the shorter term. After several years of historically low growth in spending, the NHS is under considerable financial strain. This is impacting on quality, with hospitals struggling to meet demand last winter and more than half of all NHS providers in deficit. Maintenance budgets and investment capital have been used to meet day-to-day running costs. Our modelling suggests that **spending increases will need to be front-loaded, with the NHS requiring increases averaging around 4% a year over the next five years to maintain provision at current levels and address the backlog of funding problems.**

Maintaining provision at current levels for 15 years is unlikely to be enough though. Over time, NHS services have improved as incomes and expectations have grown. We know that there are major areas of underprovision at present, not least in mental health. Just meeting waiting list targets and bringing capital spending more in line with OECD averages would also require additional funding relative to our status quo scenario. Put all this together and a **modernised NHS could require funding increases of 4% a year over the next 15 years: 5% a year for the next five years and 3.6% a year for the decade after.**

Our analysis suggests that **over the next five years, capital funding should grow at a faster rate than day-to-day spending,** by 11% a year in real terms compared with 4.7% for resource spending. Capital spending in the UK would increase by £5 billion by 2023–24. Some of this extra capital spending could improve quality of care – for example if it were invested in scanning technologies, which are so important for timely cancer diagnosis. But the principal case for a significant up-front investment in capital is to support the system to improve productivity. The NHS has a large backlog of maintenance, too much of its physical infrastructure is out of date, and there is much more to do to ensure rapid uptake of digital technologies.

Using analysis from the Personal Social Services Research Unit (PSSRU), we find that to keep up with the ageing of the population and growth in young adults living with disabilities will require public funding to increase by 3.9% a year across the UK over the next 15 years, increasing spending by around three-quarters. Spending on social care would increase from 1.1% of GDP in 2018–19 to 1.5% in 2033–34. This is based on maintaining the current system of eligibility and means-testing for social care in each of the four countries of the UK.

The system of means-testing for social care in England has been strongly criticised and the government is planning a Green Paper on social care reform in England in Summer 2018. Extending access to care, improving quality or reforming the means test, for example through capping care costs, would add to the estimated spending pressures.
If England introduced a cap on lifetime care costs and reformed the means test in line with the proposals in the Conservative party manifesto in 2017, this would add £6.7 billion to our estimated social care spending pressures in 2033–34.²

The lines between the health and social care systems are blurred by initiatives such as NHS Continuing Healthcare, which provides social care free of charge to the neediest individuals, and the Better Care Fund, which provides grants to local authorities to fund social care spending. The two systems cannot be considered in isolation.

Over the next 15 years, if UK health service spending were to increase by 4% a year, in line with our modernised NHS scenario, spending as a fraction of national income would rise from 7.3% of GDP today to 9.9% in 2033–34 (based on the OBR’s forecast for GDP growth of an average of 1.9% per year). Overall, that is faster growth than the long-run average, reflecting some catch-up after the recent period of slow growth and, again, demographic change.

This would take spending to around 10% of national income, 1 percentage point more than under the status quo scenario. Social care spending would also increase as a share of national income, from 1.1% to 1.5% of GDP over the next 15 years. Together this means that in 2033–34 in the UK we would devote 2–3 percentage points more of our national income to publicly funded health and care. However, it is important to note that this is not a lot more than countries such as Sweden, Germany and the Netherlands already spend on publicly funded health and social care.

These numbers are in a sense just illustrative. But they are based on the most detailed modelling yet, which builds up likely future costs from a microeconomic analysis of supply and demand factors. This is a different methodology from that used by the Office for Budget Responsibility, for example, which uses a top-down model. The results though are similar. The OBR estimates that health spending will reach 8.7% of national income by 2033–34, very slightly lower than our status quo estimate. Part of the difference is because the OBR assumes current plans will be kept to until the end of this parliament. After that, it has spending rising by 4% a year.

Of course, it is not just how much money that is spent that matters, but how well it is spent. Much needs to be done to improve productivity in the NHS. Well-targeted capital investment can be a major help but the most urgent need is probably for a coherent, long-term workforce strategy. In the short run, a lack of qualified clinical staff will be the biggest impediment to making effective use of additional funds.

Over the next 15 years, the English NHS is likely to require 64,000 extra hospital doctors and 171,000 extra nurses as part of overall workforce growth of 3.2% a year. This would be a big increase, but in line with previous rates of growth: the NHS workforce grew by 2.9% a year in the decade up to 2008.

If the NHS were able to successfully harness digital and other technologies, the workforce pressures would turn out to be lower than this. But if we are to have an effective health service in 15 years’ time, we do need to start planning to have the requisite workforce today. The workforce challenge in social care is just as great, with almost half a

million more staff required by 2033–34 (an increase of 2.2% a year). Taken together, the increases in demand for health and social care would see the number of people in the workforce employed in these two sectors rise from 10% today to 14% in 2033–34.

Paying for it

It is all very well pointing out that spending is likely to have to rise over the medium term. The question then arises as to how to pay for it. Taking health and social care together, it looks as though spending will need to rise by 2% of GDP over the next 15 years, and by 3% if we want improvements in the services offered. That means finding at least £40 billion of additional funding, and perhaps more than £60 billion.

Figure 4. Health, education and defence as shares of total spending

![Graph showing the percentage of total managed expenditure for health, education, and defence from 1955 to 2016. The percentage of health expenditure has steadily increased from around 5% in 1955 to 25% in 2016. Education expenditure has fluctuated but is currently around 10%. Defence expenditure has decreased from around 20% in 1955 to 5% in 2016.]

Source: See Figure 4.5 in the report.

In the past, we have effectively paid for increased government spending on health by cutting spending on other things. In fact, overall public spending as a fraction of national income is a bit lower today than it was in the late 1970s (39% of GDP today against 41.5% of GDP in 1978–79), despite the fact that health spending rose from 4% of national income to well over 7% over the same period. Spending on social security (including pensions) also rose. This was possible because we are today spending 6% of national income (equivalent to about £120 billion) less on a combination of defence, debt interest and housing than we were 40 years ago. Figure 4 illustrates how huge cuts to defence spending have helped fund a growing welfare state without requiring a sustained increase in the tax burden.

Going forward, it is extremely hard to see how we could repeat a similar trick. There is barely any defence or housing budget left to cut. Debt interest spending is likely to rise as interest rates rise. After eight years of austerity, there would appear to be no room to cut other big areas of spending. While increased borrowing could fund rising health spending
over the short term, **sustained increases in health and care spending will require increased revenues from somewhere.**

It is unlikely that a significant fraction of any additional health spending can be found from increasing current charges or introducing new ones – not unless we want a fundamentally different NHS. Social care is already highly reliant on private funding and most reform proposals imply less rather than more reliance on individual contributions.

The implication is clear: in the medium term, **if we want even to maintain health and social care provision at current levels, taxes will have to rise.**

**It is hard to imagine raising this kind of money without increases in at least one of the three biggest taxes – income tax, National Insurance and VAT.** By way of illustration, you can raise about £5 billion by increasing all the main rates of income tax by a penny, about £6 billion by putting a penny on VAT and about £10 billion if you put a penny on each of the main employee, self-employed and employer NI rates.

Of course there are plenty of other options for raising taxes, including the reversal of some of the corporation tax cuts implemented in recent years, some additional taxes on property and wealth, or increases in a myriad of smaller taxes. Any tax rises could take place gradually, as the share of national income required to meet pressures on health and social care increases over time.

To illustrate the scale of change likely to be required, note that on the assumptions about growth underlying this work, average household net incomes would rise by around 17% over the next 15 years. If taxes were to rise by 2% of GDP then net incomes would rise 14% instead and if taxes were to rise by 3% of GDP then net incomes would rise by 12.6%.

Tax increases of this scale are economically feasible. While it is at a historically relatively high level, at more than 34% of GDP, **the tax burden in the UK remains well below that in a number of other, economically successful, European countries**, including Germany and France. There is at least some evidence that such increases might also be politically feasible. In 2016, a plurality of respondents to the British Social Attitudes Survey said they would prefer higher overall taxes and spending, and a clear majority see health spending as the top priority for extra cash. There is also a clear preference among the public that any tax increase should be via the National Insurance system and/or earmarked specifically for the NHS.

There remain strong arguments in principle against an earmarked, or hypothecated, tax. **One would never want health spending to rise and fall with revenue from a particular tax.** One proposal would set a health budget for a parliament and set a tax rate at a level that was expected to raise enough to cover that budget. If it turned out to raise more, or less, then the Treasury would keep the surplus, or pay the extra from borrowing or general taxation. Something like this, perhaps through a reformed system of National Insurance contributions, could make for a politically feasible way of providing more funding for health and care. But, as ever, there are trade-offs. This would probably introduce additional inefficiencies, and even inequities, into the tax system. It would be hard to make it properly transparent. There would be challenges in a world where health and care spending, and in Scotland some tax decisions, are devolved matters. So while
some form of hypothecation is possible, and may make increased taxation more palatable, it is hardly a panacea.

There are additional challenges around social care funding. A large fraction of social care is currently paid for privately: 26% of domiciliary care recipients and 44% of care home residents paid for their own care in 2014–15. The state does not play its usual role in providing insurance against bad outcomes and many people face extremely high care costs in old age as a result and many may have unmet care needs. Any rebalancing of the social care system looks likely to increase pressures on the public purse rather than reduce them.