The NHS productivity challenge
Experience from the front line

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May 2014
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Key messages

Funding and the national productivity agenda

- The unprecedented slowdown in the growth of NHS funding in England since 2010 has meant that the NHS has had to pursue the most ambitious programme of productivity improvement since its foundation in order to close the gap between need and available funding.

- While not always easy to verify, a combination of pay restraint, cuts in central budgets, and the abolition of some tiers of management have delivered significant savings over the two financial years since 2010/11.

- The strongest pressure has been applied and felt at the front line of the NHS, by hospitals and other providers – for example, through real cuts in tariffs to squeeze more value from every health care pound.

- While the original productivity programme (Quality, Innovation, Productivity and Prevention, or QIPP) was designed to cover the period of the 2010 Spending Round, current planning assumptions are based on a continued squeeze up to 2021/2. On this basis, NHS spending as a proportion of gross domestic product (GDP) will fall from its peak of 8 per cent in 2009 to just over 6 per cent in 2021 – equivalent to spending levels relative to GDP in 2003.

- There is growing evidence of financial pressures building in the NHS this year; 2015/16 has been cited as a possible financial ‘cliff edge’ as providers plan to cut emergency and other elective work as part of the opportunity cost of diverting a further £1.8 billion of NHS allocations to consolidate the £3.8 billion Better Care Fund.

The productivity experience at the front line

- The experiences of six trusts – which vary in size, the type of services they provide, and their foundation trust status – as they grapple with their own
productivity challenges suggest some real gains in benefits for patients and decreased costs for the NHS.

- The record of the six trusts involved in this qualitative study broadly reflects the national picture; savings have been made (and recycled), and targets set by providers to balance expenditure and income have largely been met over the years since 2010/11 (and before).

- Closing the ‘income–expenditure gap’ at local level also requires significant efforts to increase income (rather than just reduce costs).

- All trusts acknowledge that the current productivity challenge is uniquely different (and difficult) because funding restraint has been more severe and sustained than in the past, and comes at a time of major reorganisation of the NHS.

- It is no longer deemed acceptable for trusts to respond to funding shortfalls by reducing (even if temporarily) service quality, such as by letting waiting times grow; this adds to the pressure they are under.

- In addition, there is a growing conflict between the need to deliver services with smaller budgets and yet respond to the quality recommendations from the Francis ([Mid Staffordshire NHS Foundation Trust Public Inquiry 2013](#)), Keogh ([NHS England 2013b](#)) and Berwick ([National Advisory Group on the Safety of Patients in England 2013](#)) reports.

- Without exception, all trusts were by degrees pessimistic about their prospects for being able to continue to make ends meet and improve quality over the next few years.

- Current productivity policy levers – such as freezing pay and bearing down on the tariff – were not seen as sustainable, even over the next few years. With ‘salami slicing’ of budgets, and having all but exhausted the more traditional internal cost-reduction efforts, local health economies needed to think more collectively (and with guidance) about how to provide services within budget.

- That this inevitably means shake-ups in where and how services are provided is something that needs to be acknowledged by politicians and the public.
What next?

- On its current trajectory, the health and social care system in England is rapidly heading towards a major crisis. While it is true that there is also an increasing consensus around what makes a high-quality, sustainable health and care system, three inputs are needed to achieve this service and unlock the greater efficiency and improved outcomes it can offer:
  - more time
  - more money for transformational change and short-term support
  - measures to support change and value for money.

Time

- Some of the changes needed are complex and involve multiple organisations and agencies. The service will therefore require sufficient time to be able to engage and plan. Setting a timetable for local areas to develop their plans to be ready for implementation after the general election would be challenging, but is vastly more realistic than expecting implementation to effectively be completed by the general election, which the current planning timetable demands.

- A crucial aspect of any change is the need for political consent, with politicians engaging in a debate about the future of the NHS with the public before, not after, the general election.

Money

- The NHS and social care need more money to make the transition to a more sustainable footing. This should be an explicit and upfront investment to enable services to invest in new models in primary and community settings and to help the hospital sector make the concomitant transition.

- In the interim, before savings can be unlocked, some form of transparent funding will be needed to support organisations in difficulty; this must be separate from transformational funding and must be carefully designed to ensure that it is not an alternative to making transformational change.

- In the longer term, the approach to a more sustained and sustainable financial settlement for the NHS needs to revisit the thinking and evidence that supported Sir Derek Wanless’s 2002 projections for health care spending.
Supporting change and value for money

- There is a need to provide a more co-ordinated national focus to collate successful productivity approaches and innovations and diffuse them to NHS organisations. This would include helping trusts to develop their own capabilities in this area.

- More sophisticated approaches need to be developed towards incentives to encourage improvements in productivity – such as tailoring the Payment by Results efficiency factor to individual trusts or services to better reflect variations in productive capacity.

- As The King’s Fund has highlighted in previous work on London’s health economy, there is a need to find ways and means by which health economy or region-wide service changes can be planned and progressed. This requires collective action from national organisations – Monitor, the Trust Development Authority and NHS England – but also from local groups such as academic health sciences networks.

- While there is some evidence of greater clinical engagement in improving efficiency, there needs to be a renewed effort to encourage clinicians to identify and lead change. This would provide multiple benefits, from reducing unwarranted variations within the health service to identifying and implementing greater innovation in clinical delivery and, of course, ensuring that improving patient outcomes remains at the heart of the search for greater efficiency.
A quarter of a century ago, The King’s Fund published a short report called Efficiency in the NHS: a study of cost improvement programmes (King’s Fund Institute 1989). It examined the cost improvement programmes (CIPs) of three district health authorities, raising questions about how CIPs were valued, how recurrent and non-recurrent savings were treated and, importantly, how CIPs were monitored and audited. At the time, the White Paper Working for patients had just been published, heralding (among other things) the introduction of the internal market into the NHS. The King’s Fund report had suggested it might also mean that ‘… CIPs will no longer occupy such a central role in health service finance’ as ‘… responsibility for cost effectiveness will be devolved to local hospital managers and their success – or failure – will be reflected in the service contracts they attract’. In other words, in the new internal market (where prices were negotiated), the successful provider organisations were likely to be those who were also successful at keeping costs down.

Times have changed, but in many ways the economic and organisational landscape has recognisable similarities: the purchaser–provider separation remains; the NHS is under financial pressure; and the direct pressure – then as now – is felt most keenly by providers. Keeping costs down remains essential for financial survival irrespective of how prices are fixed in the system. The difference now is that there is a central drive to reduce tariffs in real terms as part of a strategy to incentivise providers to reduce costs.

In fact, the pressure on NHS funding overall is much tougher now than it was in the late 1980s and 1990s. In 2009, The King’s Fund published a joint analysis with the Institute for Fiscal Studies (IFS) of the funding prospects for the NHS to 2017 (Appleby et al 2009). Based on an extended analysis of the 2002 study of future health care spending needs by Sir Derek Wanless (Wanless 2002), we concluded that with no real increases in funding, the NHS would be faced with an unprecedented need to close the financial gap through more efficient and effective use of its constrained budget. We estimated that meeting the growing demands and expectations on the service identified by the Wanless review would require productivity improvements of up to 6 per cent per year given one scenario of no real funding growth.
Our estimate was in line with the Department of Health’s own analysis in 2009 of the likely financial situation facing the NHS given the impact of the global financial crisis, the ensuing recession, and government reaction in terms of policy towards public spending.

In a follow-up to our 2009 analysis, in 2010 we published a further review, *Improving NHS productivity: more with the same not more of the same* (Appleby et al 2010). This reconfirmed the need for substantial productivity improvements and set out possible national and local strategies and actions for closing the financial gap. By deconstructing the gap based on Wanless’s original funding scenarios, the review was also able to broadly quantify the drivers of increased spending – for example, assumptions Wanless made about future increases in pay, the extra costs of capital to improve the estate, and the costs of significant reductions in waiting times.

Understanding what the ‘gap’ consisted of in this way suggested the possibility of different tactics to deal with the productivity challenge – for example, trading off some further improvements in waiting times and capital spending against improvements in other areas identified by Wanless, or similar trade-offs against assumed real pay rises.

While there were policy levers that could be and were pulled at national level – such as the decision by the new coalition government in its June 2010 budget (HM Treasury 2010a) to freeze public sector pay for two years (reducing costs and hence the scale of the productivity challenge facing the NHS) – there remained a significant task for the NHS locally.

To gain a better insight into the way local NHS organisations have been grappling with their productivity task (and particularly hospitals, which are at the sharp end of political decisions over funding), we carried out in-depth interviews with and documentary analysis of six providers in England. These included a mix of foundation and non-foundation trusts, and acute, community and mental health organisations of varying sizes, with different financial histories.

In this report, we describe: local NHS providers’ understanding of the national financial environment; their views about how the current ‘efficiency drive’ differs from previous initiatives; how they set their productivity and cost improvement
targets; how hospitals have managed to make ends meet; and how they view the next few years of continued financial restraint.

To put the local findings and circumstances into context, the next section looks at the national funding and productivity picture. It sets out recent and future planned spending for the NHS in England, describes historic trends in productivity, gives a national view of the future productivity challenge, and considers the estimated impact of national strategies such as the NHS staff pay freeze.
NHS funding

Over the 13 years from 1997/8 to 2009/10, NHS spending in England more than doubled in real terms (see Figure 1). Across the United Kingdom, this meant that spending on the NHS as a percentage of gross domestic product (GDP) rose from around 5.2 per cent to just over 8 per cent – the highest proportion since 1948.

However, the 2010 and 2013 Spending Rounds (HM Treasury 2010b, 2013b) set out funding plans amounting to a marginal 0.1 per cent real increase per year to 2015/16. In the event, lower than anticipated inflation as a result of prolonged stagnation of the economy has meant that the average real increase per year over this period is likely to amount to 0.5 per cent, with real reductions in 2010/11.

While it will be for a new incoming government in 2015 to make decisions about NHS funding beyond 2015/16, the current planning assumption by NHS England (NHS England 2013a) is a zero real increase in funding for the five years to 2020/21. If this view is correct (and reflected in other parts of the UK), the increase in NHS spending as a proportion of GDP from 1997/8 to 2009/10 will be substantially eroded by 2020/21 by nearly 2 percentage points, sinking back from just under 8 per cent to just over 6 per cent (see Figure 2).

**Figure 2** Actual and projected UK NHS spending as a percentage of GDP

![Graph showing actual and projected UK NHS spending as a percentage of GDP from 1999 to 2021.]

*Sources: Office for National Statistics 2014; Office for Budget Responsibility 2013b; HM Treasury 2013a*

*NB: UK NHS spend projections assume that growth from 2012 equals inflation (GDP deflator) and that GDP grows at the central Office for Budget Responsibility (OBR) projection in its 2013 Fiscal Sustainability Report (OBR 2013b).*
Although the future is uncertain and a combination of a growing economy and public pressure may suggest a more favourable future trend in funding, the NHS is unlikely to benefit from a return to the sort of annual increases witnessed in the first decade of the 21st century. Moreover, decisions already taken about parts of the NHS total allocation in England imply a particularly difficult year in 2015/16.

The Better Care Fund (nearly £2 billion as part of the pooled integration and transformation fund. Whichever way the Better Care Fund is disbursed, and irrespective of the joint nature of any decisions made about its use, it will imply an opportunity cost for the NHS (see Figure 3).

Figure 3 English NHS funding (including budget transfers, etc), 2010/11 prices

Whether the NHS in England will have to face a decade of near-zero real growth in funding remains to be seen. However, the recent past is known and the near future
is fairly certain, and both have defined and in part quantified the overarching policy goal for the NHS in the years ahead – the need to generate more volume and value per pound spent.

The productivity challenge

While funding has remained (and looks set to remain) constrained, demand has increased and is forecast to grow. Estimates of the impact of the various drivers of health spending – from new medical technology to changes in population and national income – vary from analysis to analysis and from year to year (cf Newhouse 1992; Cutler 1995; Oliveira et al 2006; Congressional Budget Office 2007). Such estimates are naturally relatively rough and ready. However, depending on assumptions made and the modelling approach used, there is some consensus that, all else being equal, real growth of between 3 per cent and 6 per cent a year would allow the NHS to meet increased demand for its services – both in terms of volume and quality.

On this basis, and taking account of the actual and planned real changes in funding over this period, Figure 4 shows the change in NHS productivity required to close the funding gap. This remains the so-called £20 billion ‘Nicholson challenge’ – or, more formally, the Quality, Innovation, Productivity and Prevention (QIPP) initiative (the first phase of QIPP is shown in green in the figure).

However, Nicholson has recently extended his original assessment:

Our analysis shows that if we continue with the current model of care and expected funding levels, we could have a funding gap of £30bn between 2013/14 and 2020/21, which will continue to grow and grow quickly if action isn’t taken. This is on top of the £20bn of efficiency savings already being met. This gap cannot be solved from the public purse but by freeing up NHS services and staff from old style practices and buildings.

Sir David Nicholson (NHS England 2013d)

Figure 4 therefore also provides an indication of the productivity implications of NHS England’s new planning assumption of zero real funding to 2020/21 and increased outputs of between 4 per cent and 5 per cent a year (the second phase of QIPP, represented in the figure by the orange line).
For the first phase of QIPP, the assumptions about output growth and the change in real funding suggest a need for productivity improvements across the whole NHS budget of around 3 per cent a year on average. This is smaller than anticipated, given a larger real funding rise than expected as a result of lower-than-forecast inflation over this period. For the second phase of QIPP, the average annual increase in productivity is around 4.7 per cent. Historically, productivity across the UK NHS, as measured by the Office for National Statistics (ONS), has averaged around 0.4 per cent a year between 1995 and 2010.
National strategy

Having identified the scale of the gap between the likely settlement for the NHS – essentially minimal real increases in funding – and the value of additional demand and cost pressures, national strategy focused on a combination of policy levers that would reduce costs and encourage ‘transformational change’ in the way services were delivered. This involved not just maintaining the volume and quality of health care but meeting growing needs and public and patient expectations about the quality of services. Where once the NHS would have responded to tightening budgets (in part at least) by restricting supply, letting waiting lists grow, and temporarily closing wards towards the end of the financial year, such a crude response to matching demand with funding was no longer considered an acceptable approach.

In 2010, Sir David Nicholson, in his evidence to the Public Accounts Committee, sketched out how the NHS would tackle the unprecedented productivity task the Department of Health had identified (Public Accounts Committee 2010). In broad terms, Nicholson envisaged that around 40 per cent of the four-year £20 billion funding gap would be generated at local level through ‘traditional efficiency’ gains and incentivised through the Payment by Results (PbR) system by building tough efficiency factors into the tariff. In essence, this represented a ‘shoot first, ask questions later’ approach whereby hospitals would face a squeeze on prices but be performance managed to maintain quality.

Nicholson envisaged that a further 40 per cent would be found from ‘central initiatives’ – cutting some central budgets, reducing management staff (centrally and at intermediate tiers of the NHS), but significantly, through restricting NHS staff pay as part of the Chancellor’s public sector pay policy announced in the 2010 Budget (HM Treasury 2010a). The source of the remaining 20 per cent remained somewhat vague, but included new ways of providing and delivering services – for example, shifting care out of hospitals where possible, and centralising services where necessary. However, as Nicholson noted at a hearing of the Public Accounts Committee in 2010, this part of the productivity strategy was the least certain (see box overleaf).
Sir David Nicholson: evidence to the Public Accounts Committee, 2010

“Well we have never done it before – we have never done anything of this scale before – so it is new territory for us. We expect levels of efficiency gain that we have never seen, against a background of an NHS that has grown at 4.5% every year since 1948.

‘40% of those savings come from a variety of the pay freeze that we have over the next couple of years, the significant reductions in the amount of money we hold nationally – the central budgets – and the delivery of the management cost savings, which we are driving nationally through the work I talked about earlier around the running cost envelope. For 40% of them, we have a national handle on them and we are pretty confident we can deliver those.

‘The next 40% of the savings are essentially the delivery of efficiency gains in the provider arm. The way we deliver that is we set the tariff and we have set the tariff with a 4% efficiency gain for next year. We have done that and we have created a whole set of help and support for people to enable them to deliver it, whether that be the Long Term Condition Programme or whether it be the work we are doing nationally on the Productive Ward. So there is a whole series of help to people to make it happen.

‘Then 20% of the savings are around service change. It was the kind of thing that I talked about last week around shifting services from hospitals to community. That is the level. In degrees of confidence in terms of our record in this, I think the first 40% we are confident about; we can deliver it. The second 40% we are medium confident about and then the final 20% I think is going to be the most difficult to do. So that is the overall approach.’

Source: Public Accounts Committee 2010

As Monitor (2013a) have pointed out, the implication of this strategy is that 60 per cent of the gains in productivity (around £3 billion a year for the four years of the first phase of QIPP to 2014/15) were expected to come from the secondary care sector through reductions in the PbR tariff and other service changes.

What has been achieved and how?

Given this strategy, what has been achieved so far? In evidence to the Health Select Committee in 2012, the Department of Health outlined the main sources of productivity gains for 2011/12 and estimates for 2012/13 (Health Select Committee 2013). As Figure 5 shows, the total value of QIPP savings were estimated at around
£5.8 billion in 2011/12 and £5 billion in 2012/13 – equivalent to around 5.5 per cent and 4.6 per cent of the total NHS budget respectively.

**Figure 5 QIPP savings by method: 2011/12 and 2012/13**

- **2011/12**
  - £5.82 bn
  - Tariff efficiency: £2,400m
  - Primary care, dental and ophthalmic costs: £255m
  - Prescribing: £417m
  - Other savings: £501m
  - Pay freeze: £850m
  - Administration costs: £717m
  - Demand management: £675m

- **2012/13 (est)**
  - £5.04 bn
  - Tariff efficiency: £2,400m
  - Primary care, dental and ophthalmic costs: £194m
  - Prescribing: £472m
  - Other savings: £757m
  - Pay freeze: £850m
  - Administration costs: £163m
  - Demand management: £200m

*Source: Health Select Committee 2013*
The biggest source of saving is ‘tariff efficiency’ – £4.8 billion over the two financial years – which has been achieved by reducing PbR prices to provide hospitals with an incentive to cut costs. Savings as a result of the pay freeze were estimated at around £1.7 billion. Other major sources include, ‘prescribing’ (£0.9 billion), ‘administrative costs’ (£0.9 billion), and ‘demand management’ (£0.9 billion) and ‘other’ (£1.26 billion).

Below, we examine two areas of savings in more detail: the impact of the PbR tariff efficiency factor and savings arising from the pay freeze.

Payment by Results tariff reductions

From 2005/6 onwards, the PbR tariff has been adjusted upwards to allow for inflation (higher pay and prices plus other factors such as the cost of implementing guidance from the National Institute for Health and Care Excellence (NICE)), but
also downwards, through an efficiency factor. As Figure 6 shows, while the net real change in prices increased each year from 2003/4 to 2009/10, in 2010/11 prices remained constant in real terms as the efficiency factor matched the inflation uplift. However, an increasingly tough efficiency factor from 2011/12 onwards (coupled with reduced growth in the inflation uplift) has meant that hospitals have faced a real cut in PbR prices of 6.3 per cent between 2010/11 and 2014/15.

Quantifying the impact of the tariff efficiency factor is difficult; but applying the efficiency factor each year to the value of services provided under the PbR system and assuming that the same level of efficiency also applies to non-PbR income, Figure 7 shows the notional savings each year from 2005/6 to 2014/15.
This analysis suggests that from 2011/12 onwards, the tariff efficiency factor has generated just over £2 billion of savings each year – around 40 per cent of the £5 billion identified as part of the Nicholson challenge and in line with the strategy he outlined to the Public Accounts Committee back in 2010. However, such estimates remain speculative in this top-down analysis as it makes the major assumption that hospitals responded appropriately to the incentive of the price cut. As we will see from our review of individual trusts in [section 5](#), there are difficulties in identifying the exact impact – on services and patients – of this price reduction strategy at local level.

**Staff pay freeze**

The impact of the government’s public sector pay freeze as it applies to NHS staff is also difficult to quantify. As Figure 8 shows, pay inflation in the NHS over the four years from 2011/12 to 2014/15 is at the lowest annual level for a generation, averaging just over 1 per cent.

![Figure 8 Pay inflation, Hospital and Community Health Services staff, 1975/6 to 2014/15](https://example.com/image)

*Figure 8 Pay inflation, Hospital and Community Health Services staff, 1975/6 to 2014/15*

Sources: Department of Health 2014; Monitor/NHS England 2013; Monitor 2013b; NB: 2011/12 to 2014/15, authors’ estimates
Together with reductions in the number of staff, the historically low increases in NHS staff pay have contributed to a small cash increase and a real reduction in the overall NHS pay bill in England, of nearly £1.5 billion over the two years to 2012/13 (see Figure 9).

**Figure 9** Annual percentage changes in full-time equivalent (FTE) Hospital and Community Health Services staff, 2006/7 to 2012/13

![Graph showing annual percentage changes in FTE hospital and community health services staff, 2006/7 to 2012/13.]

Source: Health and Social Care Information Centre (HSCIC) 2014

**Figure 10** shows what would have happened to the NHS pay bill if pay had actually grown at 2 per cent a year in 2011/12 and again in 2012/13, as apparently assumed by the Department of Health (Public Accounts Committee 2013). On this assumption, the cost saving from the pay freeze would have amounted to around £0.6 billion in 2011/12 and around £0.4 billion in 2012/13. This represents around 10 per cent of the total value of the productivity gain identified as part of the QIPP initiative over these two years. The reason these savings are lower than assumed by the Department of Health is that, overall, NHS staff pay was not completely frozen; instead, largely due to pay drift, the NHS pay bill increased in 2011/12 and again in 2012/13 – by 1.4 per cent and 0.9 per cent respectively (Monitor/NHS England 2013; Monitor 2013b).
Overall, the net real change in the NHS Hospital and Community Health Services pay bill over the two years to 2012/13 – of around 3.3 per cent (£1.5 billion) – has been a result of reduced pay growth (equivalent to around £0.8 billion) and a reduction in the number of NHS staff of more than 21,000 (with a reduction of more than 19,000 in 2011/12, equivalent to around £0.7 billion).

![Figure 10 NHS (Hospital and Community Health Services) pay bill, 2006/7 to 2012/13: current prices](image)

The reduction in overall staff numbers hides the fact that numbers in some staff groups have increased over the two years to 2012/13 (ambulance and scientific and therapeutic staff, and in particular, doctors). Although nurse staff numbers have also decreased, the bulk of reductions were among clinical and infrastructure support staff – broadly, administrative and estates staff and managers (see Figure 11). However, whether the reduction in some types of jobs and the increase in others represents a productivity gain remains a moot point.
Conclusion

The dramatic slowdown in funding growth for the NHS since 2010/11 (and prospects for near-zero real growth for some years to come) has re-emphasised the economic and indeed ethical imperative for a public service that is funded by taxation to strive to ensure the greatest value for every pound spent. While all those we spoke to as part of this work endorsed the national policy response to the funding situation – for the NHS to seek to close the funding gap through improved productivity – all acknowledged the unprecedented scale of this task.

Although decisions taken nationally – over pay and savings from nationally administered budgets, for example – have somewhat reduced the scale of the task, there remains a great deal of uncertainty about the scale of the impact of different
initiatives, and indeed the overall impact on productivity of measures such as the pay freeze. Moreover, as the National Audit Office (NAO) has noted, there is limited assurance that all reported savings have actually been made (NAO 2010a). However, there is little doubt that a significant portion of the productivity challenge falls to providers at the sharp end of the service – mainly through the imposed real tariff cuts, but also through the actions of commissioners seeking new and more cost-effective delivery of the care they purchase.

Before describing the recent experiences of our six case study NHS providers as they get to grips with their local productivity challenges, the next section revisits (and where possible updates) some of the productivity ideas and opportunities outlined in The King’s Fund report, *Improving NHS productivity: more with the same not more of the same* (Appleby et al 2010).
How providers can maximise productivity gains

While, as the previous section has shown, actions at national level have contributed to the productivity challenge – either by reducing costs through actions on staff pay, for example, or reductions in nationally administered budgets to allow expansions in frontline commissioning spending – the bulk of the task in achieving productivity gains remains firmly with those actually providing services. Reductions in tariff prices as a result of applying an efficiency factor to annual tariff upratings do not in themselves save money or improve productivity, but are designed to act as an incentive for providers to find more efficient and less costly ways of providing care.

How frontline services respond – not only to the tariff incentive but also to pressures from commissioners in pursuit of more productive and efficient use of their purchasing budgets – has been, and remains, the key challenge.

In this section, we summarise recommendations and ideas on improving productivity published by The King’s Fund in 2010 (Appleby et al 2010) and also draw on similar work published more recently by Monitor, NHS England and others (cf Monitor 2012, 2013a; NHS England 2014a, 2014c; McKinsey and Company 2013).

‘More with the same not more of the same’

The management consultant, educator and author Peter Drucker defined the difference between management and leadership in terms of the former being about ‘doing things right’ and the latter about ‘doing the right things’ (Drucker 2001). A similar distinction is made between, for example, technical and allocative efficiency. Making the right choices about how to allocate or spend a limited budget on services and activities that produce the best possible set of outcomes (allocative
efficiency), at the lowest cost (technical efficiency), requires a combination of leadership and managerial skills (and not just from managers).

In The King’s Fund’s 2010 report, *Improving NHS productivity: more with the same not more of the same* (Appleby et al 2010), we reviewed opportunities for the NHS to improve its technical and allocative efficiency – ‘doing things right’ and ‘doing the right things’ – in key areas such as infrastructure (the estate, support services, etc), clinical practice (including prescribing and hospital services), and commissioning (the integration of care and the appropriate location of care). There is, of course, no strict demarcation between these areas (see Figure 12); actions by commissioners can, and usually do also affect providers or overlap with other productivity opportunities.

**Figure 12 Productivity areas**
Infrastructure: back office, support services and procurement

The NHS estate is very large and despite reductions in, for example, the footprint of hospitals and unused land, there remain opportunities to release land for other socially beneficial uses (such as housing) and to reduce the costs of running the estate.

For example, as part of a cross-government exercise in 2012 to identify potential land for housing, NHS organisations identified around 817 hectares (more than 3 square miles) of unused land. More recently, it has also been estimated that the NHS in England could make savings of up to £2.9 billion if all organisations adopted best practice in facilities management and procurement, and reduced still further the scale of unused space (EC Harris 2013).

On support services such as finance, payroll and e-procurement, the NHS Shared Business Service aims to achieve savings of around £215 million by 2015 (NHS Shared Business Service website).

Opportunities for further improvements in procurement are highlighted in a recent joint report by the National Audit Office (NAO) and Audit Commission (NAO and Audit Commission 2010), which identified savings of £500 million through better co-ordinated procurement of goods and services across the NHS. More recently, the Department of Health and NHS England have set out a revamped procurement strategy that aims to increase savings to around £1.5 billion by 2015/16 out of the £20 billion a year spending on goods and services in the English NHS (accounting for around 30 per cent of a typical hospital’s operating costs) (Department of Health and NHS England 2013).

Workforce

NHS spending on its staff accounts for just under half of total NHS spending and approximately 70 per cent of a typical hospital's total costs. As noted in the previous section, while the NHS staff pay bill has been rising by around 5 per cent in cash terms each year from 2006/7 to 2010/11, a combination of pay restraint and reductions in staff numbers have meant that the total pay bill only grew by 0.7 per cent between 2010/11 and 2012/13 – equivalent to a real reduction of more than 3 per cent.
Of course, reducing pay costs is not in itself a sign of improving productivity (although it will contribute to closing any providers’ income–expenditure gaps or, more generally, helping to meet Quality, Innovation, Productivity and Prevention (QIPP) targets). While better value for money and improved productivity were important objectives for changes in consultant and other NHS staff contracts over the past decade, evidence that the revised consultants’ contract (for example) achieved gains in consultant productivity is scarce. Bloor et al (2013) analysed consultant activity between 1999 and 2009 and concluded that ‘Claims made that the consultant contract, which resulted in substantial pay increases for hospital specialists in England, would result in increased clinical activity have not materialised. Indeed, in half the specialties studied, a reasonable interpretation of the statistics is that productivity has declined.’

In terms of other NHS staff, as the NAO reported in 2010, the Department of Health expected that among other things, Agenda for Change would result in a year-on-year rise in productivity of between 1.1 per cent and 1.5 per cent – equivalent to around £1.3 billion over the first five years of the new pay deal. However, as the NAO also noted, there has been no specific monitoring of this anticipated impact of Agenda for Change. Nevertheless, the NAO reported that around half of trusts had used Agenda for Change to create new ways of working and novel roles for staff – for example, ‘assistant practitioner’ roles where less qualified staff took on work from nurses (or other health care professionals) (NAO 2010b).

More recently, in its evidence to the NHS Pay Review Body’s report for 2014, the Department of Health suggested that while workforce productivity gains had comprised around 12 per cent of total savings in 2011/12 and 2012/13, there was a need to improve workforce productivity still further, with an expectation that this proportion would more than double in 2013/14 and 2014/15. The Department noted that ‘to restrict pay cost growth to 1.5 per cent in 2014/15, workforce productivity must increase faster than at any time over the last three Spending Review periods’ (Department of Health 2013b).

Clinical practice, commissioning and care pathways

The potential to improve quality and achieve savings by ‘doing things right’ or by ‘doing the right things’ through reducing variations in care and improving the delivery of care is evident from the work of NHS Improving Quality, the National
Institute for Health and Care Excellence (NICE), and NHS England’s ‘Any town’ initiative (NHS England 2014a), among others.

As Figure 13 shows, for example, based on raising performance to the top quartile, the value of savings and quality improvements could reach nearly £6 billion across the NHS.

Figure 13 Better care, better value indicators for providers and commissioners, 2012/13

NHS England’s ‘Any town’ health system initiative has also collated examples of changes in the way services are delivered and the type of care and interventions that would improve quality and release resources for other uses (see Table 1).
### Table 1 ‘Any town’ health system productivity ideas

<table>
<thead>
<tr>
<th>Description</th>
<th>Examples of improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypertension</strong></td>
<td>Ambulatory screening for hypertension</td>
</tr>
<tr>
<td></td>
<td>Reduced health care use; better health</td>
</tr>
<tr>
<td><strong>Prescribing and secondary care referrals</strong></td>
<td>Reducing unwarranted variations in referrals to primary care</td>
</tr>
<tr>
<td></td>
<td>14% reduction in hospital referrals</td>
</tr>
<tr>
<td><strong>Self-management</strong></td>
<td>Patient-led support for sufferers of chronic diseases</td>
</tr>
<tr>
<td></td>
<td>Improved health outcomes; financial savings</td>
</tr>
<tr>
<td><strong>Telehealth/telecare</strong></td>
<td>Broad range of telehealth/telecare interventions for older frail people</td>
</tr>
<tr>
<td></td>
<td>69% reduction in A&amp;E attendances; reduced length of inpatient stay for nursing home patients</td>
</tr>
<tr>
<td><strong>Case management and co-ordinated care</strong></td>
<td>Integrated Care Pilots using case management</td>
</tr>
<tr>
<td></td>
<td>Reduced secondary care use</td>
</tr>
<tr>
<td><strong>Mental health</strong></td>
<td>Mental health services for people being treated for physical health problems: rapid assessment interface and discharge (RAID)</td>
</tr>
<tr>
<td></td>
<td>Increased discharge to patients’ own homes; 74% lower readmission rate for RAID patients</td>
</tr>
<tr>
<td><strong>Dementia</strong></td>
<td>Keeping people with dementia independent through integrated services</td>
</tr>
<tr>
<td></td>
<td>Net savings of £250k per 100,000 population; improved patient/carer experience</td>
</tr>
<tr>
<td><strong>Palliative care</strong></td>
<td>Consultant-led palliative care designed to reduce hospital deaths</td>
</tr>
<tr>
<td></td>
<td>Reduced hospital admissions; 99% of patients allowed to die at home</td>
</tr>
<tr>
<td><strong>Cancer screening</strong></td>
<td>Increase public awareness of cancer to encourage earlier presentation</td>
</tr>
<tr>
<td></td>
<td>Better health outcomes</td>
</tr>
<tr>
<td><strong>GP consultation</strong></td>
<td>Telephone consultations with a GP</td>
</tr>
<tr>
<td></td>
<td>Reduced A&amp;E attendances; reduced work pressure on GPs</td>
</tr>
<tr>
<td><strong>Medicines optimisation</strong></td>
<td>Specific support to people having trouble managing their medicines</td>
</tr>
<tr>
<td></td>
<td>Increased medicines adherence</td>
</tr>
<tr>
<td><strong>Medicines use</strong></td>
<td>Tool to help prescribing leads identify at-risk patients</td>
</tr>
<tr>
<td></td>
<td>Possible £1 bn saving avoiding emergency admissions (nationally, per annum)</td>
</tr>
<tr>
<td><strong>Acute visiting service</strong></td>
<td>Rapid access doctor for acute care at home</td>
</tr>
<tr>
<td></td>
<td>Reduced hospital emergency admissions; improved patient satisfaction</td>
</tr>
<tr>
<td><strong>Urgent care</strong></td>
<td>Acute GPs triaging patients at A&amp;E</td>
</tr>
<tr>
<td></td>
<td>Reduced medical emergency admissions</td>
</tr>
<tr>
<td><strong>Asthma for children and young people</strong></td>
<td>24-hour home nursing for those having trouble managing asthma</td>
</tr>
<tr>
<td></td>
<td>Reduced health care costs; better patient experience</td>
</tr>
</tbody>
</table>

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The NHS productivity challenge
‘Doing the right thing’ also encompasses ‘stop doing the wrong thing’; there are quality gains and savings that could be made if all NICE’s ‘do not do’ recommendations were followed. For example, a NICE database lists 949 interventions and activities abstracted from its cancer service guidance, clinical guidelines, interventional procedures and technology appraisals guidance for which evidence suggests these interventions or activities should not be carried out due to poor or absent effectiveness (National Institute for Health and Care Excellence 2014b).

<table>
<thead>
<tr>
<th>Table 1 ‘Any town’ health system productivity ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Service user network</td>
</tr>
<tr>
<td>Elective Caesarean section</td>
</tr>
<tr>
<td>Acute stroke services</td>
</tr>
<tr>
<td>Integration of health and social care for older people</td>
</tr>
<tr>
<td>Electronic palliative care co-ordination systems</td>
</tr>
<tr>
<td>Urgent and emergency care networks</td>
</tr>
<tr>
<td>Elective services</td>
</tr>
<tr>
<td>Wellness programmes</td>
</tr>
<tr>
<td>Interoperability of systems and patient records</td>
</tr>
<tr>
<td>Public health</td>
</tr>
</tbody>
</table>

Source: Adapted from NHS England 2014a
While the evidence is perhaps less complete, implementing the NICE public health guidelines could help prevent illness upstream and contribute to the more productive use of resources downstream (National Institute for Health and Care Excellence 2014a). NICE has also developed tools to help local organisations estimate which intervention portfolio or package provides the best ‘value for money’ across a range of topics (anti-smoking, for example), compared with either ‘no services’ or ‘any other specified package’ (see Table 2) (National Institute for Health and Care Excellence 2014d).

Table 2 NICE evidence-based QIPP publication list – summary of potential savings

<table>
<thead>
<tr>
<th>Topic</th>
<th>Action</th>
<th>Value of potential saving/quality gain £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>The World Health Organization Surgical Safety Checklist</td>
<td>Reduce harm by consistent use of best practice</td>
<td>1,202.0</td>
</tr>
<tr>
<td>Safety Express</td>
<td>National pilot to deliver harm-free care</td>
<td>430.0</td>
</tr>
<tr>
<td>Fluid management during major surgery</td>
<td>Reducing post-operative complications and bed days</td>
<td>360.0</td>
</tr>
<tr>
<td>Cancer pathways</td>
<td>Redesigning services for those living with or beyond cancer</td>
<td>86.0</td>
</tr>
<tr>
<td>Type 1 diabetes</td>
<td>Dose adjustment for normal eating</td>
<td>48.0</td>
</tr>
<tr>
<td>Simple behavioural interventions</td>
<td>Reducing non-attendance</td>
<td>31.8</td>
</tr>
<tr>
<td>Histopathology management</td>
<td>7-day turnaround time</td>
<td>26.0</td>
</tr>
<tr>
<td>Low risk upper gastrointestinal bleeding</td>
<td>Avoiding patient admissions</td>
<td>13.6</td>
</tr>
<tr>
<td>Musculoskeletal physiotherapy</td>
<td>Patient self-referral</td>
<td>13.0</td>
</tr>
<tr>
<td>Heart failure</td>
<td>Use of BNP/NT-proBNP testing in primary care to facilitate early diagnosis</td>
<td>10.0</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>46.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2,267.0</td>
</tr>
</tbody>
</table>

Source: National Institute for Health and Care Excellence 2014c
Beyond some of the detailed clinical recommendations from NICE, there is also potential for improving the use of NHS resources through the redesign of care pathways and the integration of services. For example, as Bennett and Humphries (2014) summarise, areas with integrated services for older people have been found to have lower rates of hospital bed use, and areas with low bed use have been found to deliver a good patient experience as well as having lower readmission rates (Imison et al 2012). Furthermore, integrating primary and social care has been shown to reduce admissions, while integration of primary and secondary care for disease management of patients with certain conditions has been shown to reduce unplanned admissions (Curry and Ham 2010). While it does not constitute new money, the establishment of the £3.8 billion Better Care Fund from 2015/16 has the potential to boost initiatives and activities around integrated care (Bennett and Humphries 2014).

Improving productivity: empirical evidence from the wider world

The health service is not the only sector of the economy concerned with productivity issues. Out in the wider world, businesses in many other industries engage daily with the need to improve their productivity as a survival imperative. In crude terms, and in reasonably well-functioning markets, being less productive than your competitors means higher costs of production and the need to charge higher prices, which in turn means less business. Ultimately, the cost of poor productivity means no business at all; the incentives, then, are obvious.

The parallels between the NHS and, say, the aircraft industry or electricity generation are not perfect – often for good reason. However, each of these is, at a general level, engaged in the business of converting inputs into outputs, and all of them are, for various reasons, concerned with the efficiency with which they do this – that is, their productivity. It is also the case, however, that there is no neat way of separating those factors which seem to drive improvements – and importantly, differences – in productivity between industries and between businesses. Greater use of information technology may be important for greater productivity, but perhaps only if other factors are in place (such as flexible labour laws). Nevertheless, it is worth considering what lessons there might be for the NHS from evidence of what determines productivity in other sectors of the economy.
### Table 3 What determines productivity? (Summarised from Syverson 2011)

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal drivers: factors that operate within firms</strong></td>
<td></td>
</tr>
<tr>
<td>Managerial practice/talent</td>
<td>Bloom and Van Reenan (2007) find a strong correlation between a firm’s management practice and its productivity. In addition, more intense competition implied better management practice</td>
</tr>
<tr>
<td>Quality of labour and capital inputs</td>
<td>Fox and Smeets (2011) find only a modest impact of labour skills measures on productivity. More capital-intensive firms and those with more up-to-date capital are more productive (Sakellaris and Wilson 2004)</td>
</tr>
<tr>
<td>Use of IT and R&amp;D</td>
<td>Greater use of IT found to explain the higher productivity of US firms operating in Europe compared to European businesses (Bloom et al 2007)</td>
</tr>
<tr>
<td>‘Learning by doing’ (and ‘forgetting’)</td>
<td>Benkard (2000) shows productivity increasing in an aircraft firm as more units of the same plane are built. Such learning can be forgotten for various reasons, however, with a negative impact on productivity</td>
</tr>
<tr>
<td>Product innovation</td>
<td>Higher productivity found to be linked to new patents by firms (Balasubramanian and Sivadasan 2011)</td>
</tr>
<tr>
<td>Firm structure decisions</td>
<td>Suggestive evidence that more decentralised firms achieve higher levels of productivity (eg, Bloom et al 2009).</td>
</tr>
</tbody>
</table>
### Table 3 What determines productivity? (Summarised from Syverson 2011)

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External drivers: factors that operate outside firms</strong></td>
<td></td>
</tr>
<tr>
<td>Productivity spill-overs</td>
<td>Firms may improve their productivity by learning of other, more productive, firms’ production processes</td>
</tr>
<tr>
<td></td>
<td>Firms that are geographically and technologically ‘close’ tend to be more productive due to ‘knowledge transfers’ (eg, movement between firms of workers) (Moretti 2004)</td>
</tr>
<tr>
<td>Competition</td>
<td>As part of Darwinian selection, competition incentivises businesses to, for example, invest in innovative designs or reduce costs, which improves productivity</td>
</tr>
<tr>
<td></td>
<td>Syverson (2004) reports higher average productivity in more highly competitive market areas (less productive firms being driven out due to consumers more easily switching to firms charging lower prices)</td>
</tr>
<tr>
<td>Deregulation or proper regulation</td>
<td>Poorly or wrongly regulated industries can introduce disincentives to greater productivity through, for example, their pricing strategy or other regulatory actions</td>
</tr>
<tr>
<td></td>
<td>Electricity market reforms in the USA in the 1990s improved productivity as a result of new incentives imposed on producers by regulators (Fabrizio et al 2007)</td>
</tr>
<tr>
<td>Flexible input markets</td>
<td>Reductions in the financial and non-financial costs of hiring and firing labour or in accessing investment capital can improve productivity by allowing more productive firms to expand to meet demand (as a result of lower prices)</td>
</tr>
<tr>
<td></td>
<td>Hseih and Klenow (2009) show that Chinese aggregate productivity could increase by 30%-50% if US levels of efficiency in the use/matching of inputs were achieved</td>
</tr>
</tbody>
</table>

A relatively recent review of the applied economic literature in this area by Chad Syverson (2011) provides an interesting summary of what determines productivity. Syverson’s review starts with the observation that productivity varies hugely across and between industries and businesses. And despite the apparent incentives embodied in markets (as noted above), such variations in productivity can be very persistent – although eventually (and regardless of industry, country or time period) it is the more productive firms that survive. Although Syverson’s review is, by admission, selective, it nonetheless highlights a number of factors (some internal and others external) related to the productivity of businesses.
Table 3 is our summary of Syverson’s selective review. The analysis identifies six productivity factors that are internal to and directly within the influence of businesses, and four that are external (and which may or may not be subject to influence by firms). The former include: management practice and the talent and experience of managers; the use of information technology (IT) and research and development (R&D); experience of the production process (‘learning by doing’) and its flip side (‘forgetting’). External factors include: the type of regulation a business or sector may be subject to; the degree of market competition across an industry; and the financial costs of employing labour and capital.

While being wary of over-generalising or drawing unqualified parallels with the NHS (just as with any inter-industry comparison), and heeding the note above that none of these factors operate in isolation from each other, it is easy to see how many of these influences on productivity can – at least in general terms – apply to the NHS. For example, the tariff prices that are set by Monitor, and more directly the level of the ‘efficiency factor’ by which prices are deflated (and how this is applied to individual organisations), are part of the external regulatory environment that affects productivity.

And the flip side of learning by doing – ie, ‘forgetting’ – has its NHS parallels in terms of corporate memory loss following managerial and organisational reform, which can disrupt or delay plans for service development or create personal and organisational uncertainty that can lead to taking the managerial eye off the productivity ball.

While Syverson’s review reveals what we know about what determines productivity, it also reveals much that remains unknown. An obvious question (to which there is currently no answer) is: which factors are most important? Or, is productivity improvement via Darwinian market selection of the fittest (ie, the most productive) more important than productivity improvements arising from actions within a business? In some ways, this lack of (empirical) knowledge in other sectors of the economy about what determines productivity is perhaps reassuring to the NHS; at least it is not alone in its struggle to get to grips with the business of efficiently converting inputs into outputs. On the other hand, this does little to help the NHS meet the productivity challenge it faces.
Conclusion

This brief reminder of the range and scale of the productivity opportunities identified through evidence of unnecessary variation, experience, and experimentation with alternative care delivery regimes comes, as we noted in More with the same, with two notes of caution.

First, the value of these productivity improvement opportunities is often calculated on a theoretical basis. The value of reducing length of stay, for example, is assumed to be the per diem cost of a stay in hospital multiplied by the number of days saved; however, the actual value of reducing length of stay may be more or less than this. In practical terms, while the length of time that patients stay in hospital may reduce as a result of, say, a new treatment, it may prove impossible to use the released time either to admit other patients or to release cash to be spent in other ways. Even if the resource or cash is released, the real value of a reduction in length of stay is the value of the benefits produced in using the resources or cash freed up in an alternative way. Ultimately, of course, the challenge is to create greater value from every health care pound. The monetary values of the productivity gains described above should only be taken as an indicative guide to the actual value created.

Second, as we also noted in More with the same, many of the productivity ideas have been identified through comparative analysis and extrapolation from small-scale tests. And some productivity opportunities rely on the assumption that the performance of organisations in the bottom three quartiles can be moved into the top quartile. Depending on the particular aspect of an organisation's performance, this may or may not represent a credible opportunity.

If the challenge is for NHS organisations to replicate these improvements, at scale, across the whole system, how are they going about this task and what is the practical reality? The next section explores this reality through six case studies of provider organisations across England.
How six providers are responding to the productivity challenge

While actions at national level have been able to either attenuate the burden on the NHS to improve productivity (through constraining some of the growth in costs such as pay increases) or have directly contributed to maintaining commissioning income through the redistribution of central savings and budget cuts, ultimately the greatest burden of making each NHS pound produce more and better care falls to providers.

But how do those who have to grapple daily with the reality of making financial ends meet while improving services to patients view the origins and goals of national policy on productivity? As the period of austerity for the NHS may well extend to the end of this decade, is the current productivity drive qualitatively and quantitatively different to previous efforts to improve value for money? And what are the managerial and leadership lessons that are being learned as the NHS enters its fifth year of financial constraint?

To answer these and other questions, we discussed the recent and current experiences of 26 senior managers and clinical leaders in six NHS provider organisations of varying financial performance, type, size etc (see Table 4). In each trust, we conducted a semi-structured conversation with the chief executive, finance director, medical director, and lead on the productivity agenda. We also talked to a number of people in the Department of Health, Monitor, the Trust Development Authority and NHS England to gain insights into national strategy and policy. Where appropriate, we refer directly although anonymously to these conversations in this section.
The search for greater productivity: ‘It’s different this time’

All those we spoke to, locally and nationally, were clear about the underlying impetus for the current drive to improve productivity, as well as the ‘Nicholson challenge’ to produce £20 billion in productivity gains between 2010/11 and 2014/15: the near-zero real increases in NHS funding that form part of the government’s austerity plans, which were set out in the 2010 Spending Round. It was also clear that while the NHS had experienced reduced funding growth prior to 2010 – and a history of initiatives to improve productivity stretching back decades (see Figure 14) – this time round, the funding and organisational environment was different.

In particular, as the following quotes illustrate, many of those we talked to cited the sheer relentlessness of the financial situation as a distinguishing feature of the current financial environment.

I’m hearing people tell me it feels different because the pressure is more and it’s being more sustained. People have said that they felt previously that the pressure was more of an annual cycle... whereas, particularly in the last two years, we have not seen that let-up.
Figure 14 A brief history of productivity: efficiency and value-for-money initiatives in the NHS

Guillebaud committee (Minister of Health and Secretary of State for Scotland 1956) set up to investigate NHS spending and efficiency with an emphasis on containing spending. In fact, found spend had fallen as a percentage of GDP.

National Audit Act (1983) established the National Audit Office (NAO), whose remit included value-for-money investigations of government departments. Since then, NAO has produced numerous reports on value for money in the NHS.

Griffiths Report (DHSS 1983) argued that ‘major cost improvement programmes’ should be initiated within the NHS.


Public spending agreements introduced in the 1998 Comprehensive Spending Review (HM Treasury 1998) set out aims and objectives for spending departments, including value-for-money targets.

Payment by Results Healthcare Resource Group (HRG) tariffs equal average national cost plus reductions for efficiency factor as incentives to reduce costs.

QIPP 1 Quality, Innovation, Productivity, Prevention initiative to generate productivity gains to the value of £20bn from 2010/11 to 2014/15.

QIPP 2 (2013) Call to action (NHS England 2013b) identified a further £30bn gap to 2021 and urges a ‘step change in the transformation’ of the NHS as a result.

New hospital cost returns show 13% rise in weekly cost of treating and caring for patients. Government initiates ‘efficiency drive’ to reduce costs.

Rayner Scrutiny Programmes from 1979-83 comprised 155 scrutinies of efficiency programmes across government. Around a quarter of the savings identified were realised (NAO 1986).

‘Working for Patients’ (Department of Health 1989) introduced ‘internal market’ with incentives to reduce costs.

Gershon Review (HM Treasury 2004) recommended savings across government departments of £21.5bn. Halfway through the programme, the NAO reported a quarter were genuine efficiency gains, and a quarter were doubtful (NAO 2007).
It does seem a grind in that we’ve always had (for my first 15 years in the service) real-term increases in our budgets. This time, in provider land, there is no cash uplift and there is [reductions in tariff prices]. And next year is the fourth year of it.

One or two years of budgets being squeezed have generally demanded (and received) a very different response than the prospect of up to 10 years of little or no extra money, coupled with active pressure (through downward pressure on the tariff, for example) to do ‘more with the same’.

**Traditional savings approaches no longer acceptable**

Those we spoke to also acknowledged that the traditional approaches taken in times of tight funding were no longer acceptable in terms of public (or indeed the NHS’s) expectations. While somewhat of a characterisation of the way the NHS used to respond to funding slowdowns, the strategy of managers ensuring that supply met demand and that budgets remained on target by temporarily closing wards and allowing waiting lists and times to rise was certainly not seen as a credible or acceptable one now.

> When I qualified in [the 1980s], you did things because you were told to do them; it was the way in which the service was run. Now you question the evidence-based outcomes and what we are really doing, and those are the right questions.

… 20 years ago, there were a couple of key differences. The first was there was rationing going on – two-year waiting lists… The solution the NHS adopted at a local level to deal with the savings conundrum was that it closed things… It rationed things and closed things.

… It isn’t very different but I think it’s the background you’re doing it against. So the commissioning landscape is tightening up around us.

However, for others – generally those with a longer professional perspective in the NHS – current financial difficulties and consequent productivity initiatives are something they have always had to grapple with in some shape or form, and so to some extent, the past three years have been business as usual.
I mean, I would say, since 1995, there have been annual CIPs; the level might... you know, some years it was 1%, 2%, 3%, and now it’s 4%. So the target is higher but it doesn’t feel massively different; it is business as usual, you know?

Nevertheless, senior managers we talked to expressed increasing concern about the possible squeeze on the quality (and even perhaps safety) of services as they bore down on costs. This was made more acute in the wake of reports on hospital quality from Robert Francis ([Mid Staffordshire NHS Foundation Trust Public Inquiry 2013](#)), Don Berwick ([National Advisory Group on the Safety of Patients in England 2013](#)), and Sir Bruce Keogh ([NHS England 2013e](#)), as well as the appointment of Sir Mike Richards as the Chief Inspector of Hospitals.

Many of those we interviewed felt there was a pressing need to explore radical and adventurous ways of delivering services that went far beyond the traditional ‘salami slicing’ of budgets. In some cases, this would result in organisations having to close services or partner with others to deliver services in different ways. Given the equally pressing quality agenda arising from the Francis, Berwick and Keogh reports, there was also uncertainty about the impact of further financial squeezes on the quality of services.

I think the thing that makes this different, in all honesty, is the year-on-year nature of it, and secondly you can’t reduce your costs by reducing quality, and – more or less – you can’t reduce costs by reducing the quantity of health care because of the impact this has on waiting times and so on.

**Organisational turbulence**

The other aspect of the environment that perhaps marks the current productivity drive as different from previous efforts is, of course, the organisational change brought about by the government’s health care reforms. Few of those we spoke to could see how these changes had helped in any positive way with the productivity agenda, and some noted the extra difficulties that particular aspects of the organisational changes since 2010 had presented. For example, the abolition of strategic health authorities (SHAs) had left a managerial/co-ordinating vacuum that was only now becoming clearer as trusts grapple with a transformation agenda that necessarily involves a number of other service providers.
There is no one in this new system with whole system responsibility; love them or loathe them, the strategic health authorities had whole system responsibility... It’s a bit of a mess, like the economy – the Bank of England was doing one thing, the Treasury was doing something else, and the Financial Services Authority another still; all watching different bits of the system, with no one having system control.

Local area teams? I don’t know much about them. I have never met them.

As young organisations with somewhat variable skills and backgrounds, clinical commissioning groups (CCGs) were not generally seen as up to speed, managerially or technically, with the task of actively managing the co-ordination of some of the service transformations a number of trusts were either planning or felt were becoming necessary as part of the search for better value.

I’m not sure that, at the time it was set it was undoable... In fact, I would go as far as to say our experience suggests, and I firmly believe, that there are significant areas where you can take costs out of the NHS. But to do so required a degree of programmed co-operation that was made much more difficult by then deciding to chuck all the commissioning organisations up in the air for two years and completely distract the capacity of commissioners to put together packages of efficiency across the system.

Commissioners aren’t prepared... It feels at the moment that GPs have just been left to get on with it... ‘You take the hard decisions and we’ll stand back and watch you get beaten by politicians, or whatever...’ So there’s no co-ordinating support for GPs who are still very new to something we are really struggling with in certain parts of the country.

So, this time the productivity imperative really is different. Among other things, it is different because of the scale of the financial problem, its relentlessness, the (lack of) acceptability of simply reducing patient access to match budgets, and the parallel (and not particularly helpful) changes in organisations as a result of the government’s reform agenda. While these differences require new ways of thinking, new styles of management and leadership, and certainly new ideas about how to get more for the same, one thing remains constant: the need to make ends meet. So how are trusts going about this task?
**Bridging the gap: cost improvement programmes**

An essential starting point for all six organisations was a technical analysis of the scale of the gap between forecast income and the expenditure involved in generating that income. Figure 15 shows a stylised version of the sort of financial analysis needed to set out the scale of the cost improvement programme (CIP) task faced by a trust.

![Figure 15 Stylised income-expenditure bridge](image)

Here, a trust moves from an end-of-year surplus in 2012/13 through to a similar-sized planned surplus at the end of 2013/14 via a series of forecast additions to income (through extra work and use of some of its reserves) and reductions (the impact of commissioner QIPP plans, reductions in tariff prices, etc), and what is, in essence, a balancing item – their CIP target. As a partial aside, the language and
The nomenclature of productivity

In talking to managers and others in the health system, locally and nationally, it was clear that there was an issue with the language of productivity. Were we talking about cost improvement programmes/plans? Or efficiency? Or cash-releasing efficiency savings? Or value for money? Or, in a triumphal portmanteau concoction, cash-releasing productivity value-for-money savings?!

Terminology can be confusing, and many interviewees said they did not find the term ‘Quality, Innovation, Productivity and Prevention’ (QIPP) particularly helpful in understanding what the whole ‘productivity challenge’ was about. It also translated differently on the ground, so that different organisations thought of it in different ways. Characterising it differently means that national figures of what has been achieved so far are not necessarily representative of what is actually being achieved, and may mask significant variation.

I don’t think [the different terms for productivity] mean the same thing, but I think people perceive them all as ‘doing more for less’ – this is what people think is going on. There’s less money but we’re being made to work harder and harder because demands have increased.

I would rather talk about ‘value added’ or ‘quality improvements’ that release funds because I can’t live with it the other way around.

All trusts made a distinction between cost improvement programmes (their responsibility) and QIPP (commissioner’s responsibility). The former was essentially the efforts that had to be made by providers to bridge the gap between income and expenditure (mainly involving cost reduction, but could also involve simply generating more income – ‘income CIPs’); the latter (QIPP) focused on the demand side (involving, for example, actions by commissioners to reduce demand for providers’ services).

While this income–expenditure bridge diagram identifies income from additional activity separately from CIPs, ‘income CIPs’ (essentially income-generation schemes of one sort or another, both clinical and non-clinical) often generate a minority proportion (albeit a significant one) of total CIPs – for example, between 20 per cent and 30 per cent for some of the trusts we talked to. Bundling up what is essentially
additional income with what are essentially cost-reduction schemes designed to make ends meet may make it difficult to properly identify what is going on in terms of extra income, actual cost reductions, real productivity improvements, and so on. This makes it increasingly difficult to know what is happening as the information from trusts is aggregated through the NHS – emerging eventually as a single figure expressed in billions for the total QIPP savings for England as a whole.

For the organisations we visited, the average CIP target for the current financial year (2013/14) was 5.25 per cent (see Table 5).

<table>
<thead>
<tr>
<th>Year</th>
<th>Site (%)</th>
<th>Average (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>2010/11–2012/13</td>
<td>4.5</td>
<td>5</td>
</tr>
<tr>
<td>2013/14</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

These targets were similar to those we found in a larger survey of trust finance directors for 2013/14 and reported in The King’s Fund’s Quarterly Monitoring Report (Appleby et al 2014a) (see Figure 16). It is worth bearing in mind that these annual percentages are cumulative; 5 per cent repeated over four years means the equivalent of stretching the buying power of £1 to £1.22, and over 10 years, to £1.63.

However, setting targets is one thing; how organisations go about ‘filling the gap’, and whether their targets are achieved, is quite another.
For one trust, the first two years of their CIP challenge (2010/11 and 2011/12) saw a somewhat ad hoc process of focusing on staffing by controlling vacant posts. More recently, however, there has been a more structured approach, together with a greater involvement of staff in the process. The trust’s focus has now shifted to a more transformational redesign of services on the understanding that CIP targets will not be achieved through incremental changes but rather, more far-reaching strategic plans. Of course, this takes time and a lot of management effort and skilled leadership: patient/clinical pathways need detailed review; clinicians need to be not just ‘engaged’ but leading throughout the process; evidence and examples need to be identified and evaluated in the light of local circumstances; and multidisciplinary teams need to implement decisions.

It might be observed that this is the essence of management, and is what any organisation that has used the words ‘continuous improvement’ in its annual report should be doing. This may be overly harsh, but as one senior manager told us:
We've done well, we've ticked boxes. Does it feel like we've done well? No, it feels like we've ‘salami sliced’ as much as we can on the easy things and now we are left with… what?

However, this particular trust has, this year, introduced more devolved budgetary and financial responsibility through service line management. Responsibility for achieving CIP targets has shifted to clinical teams supported by finance and management. Although these targets have been agreed from the top of the organisation, the way in which they are achieved is increasingly the responsibility of clinical teams. This seems to have given the organisation renewed hope:

Even though we have only been doing this for three weeks, we are already seeing a real culture change. It's absolutely fascinating, totally gob-smacking! We had a board meeting yesterday, and it's completely amazed us – the shift in culture – ‘Here's your autonomy, here are your local services, you are responsible and accountable for them but we will give you the space to be able to do the things that you want to do within these constraints.' This management approach will enable us to realise some local efficiencies within the hospital.

All the trusts we interviewed said they had achieved their targets over the past two years; for some it has been harder than others, and for these, their success has been partly due to freezing vacant posts. Of course, not filling vacant posts is similar to cutting the tariff; it still leaves someone with the problem of making ends meet with fewer resources than planned.

No one we spoke to about their current CIP targets was under any illusions that it was going to be anything but tough to achieve them.

We're about £1.2 million short [of our CIP target] I think at the current stage, but I think we've got further plans that are coming through which will probably close the gap to about £800,000, which I think is the first time in a long time that this organisation won't have met its target. That's a symptom really, I think, of the progress that has been made with some of the more obvious schemes and just how much more difficult it's becoming to identify things that are going to deliver a reasonable amount of savings.
Again, the latest results from our regular survey of trust finance directors confirm a somewhat gloomy forecast concerning the achievement of CIPs this financial year (see Figure 17).

As at January 2014, none of the trusts we visited were forecasting that they would meet their 2013/14 CIP targets, with shortfalls ranging from around 4 per cent to 10 per cent.

Although there is concern about achieving the savings targets, we were told of many examples of cutting wasteful processes and freeing up resources for other uses. Below we describe some of the many initiatives our case study trusts had already put in place or were planning to.
**Examples of productivity schemes**

**Infrastructure**

Despite historic drives to reduce back-office costs and the inefficient use of hospital estate and space, it would appear that further economies are still possible. For example:

- Analysis of space utilisation – from staff accommodation and rooms required for clinics, to the use of hot desks and remote working – has allowed some buildings to be closed. Such change was not without costs (at least initially) and required some upfront investment in IT, for example. However, within three years, the space utilisation review has resulted in savings of around £0.5 million. Other trusts have carried out similar exercises involving reviews of shared team spaces to maximise flexibility.

- One trust has centralised an information technology system previously replicated across a number of different sites. Reducing this duplication had already saved £0.3 million, and by the time the project is completed it will have saved the trust £0.5 million.

- Improving the process of clinical record-keeping, which – with a new electronic system whereby medical histories can be shared between different teams in different parts of the organisation – was estimated to save 56 hours a week of clinical time and improve co-ordination of care.

- The use of digital dictation and voice recognition has resulted in improvements in the trust’s ability to produce discharge summaries and discharge letters, and also enabled them to revise their secretarial and back-office capabilities. Consultants now share secretarial support and other staff have been redeployed to more patient-facing roles, such as call centres and liaising with patients and relatives where required.

- Opening a subsidiary of Boots within a hospital made savings on VAT and provided a better service to patients.

- Replacing a key with an alphanumeric lock to a drugs cupboard in a casualty department reduced time wasted looking for keys by 12 nurse-hours a week.
The NHS productivity challenge

How six providers are responding to the productivity challenge

Workforce

Over the past few years, pay restraint has, as we have noted earlier, helped attenuate the productivity challenge by reducing a significant driver of increasing hospital costs. However, despite the enormous efforts consumed in revamping the employment contracts for clinical, nurse and other NHS employees, the ‘something for something’ deals have not yet been exhausted.

- Having analysed the variation in performance of various clinical teams, one trust calculated that if they were to bring their worst performing teams up to the average, they could save about £15 million. The trust used ‘best practice benchmarks’ (such as patients seen per day) as productivity targets for their community services teams. The trust aims to extend this to comparative data on individual staff performance.

- A number of trusts had also revisited staff contracts under Agenda for Change to re-examine staff roles, pay bands, and movement up the pay spine.

- All of the trusts we talked to were examining the skill-mix of their clinical teams. In some cases, such as in accident and emergency (A&E), this included reducing the number of middle-grade doctors and agreeing that senior consultants would take on increased workloads. In other cases, such as pathology, a trust had negotiated changes in work roles to allow staff on lower clinical grades to take on responsibilities of others. In some trusts, overtime hours and pay have been removed and rotas reconfigured to reduce the use of locum staff.

  *In the pathology department they have band 5 staff doing what band 6 staff used to do; changed on-call arrangements to pay people less. We could have been more creative in using flexibilities that there are within Agenda for Change.*

  *If you start at 9am, there has to be a very good reason why you are not beside your first patient at that time and why you haven’t seen patients all the way through till 5pm.*

Revisiting NHS staff contracts of employment is a difficult job for trusts. A particular difficulty is the implied trade-off between professionalism and goodwill and the terms and conditions set out in employment contracts. Such
goodwill is not just the prerogative of clinicians, of course; it extends to all NHS staff. As a labour-intensive, person-to-person contact industry, the NHS treads a difficult path in maximising the productivity of its labour force.

**Clinical practice**

As we have already noted, evidence from the National Institute for Health and Care Excellence (NICE) and examples of innovations (in the NHS and other health systems, and, not least, variations in admission thresholds and many other aspects of care) suggest that it is possible to find more efficient ways of delivering services. Changing clinical practice is, needless to say, not easy; it often involves other aspects of the delivery of care – from clinical record-keeping and referral and discharge practices, to the propensity to adopt new surgical interventions and alternative environments in which care is delivered (such as outpatients instead of inpatients, or patients’ homes instead of outpatients). Our case study sites had introduced various changes in clinical services, including the following.

- A trust that had a number of inpatient units for older people considered an alternative model that concentrated clinical services based on the types of treatments offered. They classified mental health services for older people into two groups: organic conditions (dementia, Alzheimer’s) and functional illnesses (psychosis, schizophrenia). This meant that the bed base was concentrated to deliver organic condition services in one part of the county and functional illness services in another. As a result, they reduced length of stay in inpatient units and are planning to reduce the number of beds on three separate sites, closing one site.

- Improving clinical practice also includes ensuring the smooth ‘flow’ of patients through the health care system. One trust had re-examined the timing of the review of some patients’ medical conditions and reorganised the process. It now has two consultants assigned to the inpatient unit; a ‘visibility board’ tracks all patients’ progress in terms of treatments and assessments, and the multidisciplinary team meets briefly every day to ensure that people are moving through the system as quickly as possible. As a result of this, length of stay has reduced by more than 30 per cent; there has also been a reduction in staff sickness, a significant reduction in aggression on units, increased patient satisfaction, and a reduction in bed use.
While much attention is paid to delays in access to hospital, there are also problems at the other end of care – discharging patients when they are ready to move on to other, more appropriate locations, such as their own home. Carrying out discharge assessments on admission ensures that patients leave hospital with a community care package already in place, reducing delayed discharges.

All the trusts we spoke to mentioned medicines management and e-prescribing as areas where they had achieved significant efficiency savings by reducing variation, waste and duplication. One trust had saved £1.8 million on medicines management, mainly through renegotiating prices. The proportion of non-administered drugs had also been reduced through introducing an electronic system trust-wide, which monitors and records (real-time) lab tests, imaging, prescribing, and observations of the clinical teams about a particular patient.

Reaching agreement with orthopaedic surgeons to limit implant options to two choices for any joint replacement will lead to savings.

Through reconfiguring services, savings were made by merging three consultant-led maternity units into one.

Lessons from experience

As part of our discussions with senior managers in the case study sites, we asked them to reflect on their experiences over the past few years, focusing on some of the lessons they had learned as their organisations have grappled with productivity agendas. Three broad themes emerged: the need for strong staff engagement; some negative issues; and some positive issues.

Staff engagement

A common theme was the absolute necessity of involving all staff – and patients – in achieving the productivity task. This included ensuring that staff understood the background to the required productivity improvements; that all staff had the opportunity to contribute their ideas for CIPs; and that senior clinicians were very closely involved in CIPs – for example, assessing ideas from the point of view of quality and safety, and leading implementation where possible.
Creating a senior management post dedicated to the trust’s productivity and efficiency work was also seen as very beneficial, providing not only a focus for CIP work but also technical expertise for others within the trust.

**Negative lessons**

Perhaps the most commonly cited negative lesson was the difficulty of improving productivity against a backdrop of some of the most turbulent organisational reform the NHS has experienced for many years. Many of those we spoke to felt that the abolition of strategic health authorities (SHAs) and primary care trusts (PCTs) and the introduction of new commissioning organisations hindered them from achieving the kind of service changes needed to improve quality in an extended era of financial pressure. The lack of organisational stability – both locally and nationally – was seen as problematic, leading to a loss of corporate memory and managerial experience, which had stalled progress on innovation and service redesign.

From a national perspective, there were also limits to the extent to which top-down policy levers could achieve productivity improvements:

> There’s a limit to what we can do nationally in a top-down way on this. The reality is that it’s even less than you thought it was.

While there was praise for the way national organisations had acted to promulgate the need for the NHS to really engage with the productivity challenge, and had framed and quantified the scale of the task, this had not taken sufficient account of the local impact of funding cuts in other areas – particularly local authorities.

Nationally, too, there was also a view that Payment by Results – and in particular the annual real cuts in tariff prices – was not always helpful in the pursuit of greater productivity. While the use of the tariff price-setting lever to incentivise trusts to reduce costs had focused minds locally on the task at hand, such tactics were not felt to be sustainable in the longer term.

Finally, while many people we talked to were pleased with the achievements of their staff and organisations so far, their very success in generating significant CIPs also suggested that the future would be tougher. Some expressed concerns as to whether
the scale of CIPs achieved so far could be sustained for much longer without significant cuts in staff.

**Positive lessons**

If there can be a silver lining in the dark financial cloud over the NHS, the squeeze on funding had certainly served to focus minds on the productivity agenda. While historically, the service had been expected to achieve increased value for money, this had attracted much less management attention in times when funding was rising, or when there were one or two years of little or no growth. The relatively tough funding settlements of the past few years (and prospects of a continued squeeze for a number of years to come) have encouraged more radical thinking about how services can deliver even better value for money.

A number of those we talked to emphasised the importance of starting early on productivity initiatives and paying relentless attention to the details of every scheme, from the involvement of key players (staff, patients, other organisational partners) to agreeing clear targets and performance measures.

Although setting CIP targets may start with an analysis of the income–expenditure bridge, one interviewee noted a key lesson in this regard: treating CIPs as simply a route to bridging the financial gap missed the real underlying point of the task, which was to generate better value for patients.

Finally, while there was a preponderance of CIPs within trusts, the bigger and perhaps more radical changes increasingly needed to achieve further improvements in quality and safety with limited budgets are likely to require much closer working across organisations. While this is a much harder managerial task, requiring commitment from the highest levels (the chief executive officer and chair), there are big gains to be made.

**Conclusion**

Our conversations with senior managers and clinicians in six trusts revealed a unanimous view that the NHS has faced an unprecedentedly difficult period financially over the past few years. The response to this at the front line has had to be a significant step up in the search for value for money and cost savings.
Collectively, over the four years since 2010/11, the six trusts have set – and largely achieved – CIPs averaging around 4.5 per cent a year (over 20 per cent across the four years). They have done so through a mixture of some traditional salami slicing of budgets and income generation, but also some genuinely innovative ways of working and delivering more cost-effective care. However, one vital question was raised in all of our conversations: how long could such efforts be sustained?

In the next section, we look in more detail at the short-term financial prospects for the NHS and reflect on the need for another step change in the approach to tackling funding pressures.
Financial pressures over the medium term

One common theme that emerged from the case studies was how difficult the next two years looked for provider trusts – and, in particular, how the financial squeeze is set to tighten in 2015/16 as a result of national decisions concerning the Better Care Fund. Here, we take a closer look at the next two years before considering what the medium term holds.

The short term: is 2015/16 crunch time?

Across the six case study sites, staff commented on the substantial effort required to deliver on cost improvement programmes (CIPs); interviewees involved in this study, as well as those involved in The King’s Fund’s Quarterly Monitoring Report, are also
increasingly pessimistic about the immediate future. Is this pessimism justified? Is there something materially different about the productivity challenge of the next few years?

As Figure 3 shows, in 2015/16 the NHS faces a cut in real terms spending once we take account of the transfer from the NHS to the Better Care Fund (NHS England 2014b). NHS England calculates that a corollary of this reallocation to the Better Care Fund is a reduction in emergency activity within hospitals of around 15 per cent in that year (NHS England 2014d). As Figure 18 shows, a glance at trends in the growth of emergency activity over recent years underlines just how challenging that will be.

![Figure 19 Confidence in achieving a 15 per cent reduction in emergency admissions in 2015/16](image)

**Figure 19 Confidence in achieving a 15 per cent reduction in emergency admissions in 2015/16**

<table>
<thead>
<tr>
<th>Per cent</th>
<th>Trust finance directors (n=42)</th>
<th>CCG finance leads (n=47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very likely</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Quite likely</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Don't know</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Quite unlikely</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Very unlikely</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

**Source:** Appleby et al 2014b

NB: Survey carried out in March 2014. Trust finance directors’ question: ‘How likely is it that your hospital will be able to achieve a cut in emergency admissions of 15% in 2015/16 as suggested by NHS England as part of the opportunity cost of the Better Care Fund?’ CCG finance lead question: ‘How likely is it, that working with your local authority partners, you can achieve a 15% reduction in emergency admissions in 2015/16 as suggested by NHS England as part of the opportunity cost of the Better Care Fund?’
And as The King's Fund’s quarterly survey of finance directors confirms, there is very little confidence – either among finance directors or clinical commissioning group (CCG) leads – that the suggested 15 per cent reduction in emergency admissions can be achieved in 2015/16 (see Figure 19). This is reinforced by directors’ somewhat pessimistic views about the likelihood of achieving financial balance in 2014/15 and, in particular, in 2015/16 (see Figure 20).

**Figure 20 Confidence in achieving financial balance in 2014/15 and 2015/16: finance directors of NHS trusts/foundation trusts**

![Confidence in achieving financial balance](image)

Source: Appleby et al 2014b

NB: Sample size = 74 (out of 249). Survey carried out in March 2014. Trust finance directors’ question: “Looking ahead, how confident are you that your organisation will achieve financial balance in 2014/15... and in 2015/16?”

Meanwhile, local government has taken the brunt of national action on deficit reduction, and while social care has been prioritised to an extent (and supported by the NHS), economies have had to be made. The lack of funding for transformation in health has been compounded by an equal or greater paucity of funds for social care. This makes a difficult environment for new partners to work together in designing and investing in new services when both are short of money and
struggling even to maintain existing services, and subject to the pressure that new integrated models of care must generate immediate and substantial savings.

Wherever the savings are to come from, there are two key interrelated challenges to overcome: first, and most obviously, the scale of savings to be made; but equally important is the speed with which the savings must hit the bottom line. We now look at both of these issues in turn.

**Scale of savings needed**

During past and current efficiency drives, one question is always asked: ‘What has the NHS done with all the savings?’ The lack of a straightforward answer has frustrated some commentators and sometimes led to doubts that the savings were made at all.

While it might be interesting if the NHS could draw up a detailed balance sheet of where savings have been made, and then show how these savings were re-invested, this misunderstands the way the original Nicholson challenge and its predecessors estimated the savings that needed to be made. Take emergency admissions, for example: as Figure 18 shows, these have been rising for a long time, and were they to continue to rise at the same rate, the NHS would need a substantial increase in its budget to pay for them. The cost of meeting such a substantial increase is part of the £20 billion Nicholson challenge. However, if the NHS successfully reduces the growth in admissions (which it did), it means it can treat patients without this increase and a ‘saving’ is made. But this ‘saving’ does not lead to a cheque that can be re-invested elsewhere – instead, it means the NHS can continue to treat the patients that cross the threshold of accident and emergency (A&E) without the Chancellor having to provide as much extra cash.

However, this is where the scale of the 2015/16 challenge takes the NHS into uncharted territory. In previous efficiency drives, the challenge to the hospital sector was either to slow its growth while still meeting demand, or to treat even more patients but at slightly lower average costs. The revenues of the hospital sector were not expected to fall sharply, at least not at national level.
2015/16 is a significantly harder challenge. Providing an additional £2 billion to support social care out of an overall budget that is flat in real terms translates into a sharp and sudden reduction in hospital revenues. For the first time, hospitals must treat fewer people and treat them more cheaply. Hospitals may wonder why they have been designated as the main source of the savings and not other parts of the health care system. There are probably two reasons for this, as follows.

- **Long-term strategy:** As part of *Everyone counts: planning for patients 2014/15 to 2018/19* (NHS England 2013a), NHS England, along with other national partners, set out what it considers to be the six characteristics of a high-quality health care system for the future. These include providing a far wider set of services in primary and community settings and creating a more integrated care pathway for those that need it. Both signal a shift towards a more primary and community-driven health care system that maintains people in better health while also reducing hospital (particularly emergency) admissions. With such a strategy, it would be perverse to look for major budget reductions in primary and community services – on the contrary, you might expect both to expand, though of course if they did, the squeeze on hospitals would get even tighter.

- **The Better Care Fund:** As a step on that longer-term path, the Better Care Fund seeks to bring health and social care closer together (while also trying to place social care on a more affordable basis for 2015/16). But again, if the Better Care Fund does succeed in its objectives, then we would expect to see a reduction in emergency activity and it is here, therefore, that NHS England and others have signalled they expect the primary savings to arise – savings that in effect supply the money for the Better Care Fund.

But these additional savings also come at the end of the original Quality, Innovation, Productivity and Prevention (QIPP) timetable, with two implications for the next savings programme. First, as section 5 noted, for many, the ‘low-hanging fruit’ of NHS efficiency savings made available by a decade of above-average real terms growth are likely to be close to exhaustion.

Second, as set out in section 3, the NHS has managed a degree of pay restraint that has also helped balance the budget. Apart from some isolated examples, this does
not seem to have led to a general recruitment and retention problem.¹ However, it was achieved when the rest of the economy was following the same path; the United Kingdom’s weak economic performance since 2010 may have created an environment where public services have been able to hold down pay without hitting a recruitment crisis. Currently, the economy is showing very distinct signs of life, and unsurprisingly, the Office for Budget Responsibility (OBR) has now forecast a marked increase in pay rises across the United Kingdom (see Figure 21). For the NHS, this is likely to mean that continued pay restraint (of the scale we have seen up till 2014) will become increasingly hard to achieve; indeed, the newly announced pay restraint for 2014/15 and 2015/16 raises the maximum increase for those not receiving a pay increment from 1 per cent this year to 2 per cent next.

1 ‘Our overall assessment of the recruitment and retention situation continues to be constrained by the lack of vacancy data for England and Wales. Based on the available data, our conclusion is that recruitment and retention is not a current concern, though this may be a reflection of the economic environment – this position may change as the economic, and therefore the labour market, recovery strengthens.’ NHS Pay Review Body (2013)
Speed with which savings are needed

It is perhaps the speed with which these significant savings must be made that is most challenging, for three reasons:

- how quickly hospitals would need to act in order to reduce capacity in 2015/16
- how quickly new services can be set up that enable hospitals to be confident that there is good reason to reduce capacity
- how quickly the NHS can develop a clear national strategy that incorporates quality (particularly in response to the 2013 Francis report) alongside cost into a workable plan at local level.

Reducing capacity

Previous efficiency drives have (largely) required the NHS to slow down or indeed halt its growth. They did not require the service – or major parts of it – to shrink across the board, except at the margins through recruitment freezes or actions taken in some local health economies. Even this has been painful when it was done in 2005/6 as a consequence of rectifying growing deficits across the NHS and as more recent experience has shown.

However, the consequences for hospitals of the reallocation of an additional £2 billion in 2015/16 into the Better Care Fund will require more drastic action. The reallocation implies not just a real reduction in spending but an actual cash reduction. It will mean actually taking money out of the system, rather than simply treating more patients with the same resources. This is because even if the NHS does manage to reduce emergency activity by 15 per cent, this alone will not generate the savings needed. Reducing activity without reducing capacity only saves money on the limited areas of costs linked directly to patient treatment (drugs, other consumables, and potentially agency staff). The real savings – in essence, the source of the money for the Better Care Fund – come when reduced activity means the NHS can downsize permanently, having fewer beds and, critically, fewer staff.

Making changes of this scale takes time. Hospitals will need to develop a workable plan for 2015/16 and then set out a transition path. Leaving it till 2015/16 before beginning implementation will be too late. Yet bringing the necessary but potentially toxic combination of actions required into 2014/15 – some mix of recruitment
freezes, early retirement and redundancy packages, or more action on local pay – leaves little time for management even to develop and agree plans, let alone take the decision to implement them.

Establishing new services
Hospitals will only want to reduce capacity if they are confident they can still meet demand, and this is where new services in primary and community settings are needed. To deliver a major reduction in emergency activity through offering patients new and improved services is a ‘good thing’ as it delivers savings by providing better care. This would be a change that patients, the public and clinicians should support.

However, the way the NHS is expected to deliver on these changes may well unravel this support. While few if any major change programmes in the private sector come without ‘restructuring costs’, the NHS has no additional cash to allow any ‘double running’ of new and old service models or to pay for transition. This means, in general, that as the new service is switched on, the old must be switched off. This is a big ask: it requires the new service not only to be instantaneously productive, but also to equally instantaneously deliver the improvements in outcomes that mean less people will arrive at hospital needing emergency admission. It is one thing to believe, for example, that better care for people with long-term conditions (such as diabetes) in community and primary care settings can improve outcomes and lower costs. It is quite another to believe that outcomes improve as soon as the service is set up, and lead to an immediate (or in-year) saving to hospital budgets.

This also means that patients, the public and clinicians are not offered the choice between the old model of care and the new. Instead, they are offered a choice between the existing model of care and a hypothetical new one, which has yet to be proven in their locality, or for themselves or those they care for.

To deliver such change will require local health economies to design new services, recruit to them, and establish new patient pathways. These new services must then deliver the expected benefits to patients, improve patient outcomes, and reduce demand in hospitals – all in time to allow hospitals to begin their own complex plans for downsizing and releasing capacity. This does mean that bringing about major change needs investment and – at least in the initial years – will be more expensive than simply carrying on with the old care model.
A clear national strategy
The NHS and local government launched a major planning round in December 2013 (NHS England 2013a) to try to develop the plans required to deliver a sustainable, high-quality service by 2018/19. During this time, CCGs, trusts and local government will continue to struggle with the issues discussed earlier in this report.

However, while the service tries to focus on the strategic challenges ahead, it is also grappling with the tangible service implications of the Francis report. One clear manifestation of this response – but certainly not the only one – is the vigour with which the Care Quality Commission (CQC) has begun to apply its new regulatory regime, first to acute hospitals but then to the rest of the health and care system. The most recent data on workforce (see Figure 22) suggest that this new focus may be having an impact on national numbers.

Figure 22 Total and month-on-month changes in qualified nurses, midwives, health visitors and school nurses: October 2009 to December 2013 (England, full-time equivalents)

Source: HSCIC 2014
A renewed focus on quality of care is, of course, desirable. However, raising standards and thinking through staffing rotas to maximise the time nurses and other staff can spend caring for patients is again potentially a complex process. In the short term, it may be tempting for the boards of trusts and foundation trusts to instead launch recruitment drives and/or draw in agency staff to boost numbers.

The data tell us that the NHS is ending 2013/14 with both a recruitment drive and renewed growth in emergency activity. Indeed, it may be the recruitment drive that has enabled the NHS to admit more patients. It is hard to set this against the vision set out by NHS England in *Everyone counts* (NHS England 2013a), with its greatly reduced emergency activity and, logically, fewer hospital staff. In the current environment, it may require a very brave (or foolhardy) trust to agree plans for reducing capacity and staff and to begin implementation in the expectation (or hope) that the system delivers greatly reduced demand in 2015/16.

For many, these different challenges appear to be in competition: from a quality agenda, whether to re-prioritise funding into acute trusts to allow them to pay for more staff versus a long-term goal of investing in primary and community services to enable a downsizing of acute capacity. Given sufficient time, however, these challenges may not be in competition: trusts should ensure good quality of care and appropriate staffing levels now and over time, and as emergency activity falls, hospitals can shrink while still maintaining higher standards of patient care. The challenge for the NHS is that the timetable appears to require that it does both simultaneously, which may be impossible.

**The longer term: beyond 2015/16**

Looking beyond 2015/16, and on the basis of NHS England’s current planning assumptions of near-zero real increases through to 2021/22, it seems extremely hard to envisage how a programme of cost improvements ‘as usual’ could meet the QIPP 2 challenge as set out by *The NHS belongs to the people: call to action* (NHS England 2013c). As we noted earlier, those we spoke to at our case study trusts were fairly pessimistic about the longer term. For example, some thought there would inevitably be cuts in the volume of services they were able to offer, that access thresholds would need to increase, and that the balance between acute, hospital-based care and treatment provided in the community would need to alter significantly.
It is worth reiterating that NHS England’s planning assumption effectively means a cut in the proportion of the nation’s gross domestic product (GDP) devoted to the NHS of nearly 2 percentage points (see Figure 2). This represents a reduction of nearly a quarter compared to the high point so far this century, when the NHS consumed 8 per cent of GDP in 2009. The envisaged reduction to 2021/22 takes the share of GDP spent on the NHS back to its 2003 level – an unprecedented fall.

**Conclusion**

The NHS and social care have reached a critical point. The service faces enormous challenges over the next 18 months and it is increasingly unlikely that a crisis can be avoided, either in the form of widespread overspends or in a challenge to the quality of care (or both). And yet there is considerable agreement about the vision for a more integrated service that provides better care in community settings, and that this vision can deliver both lower costs and better outcomes. However, these ‘transformational’ changes are not costless to implement. Planning new services and engaging with patients, the public, and service providers (within and outside the NHS) requires investment: of time, management skills and money. It might also require running overlapping services – ‘double running’ – until new services and delivery arrangements take root. In addition, pay back – in terms of better quality services and improved productivity – may not be realised for some time. Attempting to short-circuit this change process is risky as it raises the chance of errors in design and implementation as well as falsely raising expectations of how quickly benefits (whether in terms of savings or better outcomes) can be unlocked. There is no real alternative to setting aside sufficient time to engage, plan and implement.

However, the immediate challenge is to get through the next two years before these changes can be made – and indeed, to get through these years without either delaying the start of the journey to these new models, or worse, making short-term savings that take us even further away from the end goal.

The next and concluding section sets out options for addressing the difficult issues the NHS faces now and over the next few years.
The way ahead

Faced with an unprecedented slowdown in funding since 2010/11, in response to the concerted effort to encourage and incentivise NHS organisations to meet growing demand and to raise quality, it would appear that the NHS has broadly risen to the challenge. However, it is also clear from our interviews with senior managers in national organisations – including the Department of Health, the Trust Development Authority (TDA), Monitor and NHS England – that the prospects for squeezing national budgets or pulling policy levers are reaching the end of their useful life. In particular, our interviews with leaders in six trusts as part of this review suggest that while there have been real gains in productivity, locally the situation has become much tougher and is set to get even more difficult over the next two years.

Signs of a deteriorating financial position are clearly evident in recent reports from Monitor (2014) and the TDA (2014). Nine months into 2013/14, surpluses across all 147 foundation trusts had halved compared to the same time in 2012/13. More than a quarter of all foundation trusts were in deficit (compared to an expected 16 per cent), and 40 per cent of all acute trusts reported a deficit. Further, while the sector achieved cost improvement programmes (CIPs) valued at £867 million by December 2013, this was 18 per cent less than planned. For the 102 non-foundation trusts, the situation is worse, with 32 per cent forecasting a deficit for 2013/14, and an overall overspend across all trusts of £250 million compared with a planned net deficit of £75 million. Yet 2014/15, and especially 2015/16, look even more challenging.

As we have argued, on its current trajectory the health and social care system in England is heading towards a major crisis. And while there is an increasing consensus around what makes a high-quality, sustainable health and care system, delivering this better service – and unlocking the greater efficiency and improved outcomes it can offer – will need more time and more upfront investment, both to implement new models of care and to realise further productivity improvements. It is for this reason that additional funding will be needed even though this will put further pressures on the public finances.
Four opportunities to improve productivity

In making the case for additional funding, we are clear from our research that there is plenty of evidence that the NHS could continue to squeeze more out of existing budgets whether through smarter procurement, better use of the estate, changes in clinical practice, or other means. There is also evidence that resources could be used more efficiently if organisations and services were better co-ordinated around the needs of people who require support from different health and social care professionals. Efforts to realise these potential savings need to be redoubled, and the following four approaches should help the NHS to do this.

First, while there have been efforts to support NHS organisations to meet their productivity challenge, there is a need to provide a more co-ordinated national focus to collate and diffuse more productive approaches and innovations to NHS organisations. Furthermore, there is also a need for more support on the ground to help NHS organisations and staff adopt new, more productive practices and better ways of meeting patients’ needs. Most importantly, this should include helping trusts to develop their own capabilities in service improvement and the redesign of clinical care.

Second, there is a need for more sophisticated approaches to devising and using incentives to encourage improvements in productivity. Most obviously, the across-the-board real reductions in the Payment by Results tariff as a way of incentivising trusts to reduce costs should be tailored to reflect variations in trusts’ productive capacity. This will not be easy, and will require more knowledge about each trust.

An indication of the sort of variation in efficiency that exists is evident from the reference cost index – a cost-weighted activity measure that varied by +/- 37 per cent across all providers in England in 2012/13 (Department of Health 2013c). Moving beyond the implicit assumption that all NHS organisations have an equal capacity to meet a single efficiency target should then allow trusts to set more realistic goals. Suggestions by Monitor and NHS England that they may consider varying the efficiency factor used to deflate tariff prices are therefore welcome (Monitor and NHS England 2014).

Different incentives are also needed to support the emergence of integrated models of care. As we argued in a previous report (Appleby et al 2012), a blend of payment systems must be used to enable the NHS and its partners deliver their objectives. In the case of integrated care this involves moving beyond Payment by Results to the
use of capitated budgets, which create incentives for providers to work together to improve outcomes and release resources. Development work on capitated budgets now needs to be accelerated, with NHS organisations being given permission to test out different approaches such as population-based budgets, disease-based budgets and year-of-care tariffs.

Third, part of the next productivity phase will increasingly involve changes that affect more than one organisation, which could see ‘winners’ and ‘losers’ in organisational terms. In such circumstances, and with the greater autonomy that NHS providers have gained over the years, it could become difficult to make certain changes happen, even if they would be in the interests of patients and the NHS collectively. As we have noted in relation to London’s health economy, there is a need to find ways and means by which health economy or region-wide service changes can be planned and progressed (Appleby et al 2011). This would need collective action from national organisations – Monitor, the TDA and NHS England – but also from local groups such as academic health sciences networks (Ham et al 2013).

Lastly, though there is some evidence of greater clinical engagement in improving efficiency in the six trusts, there needs to be a renewed effort to encourage clinicians to identify and lead change. This would provide multiple benefits, whether in reducing the unwarranted variations that exist within the health service, in identifying and implementing greater innovation in clinical delivery and, of course, in ensuring that improving patient outcomes remains at the heart of the search for greater efficiency.

The reason for emphasising the need for greater clinical engagement and leadership is that most decisions on how NHS resources are used to treat patients are taken by doctors, nurses and other frontline staff. These decisions commit resources through prescribing of drugs, ordering of tests, referrals to specialists, and admissions to hospitals. Using available funding more efficiently therefore requires providing support to clinicians to review practice patterns in order to reduce waste and unwarranted variations in care.

There is much to be learned in this respect from high-performing health care organisations, both in the NHS and in other countries (Ham et al 2013). The experience of these organisations is that high-quality care often costs less, and acting on this insight must be a high priority for the NHS in England in future.
The challenge is that this takes time and typically results from a commitment over 10 years or more. It is in this area that much more needs to be done to strengthen capabilities in the NHS to enable clinical leaders and managers to bring about long overdue improvements in care.

Many of the required changes are complex and involve multiple organisations and agencies. As section 6 set out, the service will require sufficient time to be able to engage and plan effectively, and this is likely to take months rather than weeks. Setting a timetable for local areas to develop their plans ready for implementation after the general election would certainly be challenging, but is vastly more realistic than expecting them to complete implementation by the general election – as the current timetable effectively demands. A critical element in this work is engaging with local communities and securing the support of local and national politicians. This will not be easy and is all the more reason to start planning now ready for implementation in the second half of 2015.

**Additional funding**

While we acknowledge the scope for further improvements in productivity in the NHS, given the time to plan and engage the public and politicians with the complexities of changes needed, we are also clear that the NHS and social care services need more money. In part this is to help unlock quality and cost improvements that increasingly require upfront investment and finance for double running, and, longer term, it is to realise the aspirations of the public for the sort of health service they would want to meet their health care needs. The current funding for the NHS and social care does not provide the opportunity to meet these upfront costs.

In the short to medium term, it is critical that new money does not simply become a support fund for existing services and structures. Rather, it should be an explicit investment to finance new care models in primary and community settings, and to help the hospital sector make the concomitant transition. This would mean the creation of a health and social care transformation fund, which would be used to cover the double-running costs involved in establishing new services ahead of releasing resources from existing models of care. A fund of this kind would be a step towards the more radical reform of health and social care funding and entitlements proposed in the interim report of the Barker Commission (Commission on the Future of Health and Social Care in England 2014).
Such a fund would be used for a number of purposes, including to establish integrated health and social care teams in the community that would work closely with general practices to support people in their homes and over time reduce inappropriate use of hospital services. These teams could also support early discharge from hospitals to help reduce both lengths of stay and hospital capacity. The fund could also be used to develop palliative care services across hospitals and the community to support more people to die at home or another place of their choice rather than hospital. The costs of reconfiguring hospital services would also be a call on the fund, recognising, from experience in south London and Mid Staffordshire, that major changes in the location of hospital services often require substantial upfront investment before resources can be released for other purposes.

Some form of transparent support funding is also likely to be needed in view of the growing number of providers that are unable to balance their budgets. This needs to be separate from the health and social care transformation fund and must be used to maintain existing services while new models of care are implemented. In the absence of transparent support funding, the NHS will drift into a difficult time of unplanned deficits, undeliverable savings plans, and threats to the quality of care. The risks of this in an election year are all too apparent.

At the end of this, the likelihood is that HM Treasury will still have to pick up the bill, but will also be trapped in paying for unsustainable organisations in a system that has lost financial discipline. Our assessment is that many organisations will need additional support in 2014/15 and 2015/16. The choice is whether this is planned and managed as part of a wider programme alongside transformational change, or is provided after the event when patient care and staff morale will both have suffered.

Longer term, the approach to a more sustained and sustainable settlement for the NHS needs to revisit the thinking and evidence that supported Sir Derek Wanless’s 2002 projections for health care spending (Wanless 2002). Even on Wanless’s ‘fully engaged’ scenario, which required least additional investment, he suggested NHS spending should reach around 9.4 per cent of GDP by 2022 – this is over 50 per cent more than would be the case under NHS England’s current funding assumptions. If the NHS were to reach this ‘fully engaged’ level of spending by 2022 from its current funding position, it would require additional funding over and above inflation of around £5 billion for each year from 2014/15. Similar estimates have been reported.
by others (cf Campbell 2014). However, all such figures now need to be revisited in the light of the new models of care around which the future health and care system should be designed.

**In summary**

The assessment offered in this paper draws on our research into six NHS trusts and on our quarterly monitoring reports to paint a sobering but realistic picture of the state of NHS finances and performance today. We recognise that the call for more funding alongside acknowledgement of the scope for further improvements in productivity could be seen as contradictory, but for the reasons set out above we do not believe this to be the case. To persist in the belief that the NHS (and social care) will be ‘let off the hook’ of making further productivity improvements if additional funding is provided – as politicians sometimes argue – is a high-risk strategy that is likely to have substantial negative consequences. It also ignores the huge effort being made to continue delivering these improvements.

The question therefore is not whether the NHS will run out of money but when, and how this can be avoided. In a context in which organisations with a history of good performance are struggling to cope, there is every prospect that problems that have so far been found in a small number of providers will become much more common. The risk of contagion – of the NHS reaching a tipping point where only a minority of organisations are able to sustain acceptable levels of performance – is a clear and present danger, accentuated by the pressures facing social care. We hope our report will raise awareness of this risk and indicate how it can be avoided through planning and the targeted use of additional funding.
The NHS productivity challenge

References


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Acknowledgements

We would like to thank all those at the six trusts and the various national bodies who gave their time to talk to us about the issues addressed in this report.
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The health and social care system in England is rapidly heading towards a major funding crisis. With an unprecedented slowdown in the growth of NHS funding since 2010 and with 2015/16 cited as a possible ‘cliff edge’ for the NHS, how can the health and social care system continue to provide affordable, high-quality care?

The NHS productivity challenge gives an overview of the national picture, both currently and over the past five years, and considers how, in the light of current funding pressures, providers can maximise productivity gains. The authors then discuss how six trusts - which vary in size, the type of service they provide, and their foundation trust status - are responding to the productivity challenge.

The report concludes that the health and social care system needs:

- more time - to engage in and plan effectively for the complex changes needed to improve
- more money - transformational funding to enable services to invest in new models of care in primary and community settings and short-term funding to support organisations in difficulty
- a more co-ordinated focus on collating successful productivity approaches and innovations and sharing them between NHS organisations
- more sophisticated approaches towards incentives to encourage improvements in productivity.

To ensure the NHS continues to provide a high-quality, sustainable service in the long term, local health economies need to think collectively about how to provide services within budget; politicians and the public need to acknowledge that this means major changes in where and how services are provided; and there needs to be a renewed effort to encourage clinicians to identify and lead change.