

# Briefing: NHS finances outside the EU

Health Foundation analysis of the impact on NHS finances  
of the UK leaving the European Union

**£2.8bn**

If the UK leaves the EU, by 2019/20 the NHS budget could be £2.8bn less than currently planned

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In this briefing we explore what the UK leaving the European Union (EU) might mean for funding of the NHS in England. We then outline the current state of finances for NHS providers in 2015/16, what this implies for the total Department of Health budget, and the scale of the financial challenge facing the health service for the near future.

Our analysis focuses on the English NHS, although there will clearly be similar implications for the health services in Scotland, Wales and Northern Ireland.

The funding and quality of social care has implications for the NHS, but in this briefing we have not been able to assess this in any detail. We will undertake further analysis at a later stage.

All figures are 2016/17 prices unless otherwise stated.

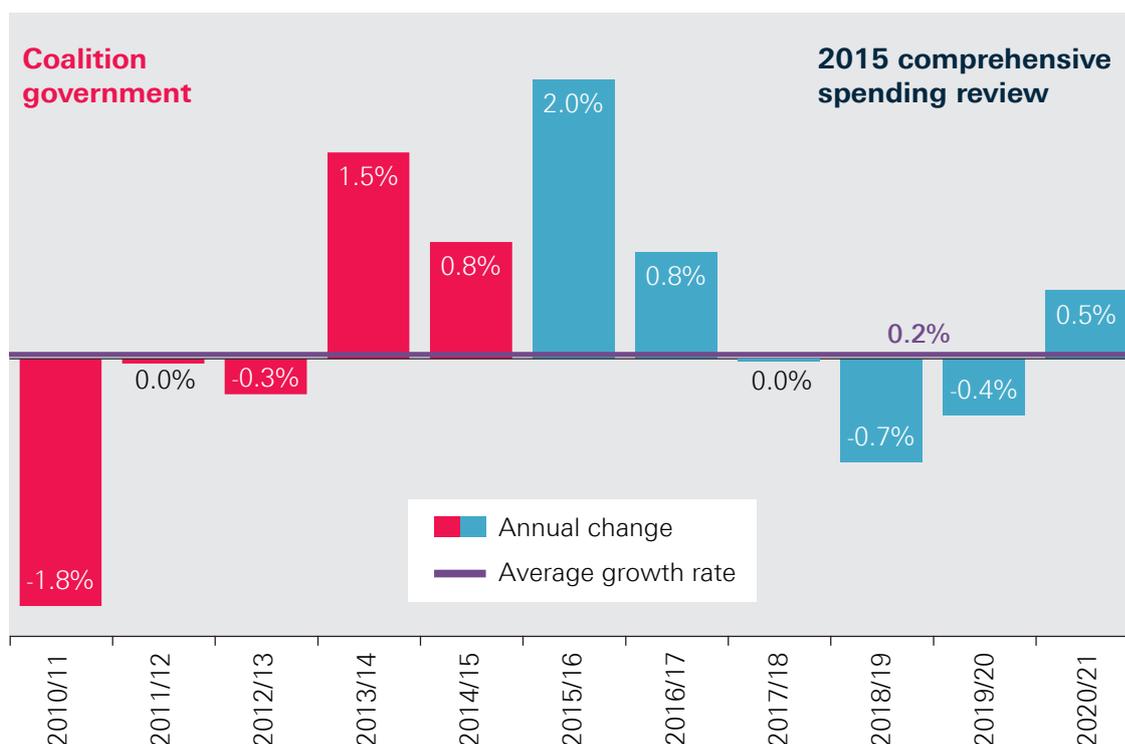
## Introduction

On 23 June 2016, the UK held a referendum on its membership of the European Union (EU), which resulted in a majority (51.9%) voting to leave. The full ramifications of this result are impossible to know at this stage. The impact on the economy will be critical. If economic growth diverges from the government’s forecasts it is likely to have major implications for total government spending, which may in turn have a significant impact on the NHS budget.

The vote to leave the EU comes at a time when the NHS is facing a substantial financial challenge. The government’s pre-referendum plan to achieve a fiscal surplus by 2019/20 already means that there is less money available to help meet health system funding pressures than in previous decades. The 2015 comprehensive spending review confirmed the period from 2009/10 to 2020/21 as the most austere decade that the NHS has ever experienced.<sup>1</sup> Under plans announced in the 2015 spending review, funding will rise by an average of 1.0% a year. This is less than half the previous lowest growth over a comparable period (2.1% a year between 1975/76 and 1986/87). Constrained funding growth has happened while the population of England is growing. Taking account of that population growth, health spending per head will be almost the same in 2020/21 in real terms as it was in 2009/10 (figure 1). This means that any additional pressures from rising costs, an ageing population, cuts in social services, and increasing prevalence of chronic conditions will need to be met by efficiency growth.

The funding available for the NHS is highly dependent on the strength of the national economy; we cannot know with certainty how the UK’s decision to leave the EU will impact, with so much depending on the details of the deal negotiated with the remaining EU members and future trade arrangements with other countries.

**Figure 1: Annual change in NHS spend per head in England, real terms**



Sources: Public Expenditure Statistical Analyses 2015; Comprehensive Spending Review 2015.

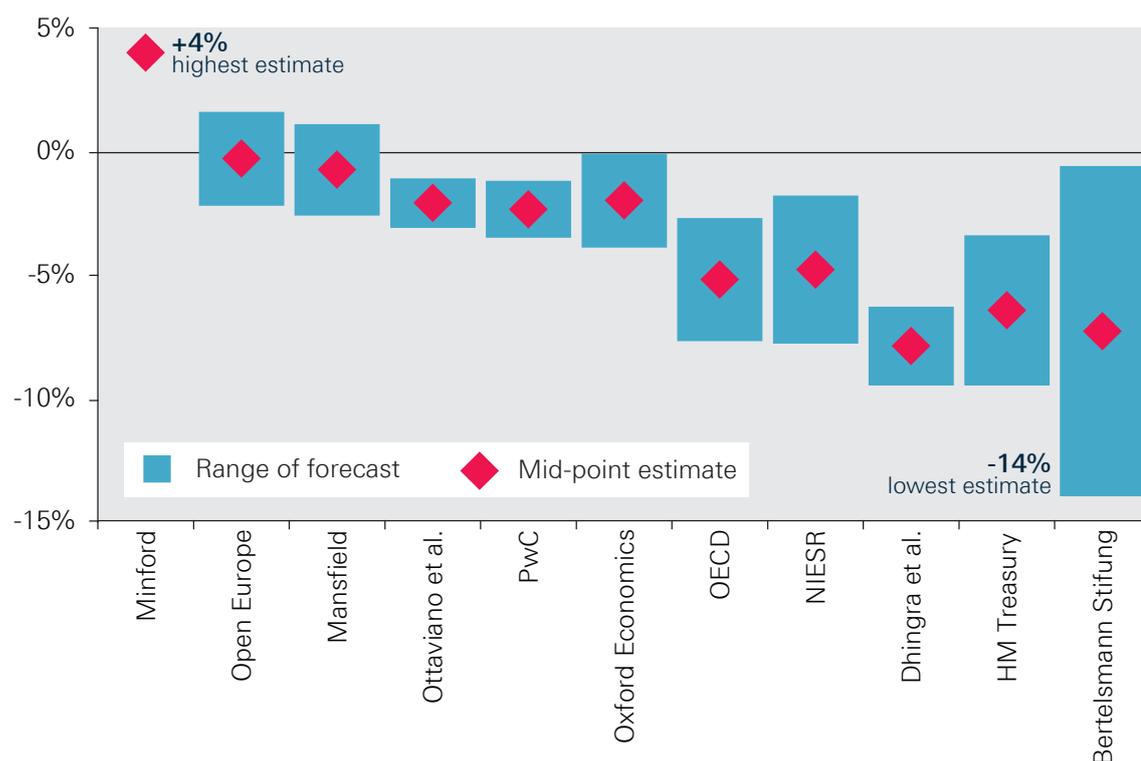
Current plans for government spending rely on the economic forecast published by the Office for Budget Responsibility (OBR) in March 2016, shown in table 1.<sup>2</sup> Any changes to spending plans will depend on updated projections from the OBR. New projections from the OBR will not be available until the autumn.

**Table 1: OBR projections for economic growth, March 2016**

	2015	2016	2017	2018	2019
<b>GDP real terms annual growth</b>	2.2	2.0	2.2	2.1	2.1
<b>Public sector net borrowing as % GDP</b>	3.8	2.9	1.9	1.0	-0.5
<b>Inflation (CPI)</b>	0.0	0.7	1.6	2	2.1
<b>GDP deflator</b>	0.3	1.1	1.9	2.0	1.9

In the absence of revised OBR projections, we have used projections from other sources. In the run up to the referendum, a number of leading economic organisations (including HM Treasury,<sup>3</sup> Organisation for Economic Co-operation and Development (OECD), and the National Institute of Economic and Social Research (NIESR)<sup>4,5</sup>) published forecasts of the effect on the economy of the UK leaving the EU, based on a number of different scenarios (figure 2). The overwhelming majority of these forecasts project a negative effect on the economy. There was only one published forecast, from a member of the Economists for Brexit group, that didn't estimate a negative impact on the economy.<sup>6</sup> Since the referendum result the updated Consensus Economics forecast – based on a survey of 700 economists – revises growth for 2016 down from 1.9% to 1.4% and for 2017 from 2.1% to 0.4%.<sup>7</sup>

**Figure 2: Forecasts of change to GDP in 2030/31 following UK leaving the EU<sup>8</sup>**



Source: IMF. *Country Report. United Kingdom: Selected Issues*. IMF, 2016.

We have not sought to model all these scenarios. Instead, our analysis is based on the NIESR economic modelling<sup>4,5</sup> as we considered it to be suitably comprehensive and to provide a range of options that lie within the other forecasts. We then applied some of the subsequent analysis by the Institute for Fiscal Studies (IFS) of the possible impact of the UK leaving the EU on public finances.<sup>9</sup> We have produced estimates for what these scenarios might mean for the NHS budget, under the assumptions set out in appendix 1.

We have primarily used the most optimistic scenario from NIESR's modelling, which assumes that the UK joins the European Economic Area (EEA). In the short term this would see the economy grow at an average of 1.5% a year between 2015/16 and 2019/20, instead of 2.1% without leaving the EU. This would mean a total loss to the economy of £43bn in 2019/20 (£835m a week).

In the longer term, this optimistic scenario suggests that the economy would grow at a marginally lower rate than the OBR's pre-referendum estimates of the long-run trend rate of growth. But even a small change has an effect and in 2030/31 this would mean a total loss to the economy of £47bn (£900m a week).

We also provide estimates using the most pessimistic scenario from the NIESR, whereby the UK relies on World Trade Organization (WTO) rules, which would result in economic growth of 1.7% a year until 2030/31. Under this scenario the total economy in 2030/31 would be £204bn lower than previously estimated (£3.9bn a week).

## Possible impact on the English NHS budget of the UK leaving the EU

The future for the NHS budget is highly uncertain. It ultimately depends on political decisions, which will be based on the revenue available to the government from taxation, and policy priorities. Higher rates of economic growth lead to higher tax revenue, and vice versa.

A Vote Leave campaign statement at the start of June suggested that after leaving the EU the government should 'give at least a £100 million per week cash transfusion to the NHS'.<sup>10</sup> This was restated after the referendum.<sup>11</sup> The feasibility of this will depend on what happens to economic growth and political decisions on taxation, other public spending and the size of the fiscal deficit.

The figure of £100m a week is lower than the high profile suggestion by the Vote Leave campaign that, if the UK left the EU, the government could choose to spend an extra £350m a week, currently sent to the EU, on the NHS. This figure was challenged by the UK Statistics Authority,<sup>12</sup> which deemed it 'potentially misleading' – in particular 'the suggestion that this could be spent elsewhere'. It made clear that the Treasury pays the UK's contributions after deducting the value of the rebate.

The UK's net contribution to the EU (after taking into account the rebate and spending by the EU in the UK) is currently worth around £150m a week, or £8bn a year.<sup>9</sup> Leaving the EU would therefore mean that this £8bn would be available to the UK government.

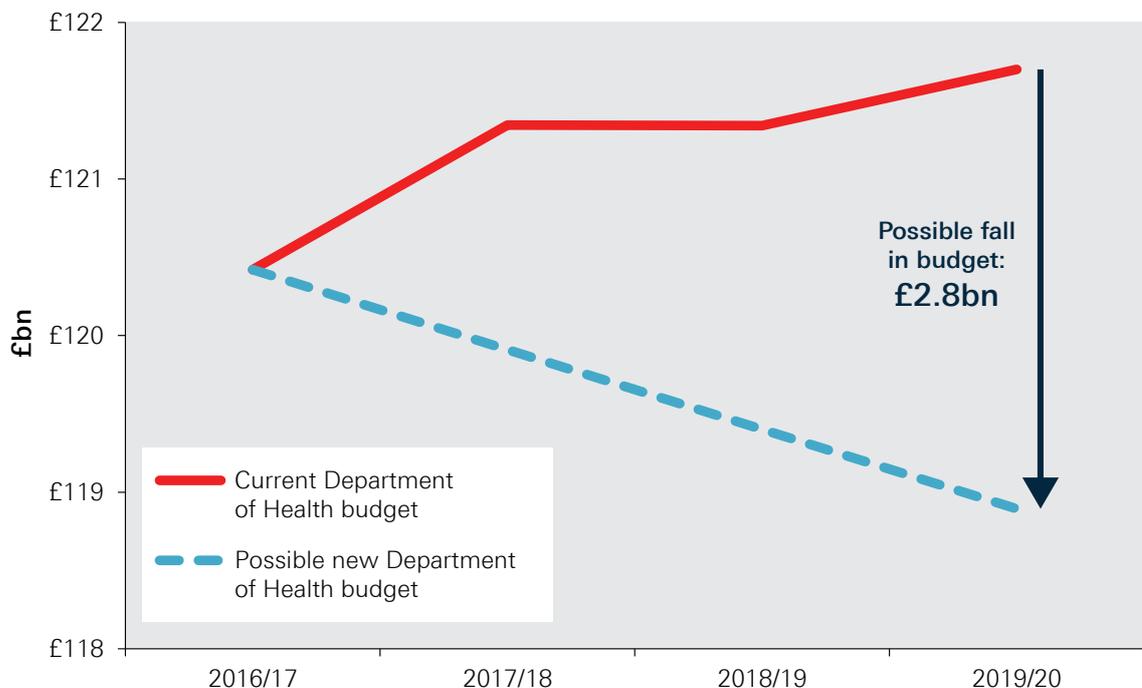
However, any new trade agreement with the EU would incur costs. As a guide, if the UK were to have an agreement with the EEA similar to Norway's, it would cost around £4bn, leaving the UK government with £4bn.<sup>9</sup>

However, according to most economists, the decision to leave the EU will lead to a fall in economic growth, due in part to reduced access to markets after the UK's exit; and before then from the impact of uncertainty on investment and the expected higher inflation due to changes in the value of sterling.

Lower national income will reduce the scope for public spending. The IFS calculates that if economic growth slows in line with the NIESR optimistic forecast (in which the UK joins the EEA), and the government receives a net benefit of £4bn no longer paid to the EU, the UK will have a budget deficit of 0.8% of GDP (£16bn in 2016/17 prices) in 2019/20.<sup>9</sup> This is in contrast to the 2016 Budget where the government planned a surplus of 0.5% of GDP (£10.4bn).<sup>13</sup>

Further consolidation of £16bn would therefore be required to achieve a balanced budget in 2019/20 – a cornerstone of the Conservative government's policy. This would forego the current planned surplus of £10.4bn – in line with statements by the Chancellor since the referendum.<sup>14</sup> Exactly what this would mean for the NHS is hard to say, but under the assumptions set out in appendix 1, we estimate that the Department of Health budget could be nearly £3bn lower in 2019/20 than currently planned,\* falling to £118.9bn from the existing planned spending of £121.7bn (2016/17 prices). This would be an average decrease of 0.4% a year in real terms between 2016/17 and 2019/20. It would see the health budget fall back to a similar level of spending to 2015/16.

**Figure 3: Estimated fall in budget for the Department of Health**



Source: Health Foundation modelling, based on Emmerson et al. *Brexit and the UK's Public Finances* and NIESR modelling.

\* We include more projections of the future NHS budget later in this briefing

This of course is only one scenario. There are three key policy choices that would influence the impact of slower economic growth on the health budget.

### **Choice 1: A balanced budget in 2019/20**

We have assumed that the government chooses to aim for a balanced budget in 2019/20, not the £10.4bn surplus set out in the 2015 spending review. This seems likely following an announcement by the Chancellor on 1 July,<sup>15</sup> but will ultimately be a decision for the next prime minister and their government. If the government chooses to maintain current spending plans, this would likely require a national budget deficit in 2019/20 of at least £16bn, instead of the previously planned surplus of £10.4bn.

If the government slows the pace of deficit reduction this would require extending the period of austerity. The NHS is currently faced with a substantial efficiency target set in the *NHS five year forward view* to achieve by 2020/21. Extending the period of austerity for the NHS beyond 2020/21 would also extend the scale of this challenge.

### **Choice 2: How fiscal consolidation is shared between tax and different areas of public spending**

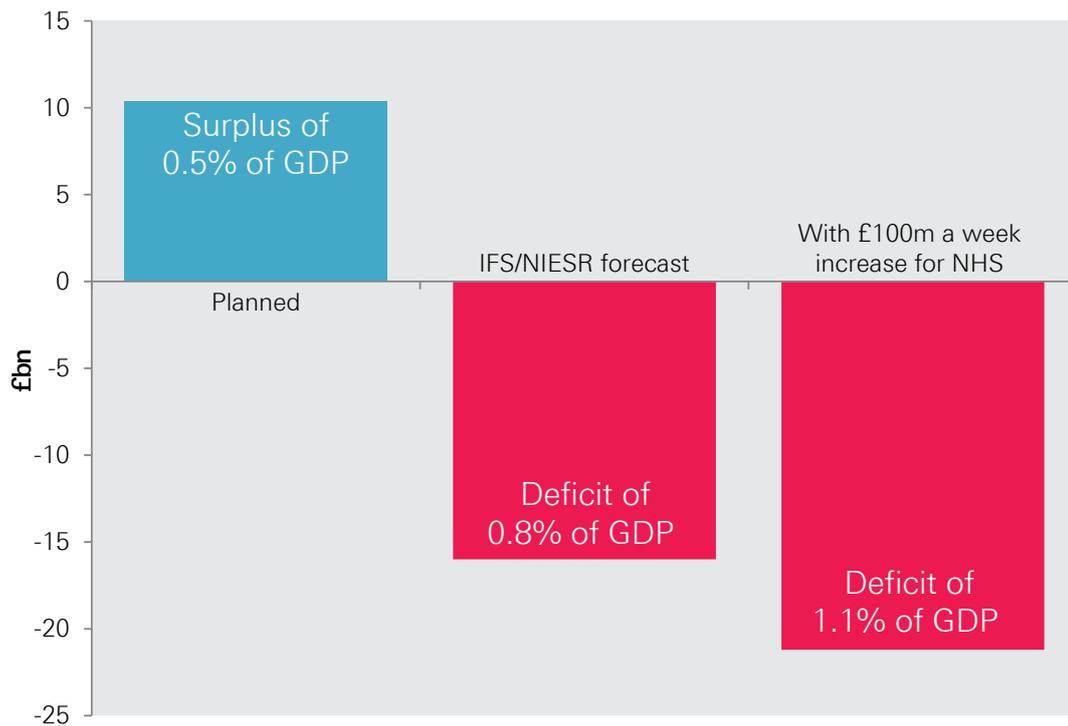
We have assumed that health takes an equal share of the fiscal consolidation. This means that the benefit from reduced EU payments is shared equally across tax and public spending, as are the reductions to public spending that result from lower economic growth. In this scenario, to achieve a balanced budget in 2019/20, alongside a reduction of £2.8bn to the NHS budget, taxes would need to rise by £3bn and other areas of public spending, including education and welfare, would need to fall by an extra £10bn. The current government has protected the NHS budget compared to other budgets, and it may choose to retain this policy. But this would require additional reductions in other public services, higher taxation or a larger deficit.

If the decision is made to increase the NHS budget by £100m a week in 2019/20 (2016/17 prices), this will equate to a £5.2bn a year increase. This assumes that the £100m is over and above the current plans as set out in the 2015 spending review, set out before the EU referendum. It also assumes that 2019/20 is the first year of additional money, rather than a staged increase.\* Without changes to tax or spending this would mean the £16bn budget deficit forecast in the NIESR optimistic scenario and IFS modelling would therefore rise to £21bn (1.1% of GDP). The alternative would be to reduce spending in other areas of public services by £5.2bn in order to maintain the same level of deficit. This would require spending on other areas of public services (departmental spending including tax credits and social security) to fall by a further 1.2% on top of the current planned cuts. Alternatively, additional revenue could be raised. £5.2bn of additional funding is the equivalent of around an additional 1p on the basic rate of income tax.<sup>16</sup>

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\* If the increase is staged, it will amount to higher spending in the intermediate years.

**Figure 4: Impact of NIESR forecast on planned budget surplus, and impact of £100m a week increase**



Source: Health Foundation modelling, based on Emmerson et al. *Brexit and the UK's Public Finances* and NIESR modelling.

### **Choice 3: The terms of the UK's exit from the EU and post-EU trade deals.**

The drop of £2.8bn in the Department of Health budget uses NIESR's most optimistic scenario – in which the UK chooses to join the EEA. With this scenario growth is lower than previously expected but the impact is relatively modest. However, if the UK chooses to adopt a different trade arrangement, the impact to the economy – and therefore the health budget – could be larger. Under NIESR's most pessimistic scenario – in which the UK relies on WTO rules – £28bn further consolidation would be required to achieve a balanced budget. Using the same set of assumptions, the Department of Health budget would be £4.6bn lower in 2019/20, instead of £2.8bn lower.

## **How prepared is the NHS for a reduced budget?**

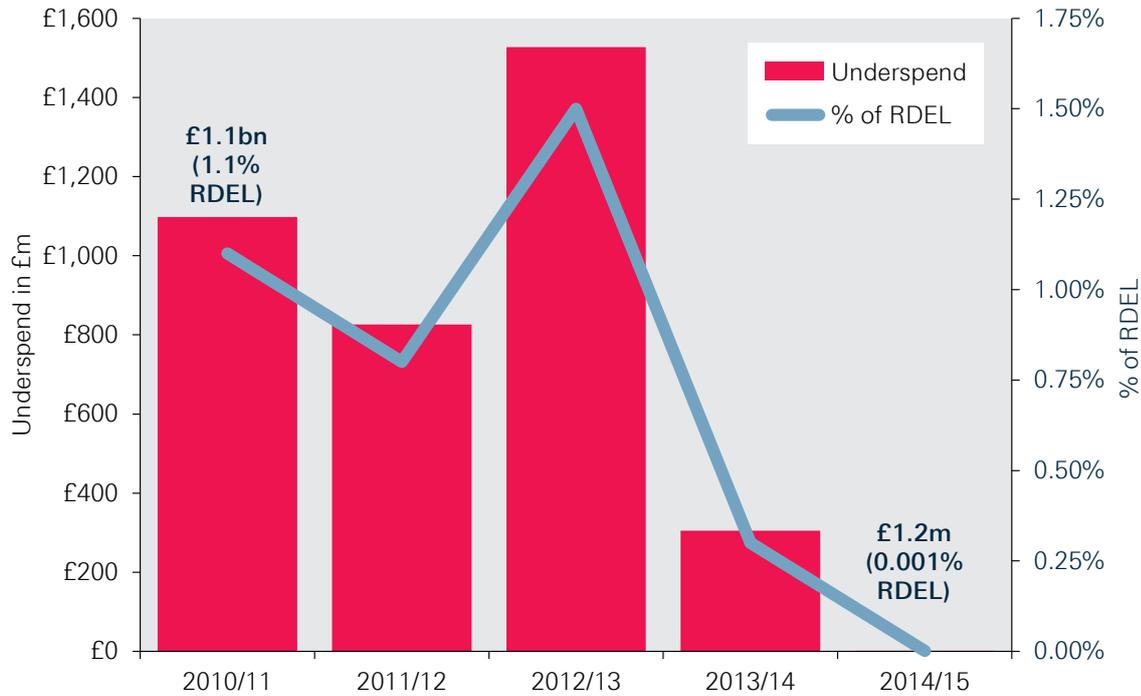
In July, the Department of Health is expected to publish its accounts for 2015/16. This will be a crucial indication of how well the English NHS is managing to meet rising pressures with limited funding. Recent results have shown a worrying trend, with Department of Health underspends falling from 1.5% of its primary budget\* in 2012/13, to 0.3% in 2013/14, then just 0.001% in 2014/15 (see figure 5 overleaf).<sup>17</sup>

While we don't yet know the audited final position for the whole Department of Health budget for the last financial year, plenty of information has already been published which shows how its largest elements are struggling, and just how difficult a task staying within the budget will be. This includes rising deficits among providers, commissioner deficits, rising agency staff costs and falling productivity.

\* Defined as the Revenue Departmental Expenditure Limit (RDEL). The Department of Health's other main budget is its Capital Departmental Expenditure Limit (CDEL), which is its spending on longer-term projects such as buildings and IT.

In 2014/15 NHS England reported an underspend by commissioners (NHS England and clinical commissioning groups (CCGs)) of £377m. This was a large factor in the Department of Health securing the 0.001% underspend. In 2015/16, CCGs reported a £16m overspend, but NHS England as a whole reported spending £523m less than planned, according to its unaudited figures.<sup>18</sup>

**Figure 5: Recent spending against the Department of Health budget, 2010/11–2014/15 (cash terms)**

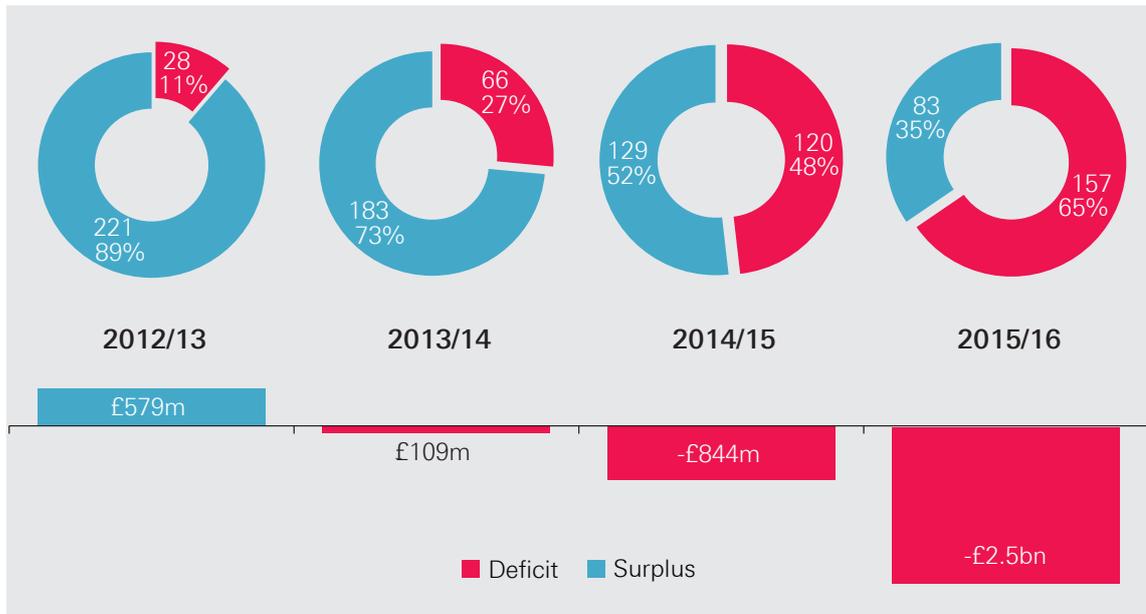


Source: Department of Health. Annual Report and Accounts 2014-15.

In May 2016 NHS Improvement published the 2015/16 end of year accounts for all NHS providers – which cover about two-thirds of total NHS spending. These showed a continuation of the recent rapid decline in financial performance of most NHS providers (NHS and foundation trusts). At the end of 2015/16, NHS providers reported a deficit of £2.5bn, almost £500m more than planned.<sup>19</sup> The majority of trusts were in deficit for the year – 157 (65%) in 2015/16, compared to 28 (11%) providers in 2012/13 (figure 6). The deficit is particularly serious in the acute sector: three out of four trusts in deficit is an acute hospital. Clearly these rising deficits will make it harder for the Department of Health to stay within its budget.

One of the key factors behind the increased provider deficit has been rising spending on agency staff. In recent years it has been increasingly difficult to recruit and retain NHS staff, due in part to a fall in the number of training places available, long-term pay restraint and increased numbers leaving early. This has led to an increased reliance on agency workers, who are often paid at a premium rate.<sup>20</sup> The result is a 27% rise in total agency spend in 2014/15, in real terms. As a recent Health Foundation report shows, there is a clear link between a trust’s spending on agency staff and the size of its deficit.<sup>21</sup>

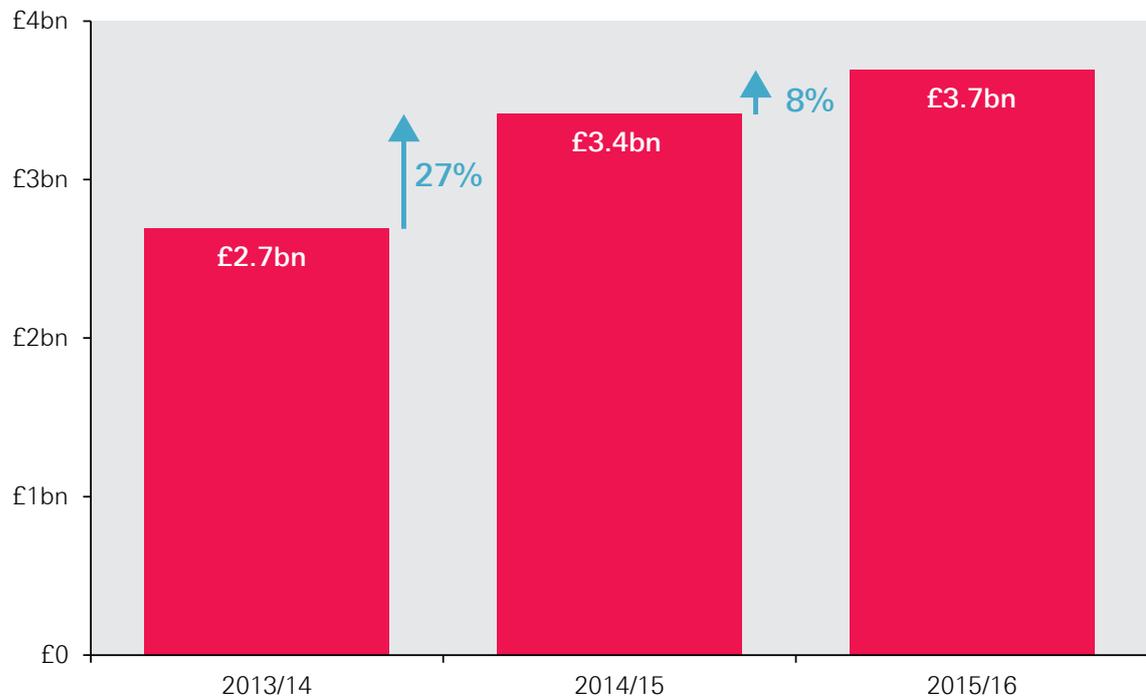
**Figure 6: NHS provider surplus/deficit, 2013/13–2015/16**



Source: Year-end reports by Monitor/NHS Improvement.

A cap, limiting the amount that agency staff can be paid, was introduced in November 2015. While this has reduced costs slightly, spending on agency staff still increased by 8% in 2015/16, reaching £3.7bn (figure 7) and accounting for 7.5% of the total pay bill. NHS Improvement estimated that the cost of unplanned agency workers was £1.4bn more than planned.<sup>19</sup>

**Figure 7: Agency staff cost 2013/14–2015/16**



Source: NHS Improvement year-end report 2015/16

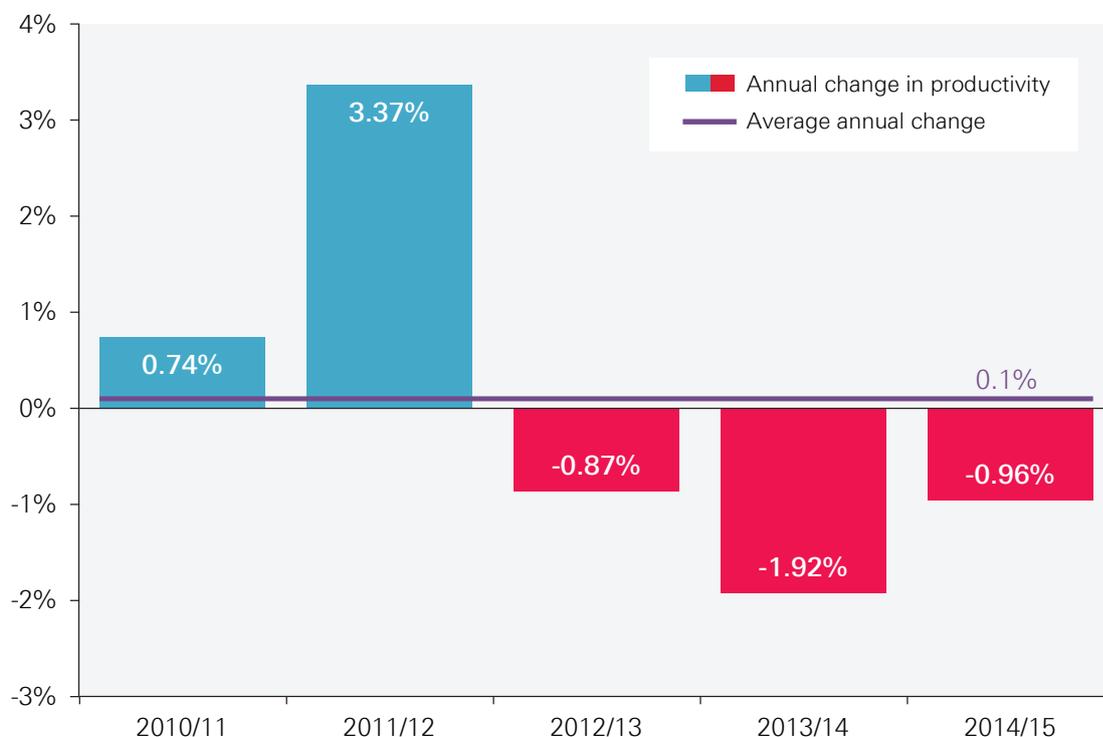
At least 58,000 people working in the English NHS are from the EU – 5% of all staff.<sup>22</sup> This number varies considerably across England, from 2% in the North East to 11% in North West London. The percentage also varies by staff group, with almost 10% of doctors and just over 7% of nursing and health visiting staff coming from the EU. There are about 20,000 nurses from the EU. The NAO reports a staffing shortfall in clinical staff of 50,000 in 2014.<sup>23</sup>

With costs rising faster than funding, improvement in productivity is essential to maintain the quality of services for patients. The *NHS five year forward view* suggested that in order to cope with limited funding and maintain quality of care, the NHS is required to achieve efficiency savings in the range of 2–3% per year.<sup>24</sup> If the Department of Health budget is lower than currently planned, as described in the previous section, efficiency growth would need to be still higher to maintain quality.

While we aren't yet able to estimate the level of efficiency achieved in 2015/16, latest studies suggest NHS providers' efficiency is much lower than the 2–3% required. NHS Improvement estimated that acute hospitals' efficiency increased by 1.4% a year on average between 2009/10 and 2013/14. Our previous work has shown productivity\* in acute hospitals has fallen in more recent years (figure 8).<sup>21</sup>

In addition, a recent study of NHS productivity by the University of York, which adjusts for quality of care, found that the productivity of all NHS providers fell by 0.5% between 2012/13 and 2013/14.<sup>25</sup> A range of analyses examining the NHS as a whole find efficiency growth varying between 0.8% and 1.4% a year,<sup>21</sup> suggesting a substantial improvement in efficiency is required for the health service to achieve fiscal sustainability.

**Figure 8: Annual change in hospital productivity, 2009/10–2014/15**



Source: Lafond S, Charlesworth A, Roberts A. *A perfect storm: an impossible climate for NHS providers' finances*. The Health Foundation, 2016.

\* We measured productivity of acute providers instead of efficiency. Productivity measures the ratio of inputs to outputs, while efficiency accounts for quality and appropriateness of the outputs. While technically different, productivity growth is a good guide to efficiency growth.

## Why must the Department of Health meet its budget?

The money allocated to providers does not account for all the money parliament allocates to the Department of Health. This means that, while there is a provider-side deficit of £2.5bn, the Department of Health is still expected to achieve financial balance by underspending in other areas. These areas include commissioning, staff training, capital investment, public health and arm's length bodies.

Parliament's authority over public expenditure 'is taken very seriously' and 'no resources can be properly committed, or expenditure incurred, without the approval of the Treasury'.<sup>26</sup> If the Department of Health overspends its budget there are likely to be significant political ramifications, discussed in appendix 2.

As well as serious political ramifications, an overspend in 2015/16 could have a major impact on the ability to provide NHS services in 2016/17 and beyond. If the department overspends, the Treasury will want greater assurance that the NHS is able to live within its means. This could include the additional spending being paid back from the budget in the following year or years, potentially reducing the funding available in those years.

2016/17 is a vital year for investing in transformation of services, with a relatively large upfront investment of £5.5bn for NHS England (in cash terms) assigned to support transformation of the system, with much more financially tight years to come. Any reduction in the planned budget for future years makes the investment this year even more critical.

There are already substantial cost pressures on this investment, which means that the net funding increase in 2016/17 is in the region of £0.7bn (figure 9). Any overspend might see this amount reduced further, undermining attempts to invest in transforming the service.

**Figure 9: NHS England cash increase for 2016/17 – the impact of cost and demand pressures and efficiency savings**



Sources: Spending Review 2015; NHS Improvement Economic Assumptions; NHS England Five year forward view technical modelling briefing; March 2016 GDP deflators.

## The future – short term

It is clear that there is a substantial financial challenge facing the NHS in both the short and long term. Following the vote to leave the EU, there is a very real possibility that this challenge will get even harder.

In November 2015 we published *Filling the gap*,<sup>16</sup> which gave projections for the funding pressures facing the NHS in the UK and the likely funding gap, based on our best estimate for the budget. A reclassification of the NHS budget in the 2015 comprehensive spending review (CSR) means the total settlement for the Department of Health is lower than was expected at the time of our report.<sup>1</sup> The implications of leaving the EU mean that this budget may be lower still.

We have updated our projections for the English NHS based on the settlement in the CSR and modelling of the current public sector pay settlement. The current settlement of 1% a year for public sector staff is lower than the long-term trend for pay. Health care is labour intensive, so future increases in funding pressures depend heavily on what happens to pay, and whether this settlement can be maintained.

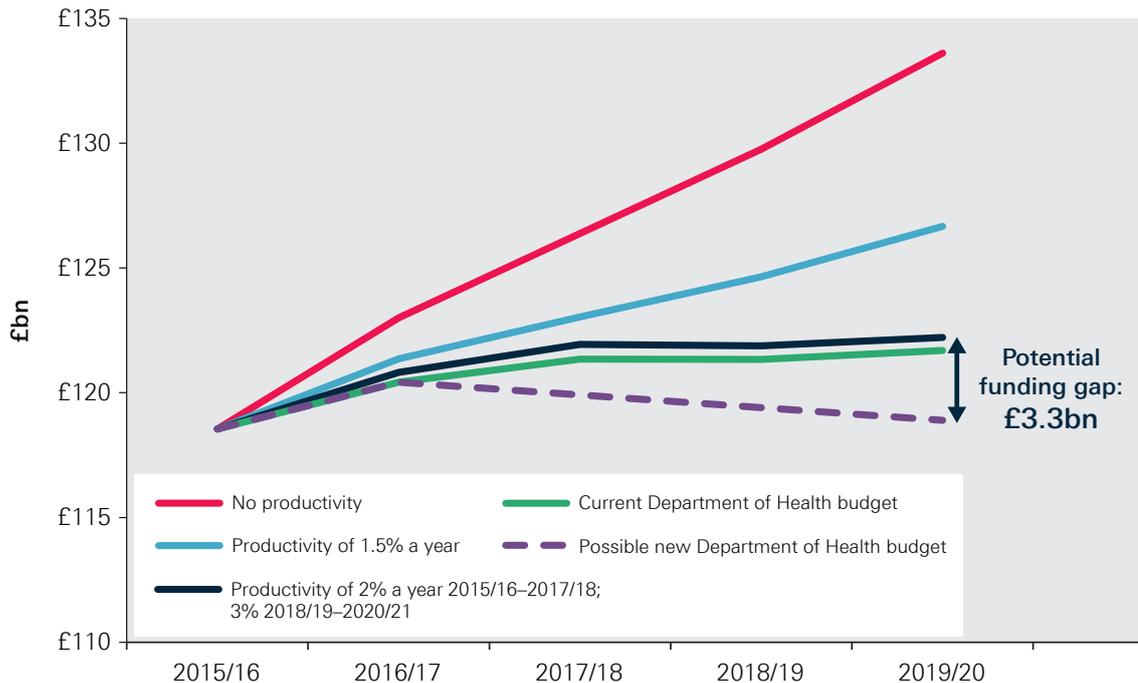
The funding gap for the NHS in England will depend on the level of efficiency growth that can be achieved. Based on the current planned budget, with no improvement in NHS efficiency, there would be a funding gap in 2019/20 of £11.9bn. However, if the NHS achieves the ambitious target of 2–3% efficiency growth set out in the *NHS five year forward view*,<sup>24</sup> this funding gap would be almost closed by 2019/20 within the current budget. However, this would be more than double the long-term trend for efficiency growth in the NHS – 1% since 1979/80. It would also mean reversing the trend of the past three years when productivity has declined.

This does not take into account the possibility that the health budget might fall as a result of lower economic growth following the UK's decision to leave the EU. Under this scenario described in the previous section, where the health budget drops by £2.8bn, even the ambitious 2–3% efficiency growth would still result in a £3.3bn funding gap by 2019/20. If there is no efficiency growth across the NHS between now and 2019/20, this would translate into a £14.7bn funding gap. Figure 10 and table 2 show the funding gap under different levels of efficiency growth.

**Table 2: NHS funding gap scenarios**

Funding gap in 2019/20 (£bn, 2016/17 prices)		
Efficiency growth	Gap based on current budget	Gap based on possible new budget if the UK leaves the EU
0.0%	£11.9	£14.7
1.0%	£7.2	£10.0
1.5%	£5.0	£7.8
2–3%	£0.5	£3.3

**Figure 10: Funding gap scenarios, 2015/16–2019/20**



Source: Health Foundation modelling.

## The future – long term

The short-term challenge for the NHS of increasing efficiency in order to narrow the funding gap has been intense for a number of years, and will continue to be so. But maintaining efficiency growth over the longer term is just as crucial.

In order to model the long-term scenarios, we have assumed that health spending will be at the same share of GDP as currently planned for 2019/20.\* Any fall in GDP therefore results in a fall in NHS spending. As such, if leaving the EU leads to long-term reductions in GDP, this will result in long-term reductions in the Department of Health’s budget.

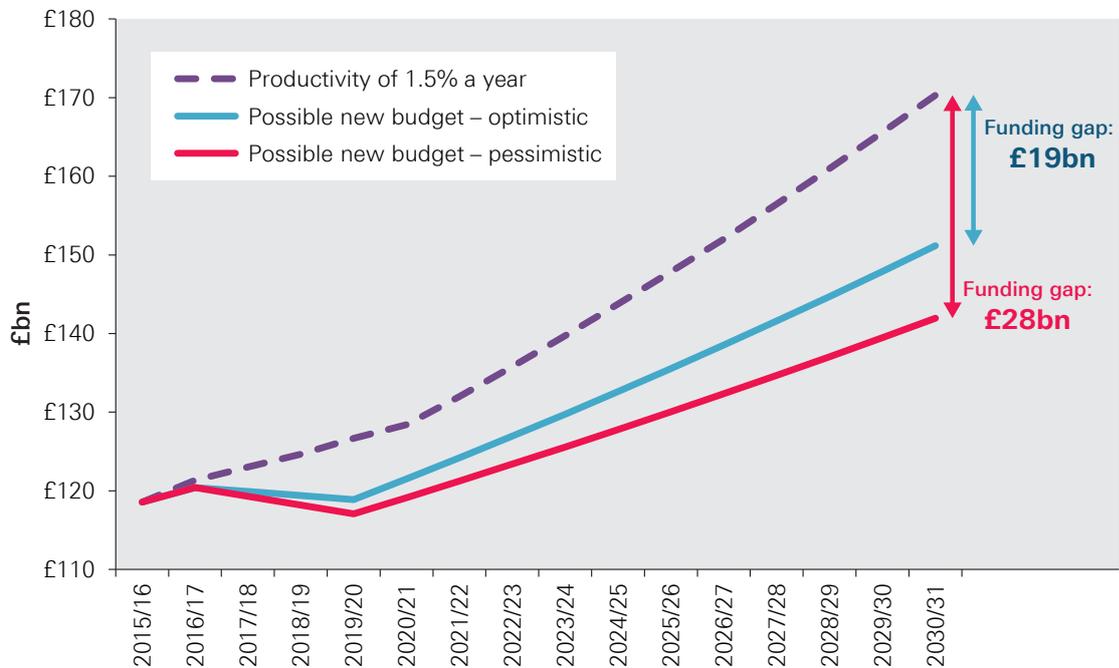
If the NHS is able to achieve efficiency growth of 1.5% a year over the long term, then without leaving the EU we estimate a funding gap worth £16bn in 2030/31. The optimistic long-term projection by NIESR of the impact of the UK leaving the EU and joining the EEA suggests a fall in expected GDP of 1.8% in 2030/31. If the Department of Health maintains the share of GDP currently planned in 2019/20, this would see health funding rise by 2.2% a year in real terms between 2019/20 and 2030/31. This would be £3bn less than the budget of £154bn at previous forecasts of economic growth (see appendix 1). This would see the funding gap rise to £19bn in 2030/31, if the NHS is able to achieve efficiency growth of 1.5% a year.

Under the NIESR’s most pessimistic scenario, where the UK relies on WTO rules, GDP would be 7.8% lower than expected. In this case the Department of Health budget would increase by 1.8% a year on average from 2019/20, so that by 2030/31 funding for the NHS would be £12bn lower than expected under the OBR’s estimates of economic growth with the UK remaining in the EU. This would result in a potential funding gap of £28bn in 2030/31 (see figure 11 overleaf).

\* This is consistent with the OBR’s method for public spending projections.

Maintaining the current range and quality of services under either of these scenarios would require NHS funding to increase faster than GDP growth (meaning a higher percentage of GDP would be spent on health), or achieving and maintaining a significantly higher rate of efficiency growth.

**Figure 11: Potential funding gap for the Department of Health in 2030/31**



Source: Health Foundation modelling.

## Conclusion

The NHS is very fragile – years of austerity and poor workforce planning mean that most hospitals are struggling to balance their books, with the attendant risk to the quality of care provided. Recent years have reinforced our understanding of the NHS’s profound reliance on the health of our economy. A sustainable, high performing health system can only be delivered if we have a strong economy.

But uncertainty after the EU referendum has threatened the stability of the economy, which provides a real threat to NHS funding.

Six years into the health service’s decade of austerity NHS finances are under unprecedented pressure. Most hospitals couldn’t balance their budgets in 2015/16 and the forthcoming accounts might show that the Department of Health overspent its budget (Departmental Expenditure Limit) – an exceptional breach of control.

The health budget has been protected from cuts but spending growth is substantially below the growing pressures on the service. In exchange for this protection, the NHS has been asked to absorb these pressures through improved efficiency. There are opportunities to improve the efficiency and effectiveness of the NHS but realising these savings is proving to be a huge challenge – particularly against a backdrop of staffing shortages.

The vast majority of economic forecasts show that growth is expected to be lower in the coming years following the UK's decision to leave the EU. Our analysis builds on the work of the NIESR and IFS to explore how this might affect the resources available to the NHS in England. There is much uncertainty – about the scale and timing of any economic impact and the policy response. The decisions the government takes about the path of deficit reduction and how any further fiscal consolidation is shared between tax and different areas of spending will be critical. But our analysis shows that there are significant risks to NHS funding. If the government seeks a balanced budget in 2019/20 and the NHS takes an equal share of the resulting cuts, the budget for the health service would be around £2.8bn lower than set out in the spending review.

There has been much discussion about additional funding for the NHS as a result of lower payments to the EU following exit. Our analysis shows that if economic growth slows, the NHS could only receive additional funding if the government is prepared for one of three things to happen – a higher fiscal deficit, higher taxes or cuts to other areas of public spending. These would be tough decisions.

If the economy doesn't grow there is less money to spend. This means that difficult choices will have to be made. Those decisions are for society to make but it is difficult to see how the NHS could meet all the pressures on the service with a prolonged period of lower spending growth. It is clear that if the NHS is to manage the current challenge and equip the health service for the future, the government and system leaders need to support the NHS to be as efficient and effective as it can be. 18 months after the publication of the *NHS five year forward view*, which highlighted the importance of efficiency to a sustainable NHS, there has never been a more urgent need for a clear plan for how to deliver those savings and ensure the service has the staff it needs to sustain high quality care.

## Appendix 1 – Assumptions for new NHS budget

Our assumptions are based on analysis by the Institute for Fiscal Studies (IFS) of what could happen to total government spending following a decision by the UK to leave the EU,<sup>9</sup> using the estimates of the impact to GDP from the National Institute of Economic and Social Research (NIESR).<sup>4,5</sup> Estimated implications to the budget for the Department of Health are Health Foundation calculations. All figures are in 2016/17 prices, unless otherwise stated.

### Implication for 2019/20

The IFS estimates that a reduction in public spending of between £17bn and £28bn, in cash terms, would be required in order to achieve a balanced budget in 2019/20. This is equivalent to £16–26bn in 2016/17 prices. The following analysis uses the optimistic scenario of a £16bn reduction, but the calculations can easily be applied to the £26bn.

The March 2016 budget showed that fiscal consolidation would be achieved by a reduction in public spending (81.2%) and increased taxation (18.8%). We have applied the same ratio for the further required consolidation. On this basis, under the more optimistic scenario, total public spending will fall by £13bn ( $= £16bn \times 0.812$ ).

In the short term, further savings are most likely to come from the Total Department Expenditure Limit (TDEL) and welfare budget, currently planned to be £353bn and £212bn respectively in 2019/20. These would therefore fall from a combined total of £564bn\* to £551bn under the optimistic scenario.

If savings are shared equally, TDEL would fall by £8.1bn from £353bn to £345bn (ie TDEL remains at 62% of the combined TDEL and welfare budget).

In the March 2016 Budget the Department of Health accounts for 35% of TDEL in 2019/20. If savings across TDEL are also shared equally (ie health remains at 35% of TDEL), the Department of Health budget would fall by £2.8bn, from a planned £121.7bn to £118.9bn.

This represents an average annual decrease of 0.4% a year between 2016/17 and 2019/20.

Applying these assumptions to the more pessimistic scenario would see the Department of Health budget fall by £4.6bn in 2019/20, from £121.7bn to £117.1bn. This is an average decrease of 0.9% a year.

These figures assume that the government still aims to achieve a balanced budget in 2019/20, and does not protect the health budget from spending cuts. If either of these is not true the potential budget for 2019/20 could be higher.

\* Figures do not sum due to rounding.

## **Long-term implications**

Over the longer term, the IFS assumes that total public spending continues to run at 37% of GDP, which is the level forecast by the Office for Budget Responsibility (OBR) for 2019/20. We applied the same assumption for the Department of Health budget, which was planned to be 5.9% of GDP in 2019/20.

In March the OBR estimated that GDP would reach £2,067bn by 2019/20 and then rise by 2.2% a year in real terms to £2,614bn by 2030/31. A health budget at 5.9% of GDP would therefore be £154bn.

The NIESR estimates that GDP in 2030/31 could be lower by between 1.8% and 7.8% following the UK's decision to leave the EU. This means GDP would be £2,567bn or £2,410bn in 2030/31 respectively.

A Department of Health budget worth 5.9% of GDP in 2030/31 would therefore be £151bn in the optimistic scenario, or £142bn in the pessimistic scenario. This is a fall of between £3bn and £12bn on the estimated budget. This is equivalent to £53m to £231m a week.

## Appendix 2 – Implications of the Department of Health exceeding its 2015/16 budget

The Department of Health is given certain ‘Control Totals’ by HM Treasury. This means that its spending on capital (long-term) projects cannot be greater than its Capital Control (£4.6bn for 15/16) and that its day-to-day spending cannot be greater than its Resource Control (£119.9bn). This is further broken up into the Departmental Expenditure Limit (DEL) (spending the department is expected to be able to control) and Annually Managed Expenditure (demand-driven spending). The original amounts voted on by parliament are set out in table 3, although it has since been adjusted in the Spring Supplementary Estimates. There is no control on Total DEL, but rather a set of controls on subsets of spending.

**Table 3: Department of Health budget as decided by Main Supply Estimate**

	Voted (£bn)	Non-Voted (£bn)	Total (£bn)
<b>Departmental Expenditure Limit</b>			
<b>Resource</b>	94.43	18.90	113.33
<b>Capital</b>	4.63		4.63
<b>Annually Managed Expenditure</b>			
<b>Resource</b>	6.60		6.60
<b>Capital</b>	0.02		0.02
<b>Total Net Budget</b>			
<b>Resource</b>	101.03	18.90	119.93
<b>Capital</b>	4.65		4.65
<b>Net cash requirement</b>			
	98.65		

Overspending on these totals is very serious (see box 1). It would mean that the department or organisations it has control over are using resources not permitted by parliament. The budgets are set through Spending Rounds (which set multi-year settlements), and then the Estimates Procedure (where parliament votes on yearly allocations). Main Estimates represent the primary budget to be voted on, with Supplementary Estimates allowing flexibility to move money around later in the year.

The government makes clear that Estimates ‘must not be misleading’, they must be ‘taut and realistic’.<sup>26</sup> If a department does look like it is going to overspend one of its control limits then it has the opportunity through Supplementary Estimates to:

- move resource from a different control limit into the one which may overspend
- receive additional funds from the Treasury Reserve.

In the 2015/16 Supplementary Estimates<sup>27</sup> the Department of Health did both, resulting in a net change of £1.2bn in its Resource DEL.

Parliament’s authority over public expenditure ‘is taken very seriously’ and ‘no resources can be properly committed, or expenditure incurred, without the approval of the Treasury’.<sup>26</sup> The Department of Health – as with all departments – is not allowed to overspend its budget. This is why it plans to achieve a small underspend each year – to allow for small unexpected costs without overspending.<sup>28,29,\*</sup> It is the use of resources (rather than the allocation of money) that counts against a department’s budget – this includes the risk that foundation trusts can maintain a financial surplus, but when they choose to spend it, this counts against the Department of Health budget.<sup>28</sup>

The government makes clear that a department overspending its budget will result, at the very least, in an Excess Vote the following February. This seeks authority for spending that was outside the plans contained in the Estimates and authorised by parliament. Such instances are seen as potentially undermining parliamentary control over spending.<sup>26</sup> Formally, the accounting officer is the person who parliament ‘calls to account for stewardship of its resources’.<sup>28</sup>

The Department of Health† has never before overspent its budget and required an Excess Vote. If it were to do so it would not be taken lightly, by either the Treasury or parliament.

### Box 1: The 1987 financial crisis in the NHS

In 1987/88 the government and health authorities took a series of actions to remain in cash limits. This included additional government funding; delaying payment to suppliers; capital-to-revenue transfers; economy measures such as reducing access to care; and reducing use of agency staff. While the imperative to balance the department budget is clear, to do so using short-term measures which add to the long-term pressures is undoubtedly short-sighted.

This followed 1986/87 when the NHS was ‘technically insolvent’ according to the Director of Finance, and the department was unable to achieve a good deal from the Treasury to fund the service at an adequate level.<sup>30</sup> This led to an Excess Vote,<sup>31</sup> and was followed by, among other things, the break-up of the Department of Health and Social Security into the Department of Health and the Department of Social Security; a new Secretary of State and Permanent Secretary; and the *Working for Patients* white paper which introduced the purchaser provider split and ‘NHS trusts’ in the NHS. The financial crisis and overspending was seen as evidence that the NHS was dysfunctional and needed reform. There was, nonetheless, private acknowledgment from the Chancellor that it had reached the point where ‘the pressures to spend more money on the NHS were almost impossible to resist’.<sup>29</sup>

\* If a department is projecting a significant year-end underspend it can (under certain conditions), use ‘budget exchange’ to remove it from that year’s budget and add it to its budget next year.

† In its current form, existing since 1988

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