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**Department of Health**

# Management of NHS hospital productivity

# Summary

**1** In 2000 the Department of Health (Department) published the NHS Plan, a ten-year vision for reforming the NHS. The Plan argued that the NHS was failing to deliver because it had been underfunded, and set out to substantially increase funding in order to meet public expectations for: more, better paid staff using new ways of working; reduced waiting times; high quality care centred on patients; and improvements in local healthcare buildings. The Plan set out the systemic problems of the NHS, such as a lack of national standards and clear incentives and levers to improve performance, and also outlined the expectation that the NHS would continuously improve its efficiency, productivity and performance.

**2** NHS productivity is the measure that describes the relationship between inputs (such as staff and clinical supplies) and outputs (healthcare activity adjusted for quality) (**Figure 1**). In the NHS the term 'productivity' is widely used but often confused with other terms like economy, efficiency and value for money. Between 2000-01 and 2010-11, NHS expenditure will have increased by 70 per cent to £102 billion from £60 billion. The Department explained that much of the additional funding was intended to be used to meet the key public expectations and would not initially be matched by a commensurate increase in outputs.

**3** The Department's implementation of the NHS Plan has comprised three stages. The first was about building workforce, physical capacity and tackling issues of major concern to the public, such as access. Between 2004 and 2007, the Department introduced levers to enable reform, such as: choice, more freedom for providers, and better financial systems. In the final stage, from around 2008, the NHS was expected to use the additional capacity and the various levers to transform services to deliver high quality care for patients and value for money for the taxpayer.

**4** As over 40 per cent of NHS expenditure is accounted for by acute NHS and foundation hospital trusts (hospitals), improving hospital performance is central to achieving the expectations in the NHS Plan. The Department expected to improve the quality and efficiency of hospital care through: national performance targets to reduce waiting times and improve patient outcomes; national pay contracts involving above inflation pay increases designed, in part, to deliver productivity improvements of between 1.1 and 1.5 per cent a year; and the commissioning of hospital services through a national tariff system called Payment by Results.

5 The National Audit Office has published two reports on pay modernisation in hospitals, which included assessments of progress in meeting the productivity improvements. Our 2007 report on the new consultants' contract concluded that it was too early to tell whether productivity had improved. Our 2009 report on Agenda for Change highlighted that the Department had not carried out a specific exercise to demonstrate the productivity improvements and hospitals had not attempted to measure the resulting efficiency or productivity gains.

6 In November 2009, the NHS Chief Executive announced that, in response to the economic downturn and increasing demand for healthcare, the NHS and Department would need to deliver between £15 and 20 billion of efficiency savings per year by 2013-14 to be reinvested in health services. Around 40 per cent of these savings are expected to come from driving efficiency in hospitals. To support NHS organisations to improve quality of care while making these savings, the NHS Chief Executive also launched the national *Quality, Innovation, Productivity and Prevention* (QIPP) challenge.

7 This report examines how productivity in hospitals in England has changed over the last ten years, and the effectiveness of the Department's initiatives in driving productivity in hospitals. It also assesses how well placed the NHS is to deliver improvements in hospital productivity. Our evaluation is based on both the outcome – whether hospital productivity has changed (Part One) – and the implementation of the national initiatives that the Department expected to influence productivity (Part Two). Part Three examines the variations in hospitals' efficiency and approaches to productivity, to provide an indication of the scope for improvement. The report concludes with a discussion of the risks associated in delivering the QIPP challenge (Part Four). In this report, we look at both the factors affecting the Office for National Statistics measure of productivity and also broader elements of productivity, such as staff pay, which significantly affect the value for money of expenditure in hospitals. Our methodology is summarised in Appendix One. A more detailed methodology is on our website at [www.nao.org.uk/NHS-Productivity-2010](http://www.nao.org.uk/NHS-Productivity-2010).

## Key findings

The most authoritative national measure shows a decline in hospital productivity

8 **Figures produced by the Office for National Statistics estimate that, since 2000, total UK NHS productivity decreased by an average of 0.2 per cent per year; however, productivity in hospitals fell by around 1.4 per cent per year.** Over the last ten years, in line with the NHS Plan, significantly more money has been spent in hospitals. This increased funding has paid for more, better paid staff, and extra goods and services. Hospital activity – adjusted to reflect improvements in the quality of care – has not risen at the same rate as these additional resources, indicating that productivity has declined. However, the adjustments for quality are challenging and remain at an early stage of development due largely to the lack of data on health gains. Also, productivity might initially be expected to fall in periods of rapid input growth as any resulting increase in output may be slower to achieve.

The Department has focused on delivering the Government's ambition for improved performance within an agreed budget

**9 The increased money going into NHS hospitals has helped deliver more, better paid staff, reduced waiting times, higher quality care and improved hospital facilities.** Until the end of 2009, the Department has focused on delivering national priorities – through a combination of targets, performance management, incentives and guidance – within a fixed budget. This has resulted in improvements in, for example: inpatient median waiting times from 12.9 weeks in 2000 to 4.3 weeks in 2010; outpatient waiting times from 4.8 weeks in 2005 to 2.7 weeks in 2010; and the percentage of patients treated in A&E within four hours from 78 per cent in 2003 to 98 per cent in 2009. The Department argues that it has not performance managed measures of productivity directly. It has focused on costing expenditure pressures and performance targets, and requiring the NHS to deliver these within an agreed budget. The Department has not set specific targets for productivity but built in expectations for efficiency improvements into the levels of funding provided to Primary Care Trusts and hospitals.

**10 NHS pay contracts implemented nationally since 2003 have increased hospital costs and are not always used effectively to drive productivity.** Since we reported on the Consultant Contract and Agenda for Change, we have not been able to identify the widespread cultural shift in hospitals that we suggested was needed if the contracts were to be used to optimise productivity. The Department intended, for example, that consultant job planning would give hospital managers the opportunity to align consultant activity with hospital objectives; however, few hospitals have used job planning or staff appraisal systems to demonstrably improve productivity. Data show that there have been improvements in the trends for measures of labour productivity since the contracts were introduced, and the Department believes there is a plausible link between these improvements and the introduction of the contracts.

**11 The Department's process of setting prices under the Payment by Results system has promoted some efficient practice.** Recent evidence suggests that national tariffs have driven reductions in length of stay and an increasing proportion of operations undertaken as day surgeries. However, the Department's own hospital-level efficiency index shows substantial variation, and the tariff adjustment to account for assumed efficiency improvements is offset by uplifts to account for inflationary cost pressures, such as those resulting from the national pay contracts.

**12 There have been delays in rolling out the national tariff to all hospital activity and the quality of information used to pay hospitals is variable.** The original intention was that by 2008 all commissioning would use national tariffs; however, in 2010 around 40 per cent of hospitals' income is not covered by Payment by Results. Reports by the Audit Commission highlighted significant variation in hospitals' cost and activity data, which are used for setting and applying the tariff. In 2010, the Department introduced the concept of best practice tariffs (paying hospitals for evidence based care), piloted on four common procedures with a view to expanding its use in future.

**13 Other Departmental initiatives to improve productivity, based on sharing innovation and good practice, have yet to be fully evaluated and remain insufficiently used within and across hospitals.** The Department has sponsored the development and sharing of good practice, for example through the NHS Institute for Innovation and Improvement (NHS Institute). There are many examples where hospitals have implemented good practice to help improve their productivity, such as: electronic job planning; “Productive Ward” and “Productive Operating Theatre” (part of the NHS Institute’s ‘productive’ series); and initiatives to help redesign patient pathways. The implementation of good practice, however, is seldom comprehensive or consistent within a whole hospital and innovation is often not adopted because of a lack of evidence or scepticism about the costs and benefits.

Hospitals have not focused sufficiently on driving productivity

**14 The hospital managers we spoke to say they have primarily concentrated on meeting national performance targets whilst maintaining financial balance, and not specifically on optimising productivity.** The national focus on quality of care has meant that clinical staff have not been performance-managed with regard to the cost or efficiency of their activities. We found that hospital managers do not always bring performance and financial data together in a way that enables them to fully understand the relationship between the money they spend and the care they provide.

**15 There are substantial variations in hospital costs and activity, but not all hospitals use this information effectively to identify efficiency savings.** Variations in performance exist in other health care systems and in private sector companies. The Department is aware of the variations in hospital costs and that they indicate potential efficiencies, with reducing variation one of the sources of savings to meet the QIPP challenge. However, we found that these variations have not been systematically interrogated by senior hospital managers or local commissioners; as a result there is limited consideration of the extent to which a hospital is delivering value for money in comparison to its peers. The NHS Institute has estimated that the scale of productivity opportunity in hospitals through the reduction of variations in some key hospital activities is around £4.6 billion. Our analysis indicates that if all hospitals performed at the level of the top 25 per cent in respect of staff costs, use of estate, control of emergency admissions and bed management, the NHS could save around £1.6 billion a year.

**16 Year-on-year increases in activity have enabled hospitals to increase their income rather than drive efficiencies and local savings.** In 2008-09 funding from Primary Care Trusts for acute hospital services rose by 7.3 per cent compared to the uplift in the national tariff of 2.3 per cent. Increased activity coupled with improved counting and coding of activity paid at the national tariff may have helped many hospitals to maintain financial balance. There are unexplained variations across England in the money spent by hospitals to provide the same treatments, and hospitals we visited did not understand why their costs were higher or lower than the average.

There are challenges to overcome if the NHS is to deliver £15 to 20 billion of efficiency savings

**17 Some hospitals do not effectively control staff costs.** Some hospitals have been slow to adopt tighter controls either over managing staff vacancies and the use of temporary and agency staff or in adopting more efficient approaches to managing staff rotas. Some managers also reported that they felt unable to effectively use the provisions within the contract to control some costs, such as recurring clinical excellence awards.

**18 Given the unprecedented scale, there are risks to the delivery of the 2009-launched Quality Innovation Productivity and Prevention challenge and the expected efficiency savings required by March 2014.** This Department-led initiative required Strategic Health Authorities to develop regional efficiency plans by April 2010. Additional plans have been developed by 12 national work-streams. Primary Care Trusts have developed local plans but these have had limited input from the hospitals who are expected to deliver the bulk of the savings. The timetable for implementation is operating alongside the schedule for transition to the new NHS structures, announced in the July 2010 White Paper. There is a risk that Strategic Health Authorities and Primary Care Trusts, which are responsible for driving the delivery of the efficiency savings, will be distracted by their planned closure by March 2013.

## Conclusion on value for money

**19** The past decade has seen consistent, significant increases in hospital funding. This was designed, in part, to deliver more productive behaviour. However, hospital productivity has fallen. The Department's design and the NHS's implementation of national initiatives were predominantly focused on increasing capacity, quality and outcomes of healthcare whilst maintaining financial balance, rather than on realising improvements in productivity. Whilst hospitals have used their increased resources to deliver many of the national priorities, hospitals need to provide more leadership, management and clinical engagement to optimise the use of additional resources and deliver value for money.

## Recommendations

**20** The July 2010 Health White Paper, *Equity and Excellence: Liberating the NHS*, proposes a number of significant reforms. Our recommendations highlight the issues that the Department should consider in these reforms to help improve productivity from publicly funded hospitals. Once the reforms are in place, we will agree with the Department the responsibility and timeline for implementing the recommendations.

**a Hospitals do not make best use of the levers in the national contracts for staff.** Any future national pay contracts should set out the expected productivity gains and efficiency savings that organisations should be obtaining, clearly linking these to the aspects of the contract that are intended to be used to realise the improvements.

- b** **Although the Department built some efficiency targets into the Payment by Results framework, these are not aligned to the level of efficiencies now required.** The national tariffs and associated business rules need to be aligned with the expected efficiency gains and in a way that also promotes the take-up of productive behaviour.
- c** **The quality of some of the data underpinning hospital payments is variable.** The Audit Commission has agreed to review the accuracy of costing data in 2010, but there needs to be a long-term strategy for improving, and providing assurance on, the validity of hospital cost (reference costs) and coding of activity data (Hospital Episode Statistics).
- d** **The Department has not adequately evaluated the cost of national initiatives after their implementation.** Major national initiatives should include a realistic assessment of the costs and benefits, with progress against these expectations evaluated.
- e** **The current measures of NHS productivity cover the whole UK, and the quality adjustment is limited.** When producing productivity measures, new data on quality such as Patient Reported Outcome Measures (PROMs) should be considered. The current UK measure should, if possible, be disaggregated for the devolved administrations and by type of healthcare service.