FUNDING OVERVIEW

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NHS funding projections

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4%

Key points

1. **Each year, the English NHS faces additional spending pressures of around 4% in real terms.** These are the result of a growing and ageing population, the increasing prevalence of long-term conditions, higher expectations of care and rises in the relative prices of health care inputs (principally of staffing).
2. **These pressures will result in a potential funding gap of £30bn by 2020/21** unless additional funding is made available or substantial productivity savings are made.
3. **NHS England suggests that this potential £30bn funding gap can be reduced through further productivity savings** as follows: productivity growth of 0.8% a year could bring the gap down to £21bn, productivity growth of 1.5% a year could bring it down to £16bn and productivity growth of 2.0%–3.0% a year could bring it down to £8bn (see table 1).
4. **The funding gap for 2020/21 will be closed if public funding for health rises by 1.5% a year in real terms and the NHS achieves a rate of productivity growth of 2–3% a year.** However, this is substantially higher than the recent rate of acute productivity growth.
5. **The period between 2010/11 and 2020/21 will be the most financially austere decade in NHS history**, even if funding rises by 1.5% a year in real terms from 2014/15 onwards, in line with NHS England's *Five year forward view*. This would result in an average increase of 1.4% a year in real terms over the decade from 2010/11 to 2020/21. During the last 50 years, the lowest average funding increase over a ten-year period has been 2.0% a year, between 1975/76 and 1985/86.
6. **Spending pressures will continue beyond the next parliament.** Pressures on the English NHS are projected to be £65bn higher than current spend by 2030/31 (in 2014/15 prices), assuming that the English NHS continues its current rate of productivity growth of 1.5% a year (from 2004/05 to 2011/12). Meeting this demand would require additional funding of 2.9% a year above inflation between 2014/15 and 2030/31, and would see the English NHS take a growing share of total national GDP (see figure 1 and table 2).
7. **Funding pressures on the English NHS are substantial, but not unique.** The OECD estimates that public spending on health will grow at a faster rate in 11 of the other EU-15* countries than in the UK (see figure 2).

* 'EU-15' refers to the first 15 countries to join the European Union: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.

There will be a potential £30bn funding gap in 2020/21 without additional funding or substantial productivity savings

The next parliament

Each year, the English NHS faces additional spending pressures of around 4% in real terms.[1] These are the result of a number of factors, including a growing and ageing population, the increasing prevalence of long-term conditions, higher expectations of care and rising relative prices (principally of staffing, as well as pharmaceutical and other costs). This continued pressure will lead to a potential funding gap of £30bn in real terms by 2020/21 unless additional funding is made available or substantial productivity savings are made.

The level of funding available for the next five years will depend on decisions made after the UK general election in May 2015. Although the three largest parties have all promised to protect the NHS budget in one form or another, the exact details of these pledges are difficult to identify.

NHS England has taken a proactive step by estimating how much funding will be needed during the next parliament, up to 2020/21. Its *Five year forward view* sets out three scenarios for what could happen (see also table 1).[2]

1. If the NHS achieves productivity of 0.8%* but receives no real terms increase in funding beyond 2015/16, the funding gap in 2020/21 would be reduced from £30bn to £21bn.
2. If the NHS maintains its more recent rate of productivity of 1.5% a year (from 2004/05 to 2011/12),[3] the gap would be further reduced to £16bn.
3. If the NHS achieves annual productivity of 2% a year until 2017/18 and 3% a year thereafter, the funding shortfall would be reduced to £8bn. This gap could be closed completely if funding increases by 1.5% a year above inflation.

Table 1: Funding gap for the English NHS in 2020/21 under scenarios from NHS England's *Five year forward view*

Productivity	Funding gap in 2020/21
0.0%	£30bn
0.8%	£21bn
1.5%	£16bn
2.0% - 3.0%	£8bn

Note: NHS England's projections of total spending are in cash terms, allowing them to explore the impact of cost pressures (such as pay) separately to assumptions for GDP deflators. The budget for NHS England is then assumed to rise with inflation

* This is slightly lower than the long-run average level of productivity of 1.0% a year between 1979 and 2010. See: http://cdn.budgetresponsibility.org.uk/41298-OBR-accessible.pdf

The NHS will clearly need additional funding during the next parliament if it is to sustain a comprehensive and high quality service

The additional funding of 1.5% a year needed to close the projected 2020/21 funding gap is higher than the current planned average increase of 0.9% a year (from 2009/10 to 2015/16). However, it is lower than the long-term average annual rise in funding for the UK NHS of 3.7% a year since 1948[4] and substantially below the average increase of around 7% a year that the NHS received between 2000/01 and 2009/10.

During the last 50 years, the lowest average increase in funding over a decade for the UK NHS was 2.0% a year in real terms between 1975/76 and 1985/86*. If the NHS in England receives an increase in funding of 1.5% a year between 2014/15 and 2020/21, it would bring the average increase over the ten years between 2010/11 and 2020/21 to 1.4% a year in real terms. This would make it the most financially constrained decade in the history of the NHS.

Making sustained productivity savings at the higher rate of 2% a year until 2017/18 and 3% a year thereafter represents a substantial challenge, especially following recent years of required savings. Historical trends suggest that a productivity increase of 1.5% a year is more likely, suggesting that the NHS will need an additional £16bn by 2020/21, worth an extra 2.9% each year in real terms.

Beyond the next parliament

The NHS will clearly need additional funding during the next parliament if it is to sustain a comprehensive and high quality service, but how this money is used will also be vital.[5] The pressures facing the NHS will not disappear, and without a transformation of how services are delivered these pressures are likely to grow substantially.

Health Foundation projections, developed using the Nuffield Trust's 2012 models,[1] show that spending on the English NHS in 2030/31 could be as much as twice the current level, rising by 4.3% a year in real terms if no additional productivity is achieved (see figure 1).

The recent trend rate of annual productivity growth in the NHS is

1.5%

It is more realistic to assume that the actual rate of productivity growth will be closer to the recent trend rate of 1.5% a year. In this case, spending would need to rise by 2.9% a year in real terms, leading to an overall increase of £65bn by 2030/31 (2014/15 prices).

Productivity in the NHS is traditionally lower than in other sectors.[6] If the NHS could achieve a productivity rate close to 2.2% a year (the trend rate for the UK economy as a whole) the additional spending would also increase by 2.2% a year, rising by £48bn by 2030/31 (2014/15 prices).

If funding continues to rise at a rate of 1.5% a year, as requested by NHS England, it would result in funding gaps worth £78bn, £34bn and £17bn respectively for each of the productivity scenarios given in the *Five year forward view* (2014/15 prices, see table 2).

If, instead, funding for the NHS grows broadly in line with expected growth for the UK economy at 2.3% a year, these potential funding gaps would reduce to £58bn, £15bn, or a surplus of £2bn respectively.

* Our best estimate for the average increase in real terms funding between 1949/50 and 1959/60 was lower than for 1975/76 to 1985/86, at 1.8% a year. However GDP deflators from 1949/50 to 1954/55 were not available, and we have estimated them by using the GDP deflators available for the calendar years 1949 to 1954, calculating the yearly change in GDP deflator for these years and applying them to the fiscal years. We note that even with the inclusion of this estimate, the value for the decade 2010/11 to 2020/21 would remain the lower.

Figure 1: Funding pressures on the English NHS in 2030/31 (in 2014/15 prices)

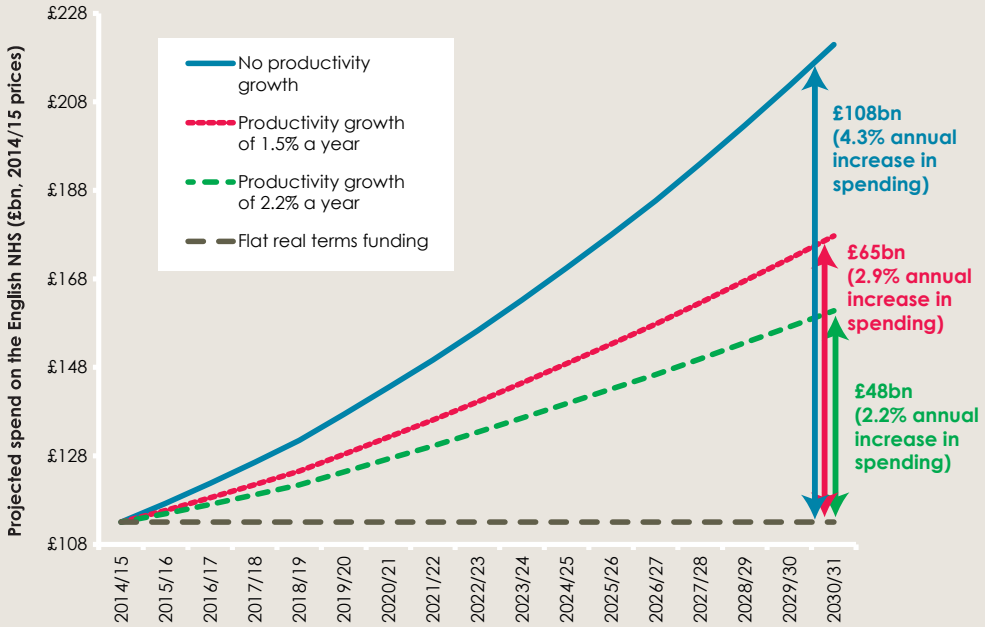


Table 2: Health Foundation projected funding gap for English NHS in 2030/31 under three assumptions for productivity

		Funding gap in 2030/31 (2014/15 prices):		
Annual rate of productivity	**Average annual real-terms increase in NHS spending pressures**	**Budget stays flat in real terms**	**Budget rises by 1.5% a year in real terms**	**Budget rises by 2.3% a year in real terms**
0.0%	4.3%	£108bn	£78bn	£58bn
1.5%	2.9%	£65bn	£34bn	£15bn
2.2%	2.2%	£48bn	£17bn	£2bn surplus

If a high quality, comprehensive service is to be maintained, each year funding will need to rise by around

2.9%

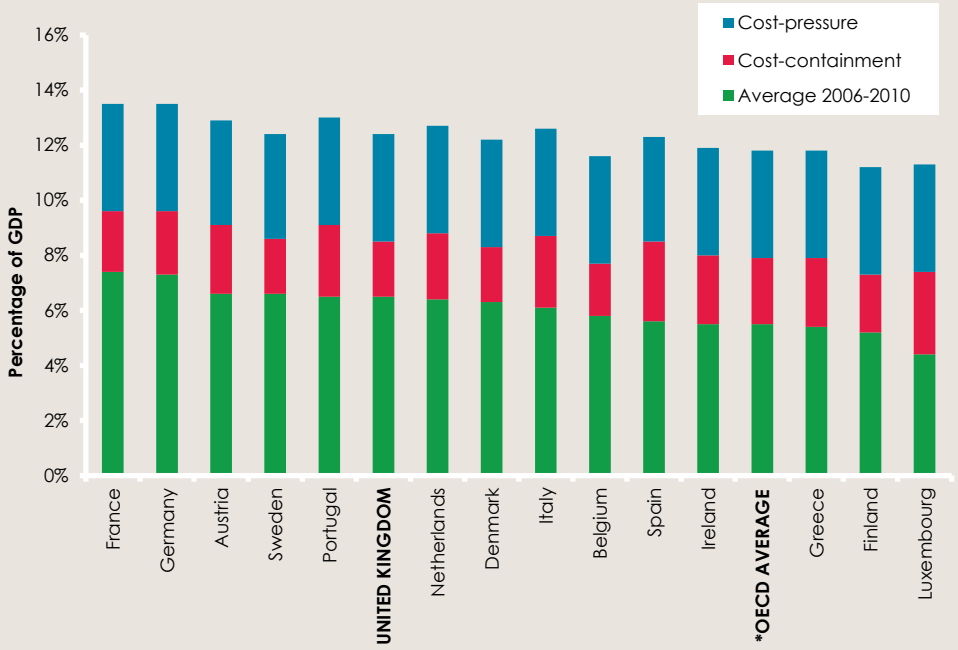
Under our central projection, the NHS in England will continue to achieve productivity close to 1.5% a year. Therefore, if a high quality, comprehensive service is to be maintained, funding will need to rise by around 2.9% a year. This is slightly above the expected rate of economic growth of 2.3% a year.

European comparisons

The UK is not alone in facing rising pressures on health care. The OECD estimates that, by 2060, all EU-15 countries will have increased the proportion of GDP they spend on public provision of health by at least 1.9 percentage points, and potentially by as much as 7.6 percentage points (figure 2).[7]

The relative projected pressures for the UK are actually lower than for other countries. Between 2006 and 2010, the UK had the fifth highest public spend on health as a share of GDP among the EU-15 countries. Based on the OECD projections, other countries will overtake the UK, making it either the seventh or eighth highest public spender (depending on the level of cost containment achieved).

Figure 2: OECD projection for average public spending on health for EU-15 countries, as a percentage of GDP between 2006 and 2010, with projected spend in 2060 under both cost-containment and cost-pressure assumptions



Source: OECD, Public spending on health and long-term care: a new set of projections.

References

1 Charlesworth A, Marshall L, Roberts A. *A decade of austerity? The funding pressures facing the NHS from 2010/11 to 2021/22.* London: The Nuffield Trust, 2012. www.nuffieldtrust.org.uk/publications/decade-austerityfunding- pressures-facing-nhs.

2 NHS England. *Five year forward view.* London: NHS England, 2014. www.england.nhs.uk/wpcontent/ uploads/2014/10/5yfv-web.pdf.

3 Bojke C, Castelli A, Grasic K, Street A. *Productivity of the English National Health Service from 2004/5: Updated to 2011/12.* London: Centre for Health Economics, 2014. www.york.ac.uk/media/che/documents/papers/researchpapers/CHERP%2094_NHS_productivity_update2011- 12.pdf.

4 Lloyd T. *Funding overview: Historical trends in the UK*. London: The Health Foundation, 2015.

5 Taunt R, Lockwood A and Berry, N. *More than money: closing the NHS quality gap*. London: The Health Foundation, 2014. www.health.org.uk/publications/more-than-money-closing-the-nhs-quality-gap/.

6 Baumol WJ, et al. *The Cost Disease*. Yale: Yale University Press, 2012.

7 OECD. Public spending on health and long-term care: a new set of projections. *OECD Economic Policy Papers* No 6, 2013. www.oecd.org/eco/growth/Health%20FINAL.pdf

About the author

Adam Roberts joined the Health Foundation in July 2014 as Senior Economics Fellow, exploring past, present and future trends for health care funding in the UK.

Before joining the Health Foundation, Adam was a Senior Research Analyst at the Nuffield Trust where he worked on projects including the project funding gap facing the NHS in England and Wales, allocation of national resources to GP practices, lifetime cost for social care, travel distances for emergency care, and trends community prescribing.

Prior to his time at the Nuffield Trust, Adam was responsible for the production of risk estimates of NHS organisations for the Care Quality Commission (and the former Healthcare Commission) to support the programme of targeted inspections. These estimates were generated by applying cutting edge methods to all relevant and available data sources, both quantitative and qualitative, to identify areas of possible concern for the commission to follow-up.

Adam graduated from Keele University in 2004 where he achieved a First Class Dual Honours Degree in Statistics and Economics.

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