

The financial crisis in the National Health Service: insufficient funding will derail transformation plans

Andrew Street

Abstract

NHS England's Five Year Forward View (5YFV) set out ambitious plans to transform the National Health Service (NHS) by 2021. The plans required the NHS to achieve productivity gains of 2-3% a year and the government to increase NHS funding by £8bn. Even though NHS productivity growth has outstripped that of the economy as a whole since the recession, the gains required of the 5YFV are unprecedented. For its part, the government is committing just £4.5bn in increased funding and is also pushing for a 7-day NHS that will further increase costs. Meanwhile the NHS is in financial crisis, with growing hospital deficits diverting resources from the 5YFV's transformation agenda. All told, the ambitious plans of the 5YFV are unlikely to be realised.

Introduction

In October 2014, NHS England published a five-year vision for the National Health Service (NHS), the so-called Five Year Forward View (5YFV) (NHS England, 2014). This set out ambitions including: "a radical upgrade in prevention and public health" to reduce the burden of illness and improved integration of primary care and secondary care, of physical and mental health and of health and social care.

To achieve this vision NHS England argued that the government would need to commit to increased NHS funding, having calculated that flat real-terms funding would produce a mismatch between resources and patient needs of nearly £30 billion in 2020/21. It argued that the NHS was capable of covering £22 billion of the expected £30 billion gap through productivity gains of 2% to 3% a year between 2015/16 and 2020/21. The government would need to make up the difference.

Prior to the general election in May 2015, all mainstream political parties committed to increase funding for the NHS by the requested amount. The Conservative election manifesto stated: "We will spend at least an additional £8 billion by 2020 over and above inflation to fund and support the NHS's own action plan for the next five years" (The Conservative Party, 2015). The commitment was reiterated in the post-election Queen's speech (BBC News, 2015).

In this paper, I will first contextualise the requisite productivity gains by considering recent experience from 2004/5 to 2013/14. I then look at how the Conservative government has met its election promise to increase NHS funding. This is followed by a critique of the government's commitment to a 7-day NHS and of the financial difficulties facing the NHS over the parliamentary term.

Growth in NHS Productivity

NHS productivity is measured by comparing growth in the outputs produced by the NHS to growth in the inputs used to produce them (Bojke et al., 2016). NHS outputs include the amount and quality of care provided to all NHS patients wherever they are treated in England. Inputs include the number of doctors, nurses and support staff providing care, the equipment and clinical supplies used, and the hospitals and other premises where care is provided.

NHS output has increased between 2004/5 and 2013/14 primarily because ever more patients are receiving treatment. Compared to 2004/5, hospitals in 2013/14 were treating 4 million (32%) more patients, the number of outpatient attendances has increased by 17%, there has been an estimated 25% growth in primary care consultations, and community care activity has increased by 14%.

Quality has also improved. For example hospitals have been getting progressively better at keeping people alive over the past decade. This can be seen from data about hospital death rates published by the Health and Social Care Information Centre covering 2005/06 to 2014/15 (Health and Social Care Information Centre, 2016). Figure 1 shows the age standardised deaths per 100,000 within 30 days of a hospital procedure. Five series are reported, namely coronary artery bypass graft, myocardial infarction, fractured proximal femur, non-elective surgery and stroke. For all five series death rates have been falling over time, dramatically so for those admitted following a stroke. Marked improvements are visible since the publication of the National Stroke Strategy in December 2007 which defined "markers for high-quality stroke care, and sets out actions and progress measures for achieving the vision over a ten-year period" (National Audit Office, 2010).

<Figure 1 around here>

On the downside, although waiting times are shorter than they were in 2004/5, they have been getting longer since 2007/8 (Siddique, 2015). Taking account of the amount and quality of care, overall NHS output increased by 47% between 2004/5 and 2013/14.

Increased NHS output has come about in response to pronounced increases in NHS expenditure. This has funded both higher wages and more staff and resources. Wages rose by 24% between 2004/5 and 2012/13 (Department of Health, 2016b) though pay has fallen since 2009 (Appleby, 2015b), while there was a 10% increase in the number of NHS staff. There has been increased use of agency staff over time, but there have been periods of retrenchment, notably whenever the hospital sector has been struggling to reduce deficits (Bojke et al., 2016). The use of non-staff resources, such as equipment and supplies, has increased by virtually the same proportion (11%) year-on-year. Taken together, NHS inputs increased by 31% between 2004/5 and 2013/14.

As figure 2 shows the NHS has increased output at a faster rate than inputs. The consequence has been that from 2004/5 to 2013/14 NHS productivity has increased by 12.86%, an annual average of 1.37%. Productivity growth has been especially strong since 2009/10, with annual productivity growth of 1.98%. Growth between 2012/13 and 2013/14, the latest available figures, amounted to 2.2%.

<Figure 2 around here>

It is also notable that the NHS has been outperforming the rest of the economy over the last few years. Productivity is measured somewhat differently for each sector of the economy according to the nature of data available, but the measures are otherwise equivalent. The main economy-wide measure produced by the Office of National Statistics is called Gross Value Added per hour worked which is used to measure the contribution to the economy of each sector in the United Kingdom (Office for National Statistics, 2015).

As shown in figure 3, between 2004/5 and 2008/9 NHS productivity growth was similar, if not slightly higher, than for the economy as a whole (Street and Grašić 2016). The recession in 2008 is reflected by the notable dip in each series. Since then NHS productivity has increased year-on-year, whereas productivity has been falling for the economy in general.

<Figure 3 around here>

Even so, the NHS productivity figures suggest that it will be a challenge for the NHS to meet the Five Year Forward View's target of productivity improvements of 2-3% a year (NHS England, 2014). Although the NHS has been doing well, the 5YFV requires the NHS to do even better.

How much is NHS funding to increase?

The Conservative government promised to increase NHS funding by a total of £10bn over the course of the Parliament, with £1.5bn provided in 2015/16, and £8.4bn thereafter to match the 5YFV requirements. In announcing the post-election spending review settlement, the Department of Health reported the ‘cumulative delivery’ of the commitment (Department of Health and HM Treasury, 2015). The £8.4bn is to be front-loaded, with £3.8 billion given in 2016/17, followed by an additional £1.5 billion in 2017/18, £0.5bn in 2018/19, £0.9bn in 2019/20 and £1.7bn in 2020/21.

On the face of it, this meets the promised commitment set out in the election manifesto. But there are two sets of carefully chosen words in the manifesto promise and their interpretation means that the NHS is receiving less money than is popularly perceived. The first is ‘over and above inflation’. The second is ‘to fund and support the NHS’s own action plan’.

Inflation adjustments allow spending every year to be reported in ‘real’ terms. It is usual practice to use the first year as the baseline, and deflate future spending back to this starting point. It would seem safe to assume that’s what the Department of Health did when announcing the cumulative delivery, particularly as the accompanying tables state that 2015-16 is the baseline (Department of Health and HM Treasury, 2015). But, in fact, the ‘additional’ £8.4bn is reported in terms of 2020/21 prices. This is not mentioned, but it matters. If 2015/16 prices are used, the ‘additional’ commitment amounts to just £7.6bn (Nuffield Trust et al., 2016).

As to the second set of words, most people seem to believe that ‘additional’ money is going to the health system and that the Department of Health’s budget will be £7.6bn (or £8.4bn) higher in 2020/21 than it is now. But actually the government is talking about the budget for NHS England, which is the organisation that holds the money “to fund and support the NHS’s own action plan”, the aforementioned Five Year Forward View (NHS England, 2014).

NHS England controls around 85% of the Department’s budget, and is the national body responsible for commissioning health services. So NHS England is to get a bigger budget. But much of the increase in its budget will come from cuts to other NHS organisations and arm’s length bodies funded from the Department’s budget.

Cuts are to be made to education, public health and capital expenditure. The £5bn annual budget for Health Education England, used to train the current and future workforce, is to be reduced by

£1.2bn, meaning that bursaries will no longer be available to student (Street, 2016). The public health grants paid by the Department to local authorities are set to fall from £3.5bn to just £3.1bn in real terms over the next five years (The Health Foundation, 2016). This risks the 5YFV plans for a “radical upgrade in prevention and public health”, unless local authorities somehow make up the difference. And the Department’s capital budget will fall from £4.8bn in 2015/16 to £4.4bn in 2020/21. This will hinder the uptake of new technology and reduce the capital to labour ratio, the likelihood being that this will reduce NHS productivity (Pessoa and Van Reenen, 2013).

Of course, the increase to NHS England’s budget isn’t solely to be funded from cuts elsewhere. The government is providing some truly additional funding over and above inflation. But rather than “at least an additional £8 billion by 2020”, the real terms increase compared to 2015/16 amounts to just £4.5bn (Appleby, 2016). The annual funding increases over this Parliament are among the lowest in NHS history (Appleby, 2015a) and leave a substantial funding gap between what the NHS needs and what it is set to receive.

A 7-day NHS

To make things even more challenging, the Conservatives made an election promise that people would be able to see a GP and receive hospital care seven days a week by 2020 (Prime Minister’s Office et al., 2015). At face value, these promises seem laudable, yet they have met with criticism and objection.

The attraction of GP surgeries being open for longer during the day and at weekends is that it will be more convenient for “hardworking families” to see their GPs (Prime Minister’s Office et al., 2015). Extending out-of-hours provision of GP care may also help to relieve pressure on the hospital sector, although it’s not clear that primary care appointments reduce accident and emergency (A&E) attendances or actually push them up (Wilson, 2015).

The government can’t force GPs to open longer, but is hoping enough will volunteer to do so. Their response, though, has been underwhelming. GPs have been struggling to cope with existing workload pressures, in the context of the profession’s acknowledged recruitment and retention problems (NHS England, 2016).

It’s not even clear how much demand there is for a 7-day GP service. Eighteen areas have been piloting the scheme, but some have already

scaled back their opening hours because demand has been less than expected (Campbell, 2015). Opening GP surgeries 7-days days a week might cost a further £1bn a year (Underwood, 2015). All in all, the case for prioritising this policy needs to be strengthened. There should be proper assessment of the demand for out-of-hours GP services, and whether satisfying this demand is the most cost-effective way of improving primary care.

The 7-day debate for hospital care is driven by evidence suggesting that people admitted to hospital on weekends are more likely to die than those admitted during the week. The ‘evidence base’ compiled by the Department of Health comprises eight studies, of which only four are peer-reviewed articles, the others being reports (Department of Health, 2015).

One of the main studies reported that 11,000 more people die each year if admitted over the extended weekend, from Friday to Monday, compared to those admitted on midweek days (Freemantle et al., 2015). The government drew the conclusion that the problem stems from senior consultants being unavailable at weekends. Consequently 7-day services have taken centre-stage in contract negotiations with junior doctors, the government hoping to remove the option for doctors to opt-out of providing non-emergency care at weekends that they secured as part of the 2004 contract negotiations (Exworthy, 2015).

It took a long while for the government to define what it meant by 7-day hospital services but eventually the Secretary of State for Health specified four priority clinical standards to be met every day for all patients requiring urgent and emergency care (Hunt, 2015). All emergency admissions should have a thorough assessment by a consultant within 14 hours of arrival at hospital; everyone in hospital should have access to consultant-directed diagnostic tests; and to consultant-directed interventions; and high dependency patients must be seen and reviewed by a consultant twice daily, and once a day after transfer to a general ward.

Notably these standards all relate to the presence of consultants not junior doctors, making it unclear why 7-day hospital services have been a central feature of the dispute about the junior doctors’ contract. And they’ve been implemented in some hospitals, implying that a new junior doctors’ contract is not necessary for their introduction.

As with primary care, more evidence is required to inform the move to a 7-day hospital service. First, it remains unclear whether the

weekend effect is just a statistical artefact or whether there is a real problem with a definitive cause (Meacock et al., 2016). Second, we need to know the costs of the policy. Nationwide, the cost of implementing 7-day services in hospital has been estimated to be £1.07bn-£1.43bn a year (Meacock et al., 2015), even supposing that it would be possible to recruit staff with the necessary skills. On 11 May 2016 the Public Accounts Committee offered harsh criticism (House of Commons Public Accounts Committee, 2016), stating:

“no coherent attempt has been made to assess the headcount implications of major policy initiatives such as the 7-day NHS. It beggars belief that such a major policy should be advanced with so flimsy a notion of how it will be funded”.

Financial challenges ahead

The ability to meet the government’s election promises with less than the requested funding is further complicated by the fact that the NHS is in the midst of a financial crisis. Most obviously NHS hospitals reported a £2.3bn deficit in 2015/16 (Brimelow, 2016). This continues a worrying trend. The hospital sector recorded a surplus of £592m in 2012/13, but this had turned into a deficit of £91m in 2013/14, which had increased to £843m in 2014/15 (House of Commons Health Committee, 2016). Hospitals are calling for debt relief and bailouts.

These deficits threaten the 5YFV plans to transform the NHS. Channelling more money to hospitals means less is available for community and mental health services (Buchanan, 2015).

Hospitals blame deficits on things outside their control. They have two strong grounds for complaint. First, they are not paid enough for the care they provide. Hospitals are paid according to how many and what type of patients they treat. When this payment system was introduced in 2003/4 the price per treatment was based on average costs reported by all hospitals (Street and Maynard, 2007). But since 2005/6 prices have been reduced by an annual ‘efficiency factor’ (Deloitte, 2014). From 2011/12 to 2014/15, the annual efficiency factor was a particularly challenging 4% (Gainsbury, 2016). Hospitals have been unable to meet this challenge in full each year and annual shortfalls have caused to accumulate over time.

In January 2015 hospitals rebelled, objecting to a proposed efficiency target of 3.8% for 2015/16. The target was subsequently dropped (West, 2015)and, in a reversal of past policy, 2016/17 prices are to

include a 1% ‘cost (Department of Health, 2016a). But the deficit damage has already been done.

The second complaint is that hospitals are treating more patients because other parts of the system aren’t working effectively. For instance, more people are going to A&E (Monitor, 2015b) because social care support has been cut back (Fernandez et al., 2013) and because the new 111 service advises more people to go to A&E than the old NHS Direct (Turner et al., 2013). Similarly emergency admissions to hospital have been rising by 2.4% a year since 2011/12 - and by 3.7% between 2013/14 and 2014/15 (Health and Social Care Information Centre, 2015). If patients turn up needing emergency care, hospitals can’t simply turn them away. While hospitals get paid the more patients they treat, since 2010 they have received only 30% of the normal price for short stay emergency patients. Hospitals complain this isn’t enough, and it has recently been increased to 70% (Monitor and NHS England, 2015).

But there are counter-arguments that hospital deficits are partly of their own making. Hospitals are indeed treating more patients, but do they all need hospital treatment? While emergency activity has been increasing, elective activity has been increasing even faster, by 3.5% a year since 2011/12, and 5.1% between 2013/14 and 2014/15 (Health and Social Care Information Centre, 2015). The fastest growth has been for people coming to hospital for investigations and day case treatment (Smith et al., 2014).

Some of these people might have been treated elsewhere, but there have been long-standing concerns that patients would be “sucked into hospital” (HSJ, 2005) by hospitals wanting to increase their income (Johnson, 2016). But this will only get them out of financial trouble if the additional income generated covers the extra costs incurred. But that is increasingly unlikely because prices are based on average costs minus the annual efficiency factor. This makes it more difficult to cover the costs of treating more patients. In such circumstances, treating more patients will make the hospital’s financial situation worse, not better.

To compound matters, most hospitals have little understanding of how much it costs to treat their patients. The best information comes from patient-level costing systems but only 42% of hospitals are using these (Monitor, 2015a). If they don’t have accurate cost information, hospitals can’t tell whether treating more patients will relieve financial pressure.

The original attraction of the English hospital payment system was that it offered equal pay for equal work: hospitals are all paid the same price for providing a particular treatment. This principle remains sound, but the payment system needs refining, although the recent removal of the efficiency factor and price increases for emergency admissions should improve matters.

When the payment system was first introduced, it was also hoped that money saved by preventing hospital admission could be invested in alternatives to hospital care. But there has been little success in preventing emergency admissions and even less in reducing elective admissions (Bardsley, 2013). The result has been that hospitals have been accounting for an increasing proportion of NHS expenditure over time (Lafond et al., 2014). That trend won't change while extra money is being used to bailout the hospital sector nor until hospitals stop focussing solely on income growth and start also considering how their costs change in relation to activity.

As the House of Commons health committee has recently commented (House of Commons Health Committee, 2016):

"with much of the upfront investment flowing from the Spending Review being used to address deficits, there is a real danger that greater integration and the move to the new models of care set out in the Five Year Forward View will stall".

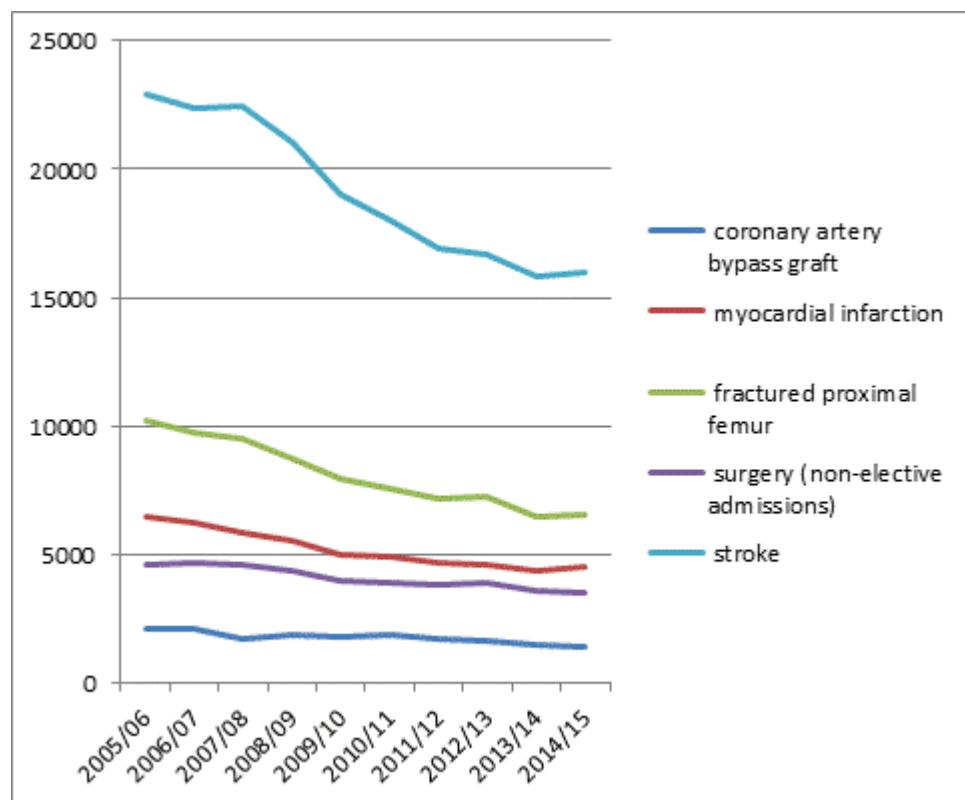
Conclusions

Before the May 2015 election, the Conservatives promised to make available "at least an additional £8 billion by 2020" to the NHS. The public has been misled, with the promise to be met by a redefinition of what is meant by the NHS. Rather than increases to the Department of Health's budget, the 2015 spending review defines the spending increase only in terms of NHS England's budget, and ignores funding reductions to other parts of departmental spending, notably public health, education and training, and capital funding. The House of Commons health committee has criticised the government for this redefinition and noted that "using the original definitions, and taking 2015–16 as the base year, total health spending will increase by £4.5 billion in real terms by 2021. This is a welcome increase ... but is clearly far less than the £8.4 billion implied by the Spending Review announcements and does not in our view meet the commitment to fund the Five Year Forward View" (House of Commons Health Committee, 2016).

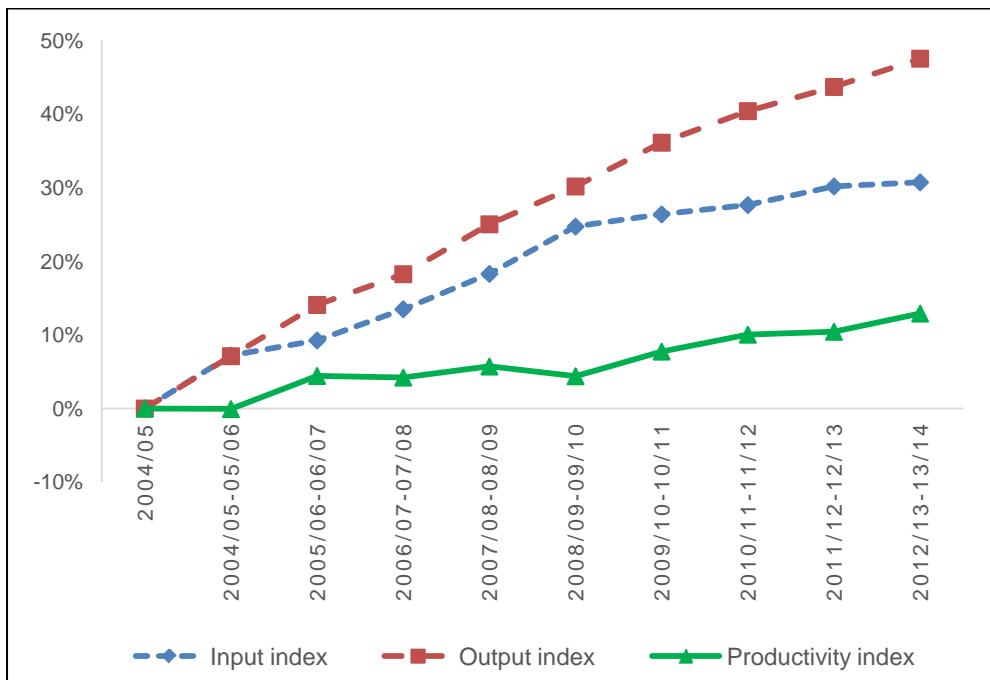
For its part, the NHS has been outperforming the rest of the economy in terms of year-on-year productivity improvements since the recession in 2008. But these historical gains still fall below the 2-3% annual improvements required by the Five Year Forward View. Nor might the recent productivity gains be sustainable. They have been achieved mainly by restricting growth in staffing levels but staff numbers have increased in response to the Mid Staffs enquiry (Tingle, 2013), and may do so further if the NHS is to extend the range of services it provides 7-days a week (Street, 2015). Moreover, real terms reductions in capital spending will reduce the capital to labour ratio, with productivity likely to fall as a consequence.

The Five Year Forward View set out an ambitious programme to reform and revitalise the health service. These ambitions are at serious risk of not being realised. This is partly because increased funding for the NHS falls short of what is required to meet growing demand. But plans are also being derailed because attention and resources have been diverted from transforming the health service to bailing-out hospitals whose deficits have been growing cumulatively over the past few years. The upshot is that the NHS is in the midst of a financial crisis and there is unlikely to be any resolution of its fundamental problems in the near future.

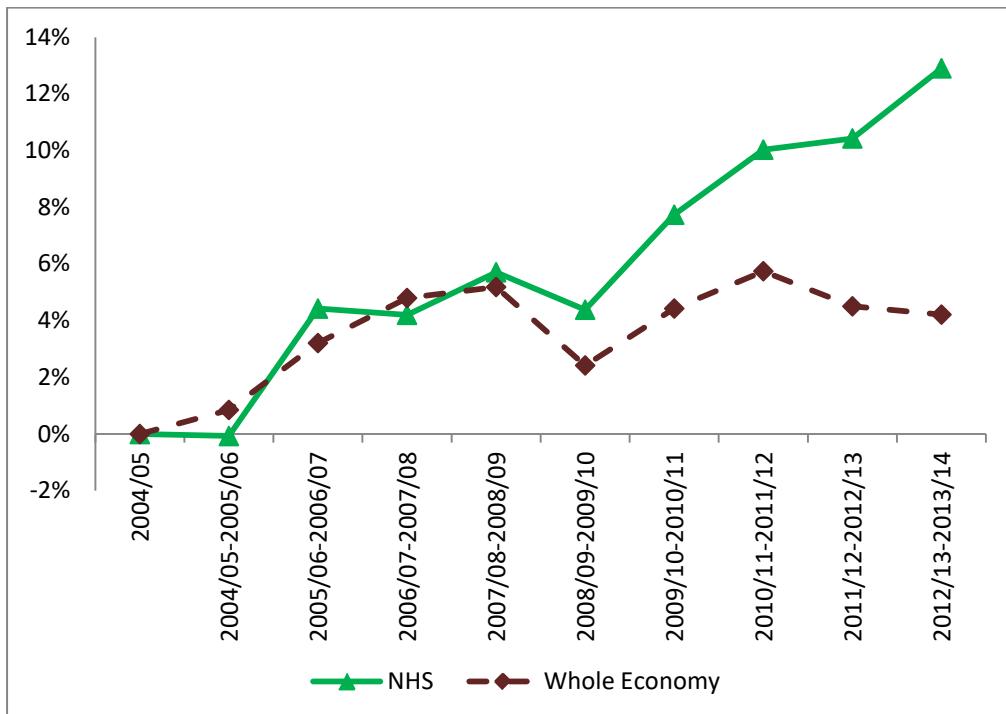
Figure 1: Age standardised deaths per 100,000 within 30 days of a hospital procedure



Source: derived from HSCIC (Health and Social Care Information Centre, 2016)

Figure 2: NHS output, input and productivity growth

Source: (Bojke et al., 2016)

Figure 3: NHS and economy-wide productivity growth

Source: (Street and Grašič, 2016)

References

- APPLEBY, J. 2015a. *NHS spending: squeezed as never before* [Online]. The King's Fund. Available: <http://www.kingsfund.org.uk/blog/2015/10/nhs-spending-squeezed-never>.
- APPLEBY, J. 2015b. Pay in the NHS: who earns what? *BMJ*, 351.
- APPLEBY, J. 2016. *The NHS budget and how it has changed* [Online]. The King's Fund. Available: <http://www.kingsfund.org.uk/projects/nhs-in-a-nutshell/nhs-budget>.
- BARDSLEY, M. 2013. *Just how good have we been at preventing emergency admissions?* [Online]. Nuffield Trust. Available: <http://www.nuffieldtrust.org.uk/blog/just-how-good-have-we-been-preventing-emergency-admissions>.
- BBC NEWS. 2015. *Queen's Speech 2015: EU referendum, tax freeze and right-to-buy* [Online]. Available: <http://www.bbc.co.uk/news/uk-politics-32894214>.
- BOJKE, C., CASTELLI, A., GRAŠIČ, K. & STREET, A. 2016. Productivity growth in the English National Health Service from 1998/1999 to 2013/2014. *Health Economics* DOI: 10.1002/hec.3338.
- BRIMELOW, A. 2016. *NHS trusts may hit £2.3bn deficit, report warns* [Online]. BBC News. Available: <http://www.bbc.co.uk/news/health-35596991>.
- BUCHANAN, M. 2015. *Mental health service budgets 'cut by 8%* [Online]. BBC News. Available: <http://www.bbc.co.uk/news/health-31970871>.
- CAMPBELL, D. 2015. Almost half of seven-day trial surgeries have cut hours after lack of demand. *The Guardian*, 29 September 2015.
- DELOITTE 2014. *Methodology for efficiency factor estimation*, London, Deloitte LLP.
- DEPARTMENT OF HEALTH. 2015. *Research into 'the weekend effect' on patient outcomes and mortality* [Online]. Available: <https://www.gov.uk/government/publications/research-into-the-weekend-effect-on-hospital-mortality/research-into-the-weekend-effect-on-patient-outcomes-and-mortality>.
- DEPARTMENT OF HEALTH. 2016a. *National tariff update and draft prices for 2016/17* [Online]. Department of Health. Available: <https://www.gov.uk/government/publications/201617-national-tariff-payment-system-draft-prices/national-tariff-draft-prices-for-201617>.
- DEPARTMENT OF HEALTH. 2016b. *NHS Finance Manual HCHS Pay and Price Series 2014/15* [Online]. Available:

[http://www.info.doh.gov.uk/doh/finman.nsf/af3d43e36a4c8f8500256722005b77f8/e154082ca1340f1880257d71002c56a9/.](http://www.info.doh.gov.uk/doh/finman.nsf/af3d43e36a4c8f8500256722005b77f8/e154082ca1340f1880257d71002c56a9/)

- DEPARTMENT OF HEALTH AND HM TREASURY. 2015. *Department of Health's settlement at the Spending Review 2015* [Online]. Available: <https://www.gov.uk/government/news/department-of-healths-settlement-at-the-spending-review-2015>.
- EXWORTHY, M. 2015. #ImInWorkJeremy: why doctors are rejecting Jeremy Hunt's seven-day roster [Online]. The Conversation UK. Available: <https://theconversation.com/iminworkjeremy-why-doctors-are-rejecting-jeremy-hunt-s-seven-day-roster-45117>.
- FERNANDEZ, J. L., SNELL, T. & WISTOW, G. 2013. *Changes in the Patterns of Social Care Provision in England: 2005/6 to 2012/13*, London, Personal Social Services Research Unit.
- FREEMANTLE, N., RAY, D., MCNULTY, D., ROSSER, D., BENNETT, S., KEOGH, B. E. & PAGANO, D. 2015. Increased mortality associated with weekend hospital admission: a case for expanded seven day services? *BMJ*, 351.
- GAINSBURY, S. 2016. 'Transformation fund' or deficit mop-up? Time for an honest conversation [Online]. Nuffield Trust. Available: <http://www.nuffieldtrust.org.uk/blog/transformation-fund-or-deficit-mop-time-honest-conversation>.
- HEALTH AND SOCIAL CARE INFORMATION CENTRE. 2015. *Hospital Episode Statistics Admitted Patient Care, England - 2014-15* [Online]. Health & Social Care Information Centre. Available: <http://digital.nhs.uk/catalogue/PUB19124/hosp-epis-stat-admi-summ-rep-2014-15-rep.pdf>.
- HEALTH AND SOCIAL CARE INFORMATION CENTRE. 2016. *Health & Social Care Information Centre indicator portal* [Online]. Health & Social Care Information Centre. Available: <https://indicators.ic.nhs.uk/webview/>
- HOUSE OF COMMONS HEALTH COMMITTEE. 2016. *Impact of the Spending Review on health and social care* [Online]. UK Parliament. Available: <https://www.parliament.uk/business/committees/committees-a-z/commons-select/health-committee/inquiries/parliament-2015/impact-comprehensive-spending-review-health-social-care-15-16/>.
- HOUSE OF COMMONS PUBLIC ACCOUNTS COMMITTEE. 2016. *No coherent attempt to assess headcount implications of 7-day NHS* [Online]. UK Parliament. Available: <http://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/news-parliament-2015/nhs-staff-numbers-report-published-15-16/>.

- HSJ. 2005. *Hospitals sucking in patients a 'real risk'* [Online]. Health Service Journal. Available: <http://www.hsj.co.uk/hospitals-sucking-in-patients-a-real-risk/15730.article>.
- HUNT, J. 2015. *Letter to Dr Sarah Wollaston MP* [Online]. UK Parliament. Available: <http://www.parliament.uk/documents/commons-committees/Health/Correspondence/2015-16/Letter-from-the-Secretary-of-State-for-Health-to-the-Chair-on-seven-day-NHS-hospital-services.pdf>.
- JOHNSON, S. 2016. *The secret finance manager's diary: 'Perversely, having more A&E patients is viewed favourably'* [Online]. The Guardian. Available: <https://www.theguardian.com/society/2016/feb/08/the-secret-finance-managers-diary-perversely-having-more-ae-patients-is-viewed-favourably>.
- LAFOND, S., ARORA, S., CHARLESWORTH, A. & MCKEON, A. 2014. *Into the Red? The starte of the NHS' finances* [Online]. Nuffield Trust. Available: http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/into_the_red.pdf.
- MEACOCK, R., ANSELMI, L., KRISTENSEN, S. R., DORAN, T. & SUTTON, M. 2016. Higher mortality rates amongst emergency patients admitted to hospital at weekends reflect a lower probability of admission. *Journal of Health Services Research & Policy*.
- MEACOCK, R., DORAN, T. & SUTTON, M. 2015. What are the Costs and Benefits of Providing Comprehensive Seven-day Services for Emergency Hospital Admissions? *Health Economics*, 24, 907-912.
- MONITOR. 2015a. *2013/14 Patient level cost collection: review and lessons for the future* [Online]. Monitor. Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/419351/PLICS_review_2013-14.pdf.
- MONITOR. 2015b. *A&E delays: Why did patients wait longer last winter?* [Online]. Monitor. Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/458764/AE_delay_main_report_final.pdf.
- MONITOR & NHS ENGLAND. 2015. *Guide to the Enhanced Tariff Option for 2015/16* [Online]. Monitor and NHS England. Available: <https://www.england.nhs.uk/wp-content/uploads/2015/05/eto-guidance-15-16.pdf>.
- NATIONAL AUDIT OFFICE. 2010. *Progress in improving stroke care* [Online]. National Audit Office. Available: <https://www.nao.org.uk/wp->

- <content/uploads/2010/02/0910291.pdf> [Accessed 3 February 2010].
- NHS ENGLAND 2014. *Five year forward view*, London, NHS England.
- NHS ENGLAND. 2016. *General Practice Forward View* [Online]. NHS England. Available: <https://www.england.nhs.uk/commissioning/primary-care-comm/gp-action-plan/>.
- NUFFIELD TRUST, THE HEALTH FOUNDATION & THE KING'S FUND. 2016. *Written evidence submitted jointly by the Nuffield Trust, the Health Foundation and The King's Fund (CSR0091) to the Spending Review inquiry* [Online]. Available: <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/health-committee/impact-of-the-comprehensive-spending-review-on-health-and-social-care/written/28159.html>.
- OFFICE FOR NATIONAL STATISTICS. 2015. *The relationship between gross value added (GVA) and gross domestic product (GDP)* [Online]. Available: <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/national-accounts/gva/relationship-gva-and-gdp/gross-value-added-and-gross-domestic-product.html>
- PESSOA, J. P. & VAN REENEN, J. 2013. *The UK Productivity and Jobs Puzzle: Does the Answer Lie in Labour Market Flexibility?*, London, Centre for Economic Performance
- PRIME MINISTER'S OFFICE, 10 DOWNING STREET, DEPARTMENT OF HEALTH, NHS ENGLAND & MP, T. R. H. D. C. 2015. *Prime Minister pledges to deliver 7-day GP services by 2020* [Online]. Available: <https://www.gov.uk/government/news/prime-minister-pledges-to-deliver-7-day-gp-services-by-2020>.
- SIDDIQUE, H. 2015. *NHS hospital waiting time figures worst in seven years* [Online]. The Guardian. Available: <http://www.theguardian.com/society/2015/apr/09/nhs-hospital-waiting-time-figures>.
- SMITH, P., MCKEOWN, A., BLUNT, I. & EDWARDS, N. 2014. *NHS hospitals under pressure: trends in acute activity up to 2022* [Online]. Nuffield Trust. Available: http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/ft_hospitals_analysis.pdf.
- STREET, A. 2015. *Why all the fuss about a seven-day NHS?* [Online]. The Conversation UK. Available: <https://theconversation.com/why-all-the-fuss-about-a-seven-day-nhs-50020>.
- STREET, A. 2016. *Soon nurses will pay for their education – they should demand higher wages* [Online]. The Conversation UK.

- Available: <https://theconversation.com/soon-nurses-will-pay-for-their-education-they-should-demand-higher-wages-63011>.
- STREET, A. & GRAŠIĆ, K. 2016. *NHS outpaces the UK economy in productivity gains* [Online]. The Conversation UK. Available: <https://theconversation.com/nhs-outpaces-the-uk-economy-in-productivity-gains-53899>.
- STREET, A. & MAYNARD, A. 2007. Activity based financing in England: the need for continual refinement of payment by results. *Health Economics, Policy and Law*, 2, 419-427.
- THE CONSERVATIVE PARTY. 2015. *The Conservative Manifesto 2015* [Online]. Available: <https://www.conervatives.com/manifesto> [Accessed 18 December 2015].
- THE HEALTH FOUNDATION. 2016. *Supplementary written evidence submitted by The Health Foundation (CSR0097) to the Spending Review Inquiry* [Online]. Available: <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/health-committee/impact-of-the-comprehensive-spending-review-on-health-and-social-care/written/29950.html>.
- TINGLE, J. 2013. *Creating new criminal offences won't help NHS patients* [Online]. The Conversation UK. Available: <https://theconversation.com/creating-new-criminal-offences-wont-help-nhs-patients-16825>.
- TURNER, J., O'CATHAIN, A., KNOWLES, E. & NICHOLL, J. 2013. Impact of the urgent care telephone service NHS 111 pilot sites: a controlled before and after study. *BMJ Open*, 3.
- UNDERWOOD, G. 2015. 7-day GP services could cost government "billions". *PharmaTimes online*, 11th September 2015.
- WEST, D. 2015. *Increase expected in national tariff rate* [Online]. Health Service Journal. Available: <http://www.hsj.co.uk/topics/finance-and-efficiency/exclusive-increase-expected-in-national-tariff-rate/7000882.article?blocktitle=PbR-news&contentID=1549>
- WILSON, P. 2015. *Enhancing access in primary care settings*, University of York, York, Centre for Reviews and Dissemination.