

Unclassified

ECO/WKP(2009)58

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

17-Jul-2009

English - Or. English

ECONOMICS DEPARTMENT

ECO/WKP(2009)58
Unclassified

THE ENGLISH NATIONAL HEALTH SERVICE: AN ECONOMIC HEALTH CHECK

ECONOMICS DEPARTMENT WORKING PAPER No. 716

By
Peter Smith and Maria Goddard

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JT03268044

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ABSTRACT/RÉSUMÉ

The English National Health Service: an economic health check

The government's health reform programme since 2000 has covered many aspects of the organisation of health care and was accompanied by a sizeable increase in spending on healthcare. Many of these reforms have the potential to improve the efficiency and responsiveness of the health care system and ultimately health outcomes, although it is too early to make definitive judgements on their effectiveness. This chapter provides an overview of the organisation and financing of the National Health Service, reviews its performance, assesses the reforms since the start of the decade and provides recommendations for further development. This Working Paper relates to the 2009 Economic Survey of the United Kingdom. ([www.oecd.org/eco/surveys/United Kingdom](http://www.oecd.org/eco/surveys/United%20Kingdom))

JEL classification: H51; I12; O57.

Key words: English health care system; health care reform; health outcomes; health expenditure.

Système national de santé anglais : bilan de santé économique

Le programme de réformes engagé par le gouvernement depuis 2000 dans le secteur de la santé couvre de nombreux aspects de l'organisation des soins et services de santé et il s'est accompagné d'une augmentation notable des dépenses consacrées à la santé. Nombre de ces réformes sont de nature à améliorer l'efficacité et la réactivité du système de santé et, en fin de compte, les résultats sur le plan de la santé, bien qu'il soit trop tôt pour porter des jugements définitifs sur leur efficacité. Ce chapitre donne une vue d'ensemble de l'organisation et du financement du National Health Service ; il en examine les performances et évalue les réformes conduites depuis le début de la décennie, et formule des recommandations pour la poursuite des réformes. Ce document de travail se rapporte à *l'Étude économique de l'OCDE de le Royaume-Uni 2009* (www.oecd.org/eco/etudes/Royaume-Uni)

Classification JEL : H51; I12; O57.

Mots clés : Système de soins de santé anglais ; réforme du système de soins de santé ; résultats sur le plan de la santé ; dépenses de santé.

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TABLE OF CONTENTS

The English National Health Service: an economic health check	5
The English health care system	5
Financing	5
Organisation.....	6
Governance and regulation	7
Health system performance	9
Population health	9
Clinical outcomes	9
Responsiveness	11
Inequalities.....	13
Spending and productivity.....	13
Health care reforms	16
Commissioning	16
Patient choice.....	18
Plurality in provision	19
Payment by Results.....	21
Workforce contracts.....	22
Conclusions and recommendations	26
Bibliography	29

Tables

1. Indicators of clinical outcomes.....	10
2. Health care quality indicators.....	12
3. Trends in the NHS workforce in England	14
4. The new General Medical Services contract	24

Figures

1. Financial flows in the English health care system.....	6
2. Selected clinical indicators from the quality and outcomes framework.....	11
3. Inpatient waiting times	12
4. Expenditure on health.....	14
5. Health care output, inputs and productivity	15

Boxes

Box 1. Recommendations concerning health care reform..... 27

THE ENGLISH NATIONAL HEALTH SERVICE: AN ECONOMIC HEALTH CHECK

By Peter Smith and Maria Goddard¹

The English health care system

1. Health care is mainly provided by a centralised public system, the National Health Service (NHS).² The bulk of its funding comes from general taxation and it is supervised by the Department of Health. As part of the Spending Review process, Parliament allocates Department of Health budgets over a three-year period, within which the Department is expected to meet all its expenditure needs, including expenditure on capital, training and research. In addition to the three-year planning framework, annual cash limits for the various parts of the NHS are rigorously enforced.

2. The English health care system has traditionally spent relatively little by international comparison. However, during the 1990s it became clear that the NHS was performing poorly on some health outcomes and in terms of responsiveness (for example, waiting times were long). These weaknesses became a central area of political concern, and in 2000 the government pledged to increase spending (then 7.2% of GDP) to the European average (8% of gross domestic product at that time) over the next five years (Ferriman, 2000).

3. This pledge was conditional on the NHS agreeing to certain reforms, designed to improve clinical quality and responsiveness. The Department of Health developed the NHS Plan (Department of Health, 2000), which set over 400 detailed targets that the NHS was expected to secure over a ten-year period in response to its increased funding. Much of the Department's energy since then has been devoted to implementing the Plan. The recent *Next Stage* review has set out a strategy for further improving quality and responsiveness within the context of the reforms enacted since 2000 (Department of Health, 2008c).

Financing

4. The NHS provides the bulk of health care in England. Although the private health care sector is gaining in importance, private spending is small in international comparison. Only about 11% of the UK

1. Professor Peter Smith and Professor Maria Goddard work at the Center for Health Economics at the University of York. The paper was originally produced for the 2009 OECD *Economic Survey of the United Kingdom*, published in June 2009 under the authority of the Economic and Development Review Committee of the OECD. We should like to thank, without implicating, Andrew Dean, Robert Ford, Peter Hoeller and Petar Vujanovic for helpful comments. We are also grateful to Joseph Chien for technical assistance and Deirdre Claassen for secretarial assistance.

2. Increased devolution within the United Kingdom has led to some divergence in the health systems of the four constituent countries. This chapter examines developments only in the English health system, although some data necessarily refer to the whole of the United Kingdom. The English system covers 84% of the total population of the United Kingdom.

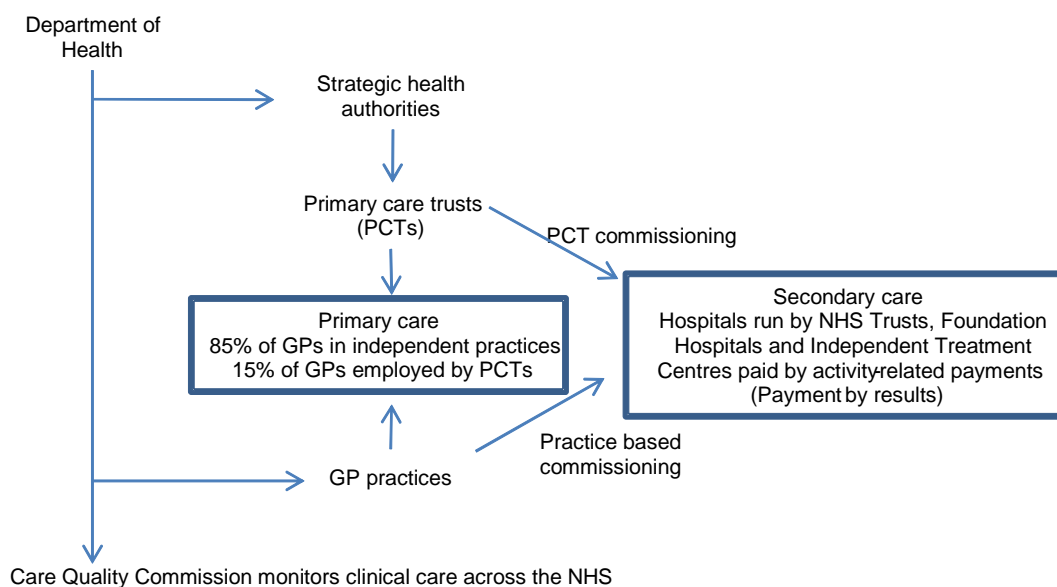
population is covered by private health insurance, purchased either by employers or individuals. In many cases, private insurance has been stimulated mainly by the desire to avoid long NHS waiting times (Office of Health Economics, 2008). There is little reliance on out of pocket expenditure to finance health care. User fees have historically been very low, being restricted mainly to charges for some prescription medicines from which, however, many citizens are exempt. In 2004, only 8.9% of prescriptions were paid at the full charge of £ 6.20 (House of Commons Health Committee, 2006). Dental charges add to out of pocket expenditure. In total, however, user charges accounted for only 1.3% of NHS revenue. UK residents enjoy thus an especially high level of financial protection from the consequences of illness.

Organisation

5. The NHS is organised on a geographical basis. The national ministry has two broad supervisory functions: setting national standards and allocating finance to regional entities. It supervises local health areas through ten Strategic Health Authorities (SHAs), each covering a population of about 5 million. The SHAs ensure that health care within its region meets the ministry's performance criteria, and that financial limits are not breached. SHAs therefore have a broad monitoring role on behalf of the ministry.

6. The principal local NHS organisations, responsible for organising local health systems, are 152 Primary Care Trusts (PCTs), each covering populations of about 400 000. The PCTs have three major responsibilities: organising primary care, mainly in the form of general practice; purchasing other health care from NHS and other providers; and organising local public health initiatives. PCTs are given fixed budgets by the Department of Health, from which they purchase health care for their population, including primary and community care, hospital care, pharmaceuticals and public health interventions (Figure 1). The budgets are allocated largely according to a national capitation formula, adjusted for local demographic and socio-economic characteristics as well as for variations in local labour and capital costs. PCTs are expected to contain their annual expenditure within the budgetary limit.

Figure 1. Financial flows in the English health care system



Source: NHS.

7. PCTs organise primary care in the form of local general practitioner (GP) practices, which are an important feature of the NHS. Every citizen must be registered with a GP practice and, except in emergencies, cannot secure access to secondary NHS care without a referral by the GP to a specialist. GPs

therefore perform an important gate-keeping role, and the restraint exercised by GPs in making such referrals has been an important mechanism to contain costs.

8. There are two broad mechanisms for funding GPs. 85% of GPs are independent contractors, with two thirds of those practicing under the terms of the national General Medical Service (GMS) contract negotiated between the Department of Health and the doctors' union (the British Medical Association). This traditional GP contract specifies detailed terms and conditions for GP remuneration, including capitation payments for basic services, such as daily clinics, and additional payments for extra services, and a major bonus scheme for securing higher quality primary care which accounts on average for about 25% of practice income. The other 15% of GPs are salaried employees of the local PCT.

9. PCTs purchase secondary and tertiary care from a local market of public, private and not-for-profit sector providers. In the hospital sector, providers have traditionally been organised as NHS Trusts. These are public organisations, with boards appointed by an independent commission on behalf of the national minister. However, they are independent from the local PCT and compete for business from local PCTs. An increasing number of NHS Trusts are being converted into Foundation Trusts, once they satisfy certain performance criteria, such as good financial management and low waiting times. Like NHS Trusts, Foundation Trusts compete for local NHS business. Unlike other NHS Trusts, they are not directly accountable to the health minister, but are regulated by an independent financial regulator known as Monitor.

10. The contracts negotiated with local PCTs are the major source of funding for NHS and Foundation Trusts. They mainly take the form of activity-related payments based on diagnosis-related group (DRG) categories. The payment mechanisms remunerate providers according to a fixed national tariff of case payments, and are known as Payment by Results (PbR). Associated with the PbR system is an increased emphasis on patient choice. Once a GP has decided that a patient requires a referral to a hospital or other specialist service, the patient is offered a choice of providers.

11. There has recently been a major policy drive to increase the role of private sector provision, to increase competitive pressures, expand patient choice and reduce waiting times by creating extra capacity. A notable development is the introduction of independent treatment centres, medical organisations that provide routine diagnostic and surgery procedures for day-case and short-stay patients.

12. In recent years, a massive investment in information technology has been undertaken, known as the 'Connecting for Health' initiative. It coordinates a number of important initiatives to make better use of IT within the health system and includes the development of a comprehensive personal electronic health record. The main intended benefits of the programme are improved patient outcomes and responsiveness and it is also expected to yield major efficiency gains in the form of better central procurement of IT, and by reducing duplication and error throughout the system. This programme has been subject to intense debate. In particular, the implementation of the patient record system has been delayed several times and is now running four years late. Some other aspects of the programme (such as "Choose and Book" for making hospital appointments on-line) have been largely delivered (National Audit Office, 2006a).

Governance and regulation

13. A substantial element of central control by the Department of Health over the NHS is an inevitable feature of a tax-funded system, in which policy and spending decisions are made by ministers accountable to Parliament. However, responsibility and power have been devolved within the national framework. The recent "Next Stage" review of the NHS sets out a vision in which the role of the centre is to support, rather than to direct, local organisations: "...the role of the Department of Health is to enable the visions created by the local NHS to become a reality, whilst ensuring that universality, minimum standards

and entitlements are retained and strengthened” (Department of Health, 2008c). The intention is to move from a centrally directed health system to a regulated system in which certain core standards and guarantees are protected, but otherwise local decision-makers are given considerable local freedom.

14. Devolution has given rise to tensions. If local commissioners (PCTs) are to have some control over what services they purchase, some local variations in healthcare provision are likely to emerge, creating what has become known as a “postcode lottery”. The Department of Health has stated that “the NHS should be universal, but that does not mean that it should be uniform. Clear minimum standards and entitlements will exist, but not a one size fits all model” (Department of Health, 2008c). Furthermore, PCTs do have a statutory obligation to consult with local authorities, and to involve patients and the public in their decisions. However, PCT boards are not appointed through local democratic processes, and there remains a question over whether local populations will feel that PCTs have the democratic legitimacy to make substantive health-policy decisions on behalf of their communities.

15. An example of such tensions has been a recent debate about the degree to which NHS patients should be entitled to “top-up” their NHS treatment by purchasing privately some additional treatments (in particular, some expensive ‘end of life’ cancer drugs) that are currently not available within the NHS. The option to purchase treatments privately has always been a feature of the health system, but some PCTs have insisted that patients doing so lose their entitlement to NHS treatment, and must therefore receive all of their care privately. The debate concerns whether such top-ups undermine the notion of fairness on which the NHS is predicated, or whether they are just an inevitable or even desirable consequence of promoting patient choice and greater patient control over treatment. The associated consultation exercise concluded that patients should be allowed to pay top-ups whilst retaining their entitlement to NHS treatment. This debate has also highlighted important methodological issues that need to be addressed by the National Institute for Health and Clinical Excellence (NICE), such as the valuation of end of life treatments.

16. A number of regulators ensure that minimum standards are secured. The Department of Health provides guidance on best clinical practice, in the form of National Service Frameworks for broad disease areas. It has also set targets and ‘core standards’ that all relevant organisations are expected to meet. The NICE creates mandatory guidance on specific treatments that must be provided by all PCTs, and more general advisory guidelines that are not mandatory. It is not known what discretionary PCT services are driven out by mandatory NICE guidance. Given the increased devolution of powers to PCTs, a central question for NICE in the future will therefore be the extent to which adoption of its guidance should continue to be obligatory (House of Commons Health Committee, 2008a).

17. The prime regulator of quality is the Care Quality Commission (CQC) (until March 2009, the Healthcare Commission), which registers all health care providers (private and NHS) and monitors the clinical performance of all NHS organisations, including Foundation Trusts. The approach to regulation taken by the Healthcare Commission has been termed “information-led, risk-based regulation”. The aim has been to utilise the vast amount of data already collected in the NHS and to focus on the establishment of benchmarks and good practice against which practice may vary depending on circumstances, but not fall below certain standards (Kennedy, 2008). A particularly important development has been the publication of annual performance cards by the Commission for all NHS organisations, summarizing overall performance on a four point scale. These have been influential in focusing managerial attention on core NHS targets. Other important regulators include the Audit Commission (which reports on the financial management of all NHS organizations), and Monitor (the regulator of Foundation Trusts, focusing mainly on financial performance). Finally, a new NHS Co-operation and Competition Panel was set up in January 2009. It advises the Department of Health on whether local healthcare markets are operating fairly and efficiently.

Health system performance

Population health

18. Variations in population health are routinely used to judge health system performance, although this practice is subject to much debate. Population health is conventionally measured by various mortality-based indices, such as life expectancy at birth and mortality rates standardised for age and sex. As elsewhere, the UK has experienced rapid improvements in recent years. In 2005, life expectancy was 77.1 years for males, which is close to the OECD average, but the figure for females was 81.1 years, which is well below the OECD average.

19. The UK mortality rate has been improving rapidly in recent years, but tends to be close to the OECD average or somewhat worse, depending on the indicator used. Standardised mortality rates can also be examined at the disease level. Cancer mortality rates, for instance, have been improving, but remain above the OECD median. Rates for circulatory disease show a faster improvement in all countries, with the UK at about the median.

20. To adjust for the prevalence of long-standing illness and disability, the World Health Organisation publishes data for health-adjusted life expectancy (HALE), which provides a summary measure for the number of years expected to be lived in “full health”. On this basis, the UK is close to the OECD average. Similarly, amongst 18 OECD countries collecting trends in self-reported health status in 2005, the UK is ranked ninth. The proportion rating their health as ‘good’ is 75%, a figure that has remained stable over several years.

Clinical outcomes

21. There has been a long-standing concern that the quality of the clinical outcomes achieved by the NHS is below the OECD average. Table 1 suggests that performance is at or slightly below the OECD average.³ The excellent reported in-hospital results for stroke regrettably have not yet been converted into good total mortality rates from stroke.

3. Comparability is sometimes limited because of different reporting timeframes.

Table 1. Indicators of clinical outcomes

Indicator	OECD sample average	United Kingdom
In-hospital case fatality rates within 30 days after admission for acute myocardial infarction (%)	10.2	11.8
In-hospital case fatality rates following stroke (%)	10.1	5.5
Colorectal cancer five-year relative survival rates, men and women combined (%)	58.9	57.0
Breast cancer five-year relative survival rates (%)	83.6	80.0
Cervical cancer five-year relative survival rates (%)	71.6	72.0

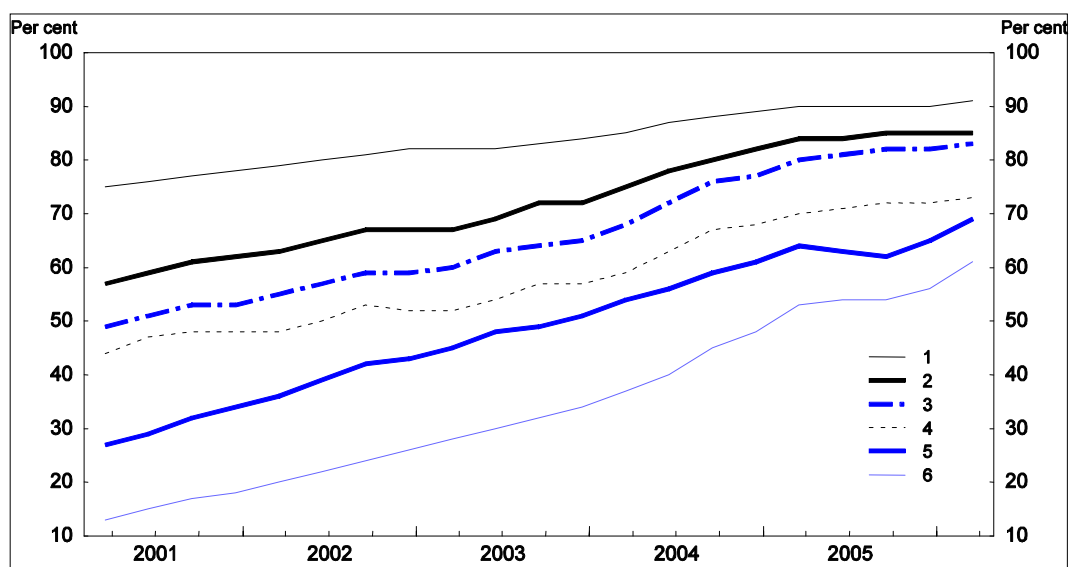
Source: OECD (2007), *Health at a Glance 2007*, Paris: OECD.

22. The Eurocare project has examined trends in cancer mortality in selected countries, indicating improving trends everywhere, but continued higher rates in the UK. It found for all malignancies a survival rate of 44.8% for men and 52.7% for women, compared with averages of 66.3% and 62.9% across all European registries. There may be reasons other than quality of care for such results, such as variations in the incidence and type of cancers. However, data for a range of individual cancers tend to corroborate evidence that UK cancer outcomes have lagged behind those found in many European counterparts, notably in Scandinavia and central Europe. This could be due to the late stage of diagnosis in the United Kingdom, implying a health system weakness.

23. Improvements in the quality of GP care have been a notable feature of the health system. Figure 2 shows trends in six quality indicators, collected from those practices voluntarily enrolled in the QRESEARCH initiative over a six year period. A major quality improvement initiative, the Quality and Outcomes Framework (QOF) (reviewed below) was implemented in April 2004, in the middle of the period shown. Unfortunately, no baseline data were collected against which to measure the impact of the QOF. However, the QRESEARCH data and other research suggest that the QOF has had only a modest effect on the trends in GP quality, which were in any case already rapidly improving before implementation of this initiative.

Figure 2. Selected clinical indicators from the quality and outcomes framework

Proportion of eligible patients achieving the indicator



1. HBP4: Blood pressure recorded in last 9 months for patients with hypertension.
2. CHD6: Blood Pressure < 150/90 in last 15 months for patients with CHD.
3. STROKE6: BP < 150/90 in last 15 months for patients with stroke.
4. HBP5: Blood pressure < 150/90 in the last 9 months for patients with hypertension.
5. CHD8: Cholesterol < 5 mmol/l in last 15 months for patients with CHD.
6. STROKE8: Cholesterol < 5 mmol/l in the last 15 months for patients with stroke.

Source: QRESEARCH and the NHS Information Centre.

Responsiveness

24. Concerns remain that the NHS is still not sufficiently responsive to patient preferences. The government has recognised this weakness, and in 2004 set a target to “secure sustained annual national improvements in NHS patient experience by 2008, as measured by independently validated surveys, ensuring that individuals are fully involved in decisions about their healthcare, including choice of provider.” Progress has been measured by means of the annual National Patient Survey Programme. Results for the adult inpatient survey are summarised in Table 2, which tracks changes in patient-reported scores for five aspects of care. The results indicate a largely static picture, as there is little movement in any of the indicators. Similar results are found for primary care and mental health services (Department of Health, 2008g).

Table 2. Health care quality indicators

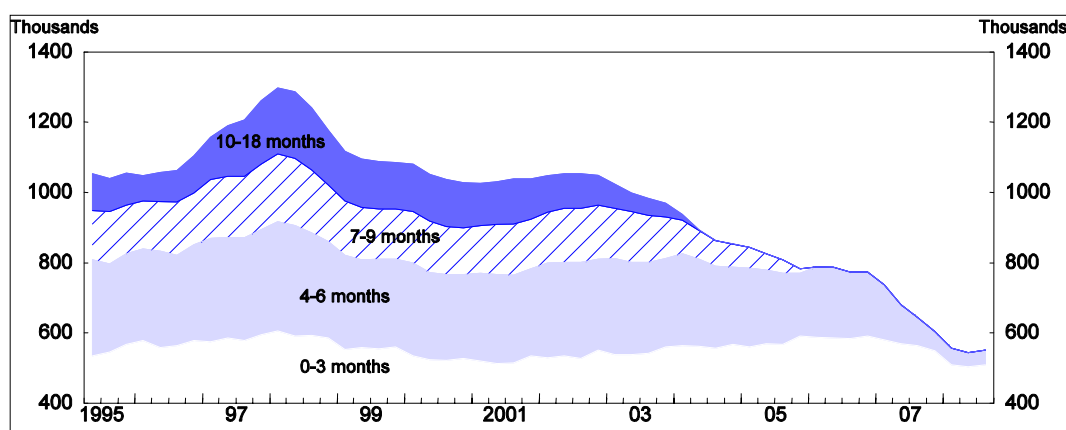
A higher score indicates better quality

	2001-02	2003-04	2005-06	2006-07 ²	2007-08
Access and waiting	82.1	83.5	84.9	84.8	83.8
Safe, high quality, coordinated care ¹	63.9	65.5	65.1	65.1	64.9
Better information, more choice ¹	67.2	67.9	67.9	67.3	66.7
Building closer relationships ¹	82.6	83.3	83.3	83.1	83.0
Clean, friendly, comfortable place to be	76.7	78.4	78.5	78.4	78.1
Overall	74.9	75.7	76.2	75.7	75.3

1. There were substantial changes in questions between 2001–02 and 2003–04. Scoring was changed to make results comparable across years.

Source: Department of Health (2008), National Patient Survey Programme.

25. Long waiting times for elective inpatient care have been a feature of the NHS since its formation in 1948. Since 2001 there has been a considerable effort to reduce long waiting times, driven by a strictly enforced system of waiting-time targets for individual hospital trusts. This has resulted in a marked improvement (Figure 3). All the very long waits have been eliminated, and recently the absolute numbers waiting have declined. However, this improvement in long waiting times has not materially affected the satisfaction scores reported above.

Figure 3. Inpatient waiting times

Source: Department of Health.

26. There is now a concerted effort to reduce the total wait from initial specialist referral by a GP to eventual treatment to a maximum of 18 weeks (Department of Health, 2008d). In August 2008, 90% of patients admitted to hospital for treatment had waited 18 weeks or less, compared to 56% a year earlier. Without question, NHS policy on long waiting times has been a major success over the period under review. However, as is to be expected with any high profile target-setting process, there have been reports of adverse consequences, including verified incidents of waiting list fraud and less readily verifiable reports of clinical quality being sacrificed in order to meet waiting time targets. Smith (2007) documents many of these adverse effects and the efforts that have been made to overcome them (such as careful external audit of waiting list data). However, gaming will always be a risk associated with such targets.

27. It is important to note that – whilst patient satisfaction levels have been broadly constant over the period under review – more general satisfaction levels with the NHS amongst the population as a whole have been rising steadily, and are currently at their highest level since 1984 (Appleby and Philips, 2009).

The highest satisfaction levels are for GPs and hospital outpatient services. Satisfaction with inpatient services has however fallen markedly, from 74% being ‘very’ or ‘quite’ satisfied in 1983 to 49% in 2008.

Inequalities

28. Inequalities in health outcomes affecting disadvantaged population groups have been a persistent concern since 1997, yet have proved very resistant to policy interventions. In 2001 the government set targets to reduce health inequalities as part of the Public Services Agreements. The overarching objective, set in 2003, was to reduce inequalities in health outcomes by 10% as measured by infant mortality and life expectancy at birth.

29. Progress was monitored by an independent reference group. In its final report the group noted that almost all the departmental actions due for delivery by the end of 2006 had been wholly or substantially achieved (Department of Health, 2008i). The inequality outcomes were however more equivocal. Comparing mortality figures for 2004–06 with those for 2003–05 there had been a further slight narrowing of the infant mortality gap; little change in the gap in male life expectancy; a widening of the gap in female life expectancy; a narrowing of inequalities in absolute terms in cancer and circulatory disease mortality, child road accident casualties and teenage conceptions; and a general reduction in the prevalence of risk factors in other areas, such as smoking, but no narrowing of the gap between social groups.

30. The inequalities strategy was refreshed in 2008 with the publication of *Health Inequalities: Progress and Next Steps* (Department of Health, 2008b). This reaffirms the commitment to reducing inequalities in health outcomes, and recognises the broader determinants of those inequalities. It sets out a range of actions designed to address the policy problem, but none of these appears to represent a radical departure from previous efforts.

Spending and productivity

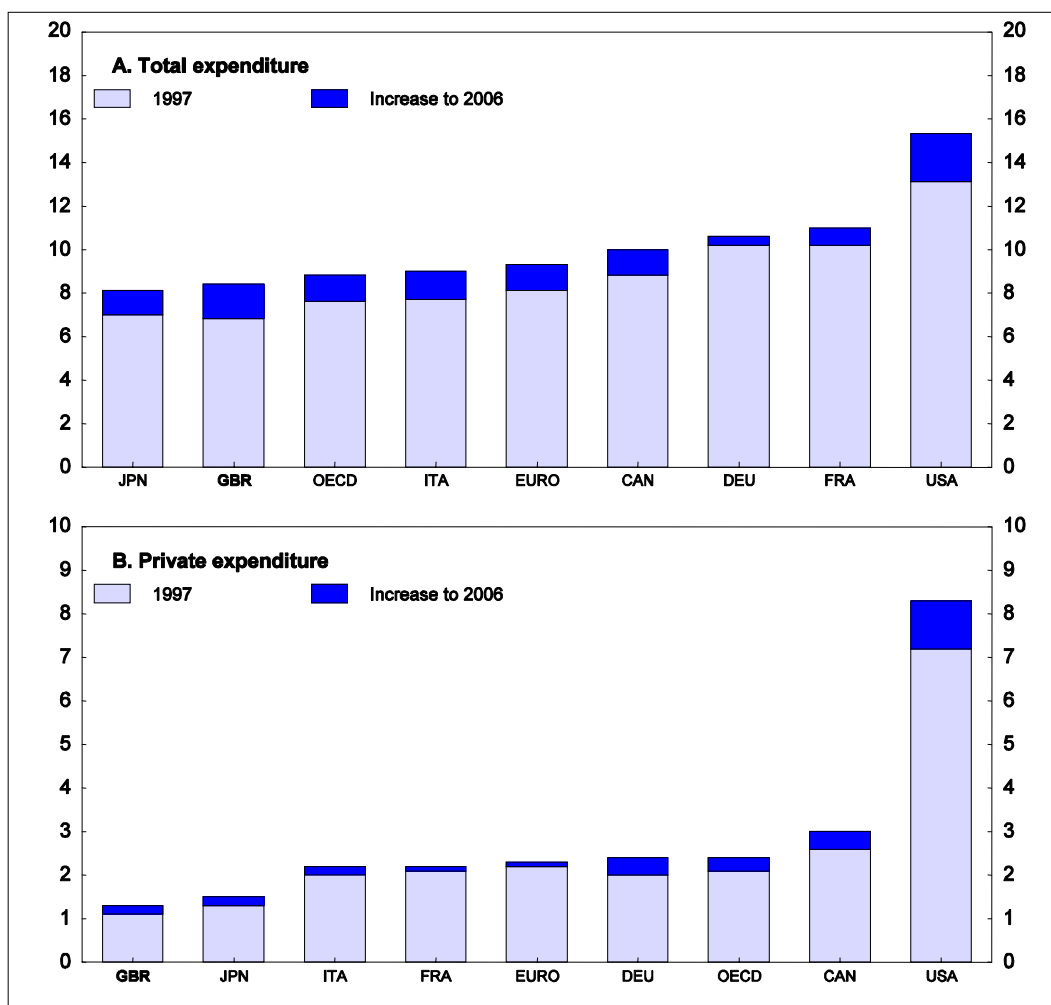
31. Between 1997 and 2006, UK health care spending as a percentage of GDP increased from 6.6% to 8.5%, fuelled mainly by large increases in spending on the NHS (Figure 4).⁴ UK spending is now close to the OECD average. According to OECD estimates, until 2050, public health care spending could rise by 3½ per cent of GDP in a cost–pressure scenario and by about half that in a cost–containment scenario. In both scenarios, demographics and relative price changes are the main drivers of health spending (OECD, 2006).

32. Increases in NHS spending in England have been substantial, with expenditure growth in real terms of approximately 10% per annum between 2000 and 2007. A prime reason for the increase in spending has been the increase in the NHS workforce (Table 3). Since 2000, total employment has risen by 19% and that of doctors by 32.5%. Full time equivalent numbers have grown even faster (22% and 34% respectively). Also support staff numbers, such as hospital porters and cleaners, central management and infrastructure support, have risen rapidly. As discussed further below, remuneration of many categories of staff, especially doctors and nurses, has also increased rapidly.

4. Spending as a share of GDP declined marginally to 8.4% in 2007.

Figure 4. Expenditure on health

Percent of GDP, 2006



Source: OECD Health Data 2008.

Table 3. Trends in the NHS workforce in England

In thousands

	2000	2007	Per cent change 2000-2007
Doctors	96.3	127.6	32.5
Qualified nurses	335.9	399.6	18.9
Other qualified professionals	120.7	154.0	27.6
Support staff	564.9	649.3	14.9
Total	1 117.8	1 330.5	19.0

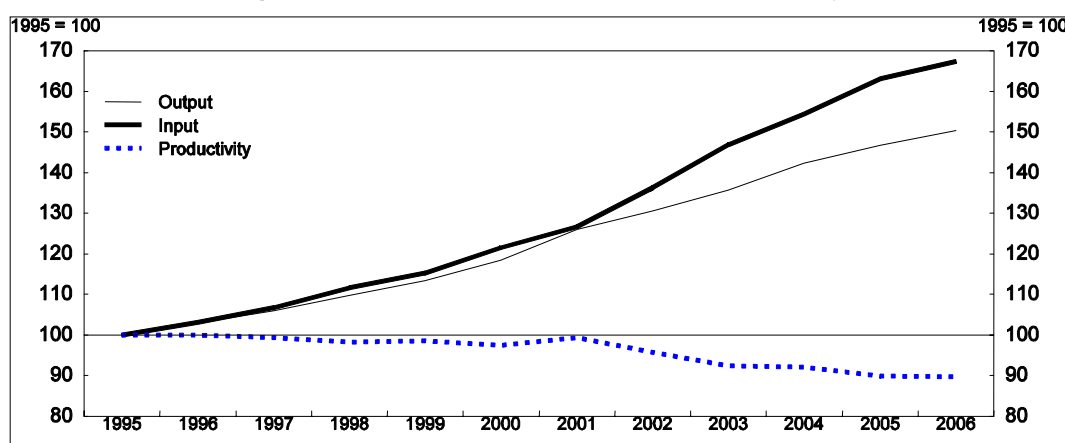
Source: <http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers>.

33. The Office for National Statistics (ONS) has produced a series of experimental reports on productivity trends in the NHS. The most recent indicates that – without any adjustment for the quality of care – the quantity of health services grew by about 4% per annum between 2001 and 2005 (Office for National Statistics, 2008). The estimate of outputs is based on a cost-weighted index of activities, such as

hospital acute services, community health, GP appointments and GP prescribed drugs. Inputs grew by 6.5% per annum over the same period as this was a period of heavy investment in the NHS, so the ONS estimate of annual productivity change was a decline of 2.5% (Figure 5). Taking account of changes in quality of care (mainly in the form of improvements in post-operative mortality) the estimate of the annual decline in productivity is 2.0%. In 2006, the latest available data on these partial measures of output, the decline in measured productivity halts. Making adjustments for quality is inherently difficult. The ONS recognises that that their figures need to be interpreted with caution and alongside other measures to build an accurate picture of NHS efficiency.

34. The NHS has increased the focus on Value for Money. For example the Department of Health has assessed its own progress in achieving efficiency gains mandated through a national public sector efficiency programme, and estimates that it has exceed the £6.5 billion savings target set for it between 2004–05 and 2007–08. However, the methods used for measuring efficiency gains have some limitations and therefore the self-assessments of gains made right across the public sector have to be treated with some caution (National Audit Office 2006b, 2007a).

Figure 5. Health care output¹, inputs and productivity



1. Excluding quality adjustment.

Source: ONS and Public Service Productivity, Health Care, London.

35. In 2002 Sir Derek Wanless published a review of NHS ‘futures’ for HM Treasury, in which he projected long-term trends in spending on health care from 2002 to 2022 (Wanless, 2002). He considered three scenarios, depending on future NHS performance and success in public health: (a) ‘solid progress’ (the central estimate); (b) ‘slow uptake’ (a pessimistic scenario); and (c) ‘fully engaged’ (an optimistic scenario). The “fully engaged” scenario includes an ambitious assumption about productivity gains.

36. In 2007 Wanless prepared a detailed five year progress review (Wanless *et al.*, 2007). He found that, overall, progress has been somewhere between ‘slow uptake’ and ‘solid progress’, and in particular that rates of change in ‘lifestyle’ had been disappointing. Also, National Service Frameworks were not systematically updated or rolled out, so he could not estimate costs of new treatments, and there are no clear plans or targets for productivity improvements. Spending over the five year period has been in line with his recommendations. If current trends continue, Wanless judged that future resources required will tend towards the ‘slow uptake’ scenario, raising questions about the financial sustainability of the NHS. He concluded that the need to improve prevention and productivity has become even greater. There has indeed subsequently been greater policy attention directed towards prevention of diseases, with an emphasis on the collection and dissemination of evidence on the effectiveness of interventions (*e.g.* the Cochrane Public Health Review Group and the NICE Public Health programme). Implementation of national policies such

as the ban on smoking in public places represent progress in addressing lifestyle issues, and there is currently much emphasis on tackling obesity.

37. International comparisons of health system productivity, as attempted by the WHO in its World Health Report 2000, are fraught with difficulty (World Health Organization, 2000). Historically, relative to OECD comparators, the health care system incurred low spending but secured mediocre outcomes in many domains. More recently, outcomes have improved, but they still on balance tend to lag behind comparators. Likewise expenditure has increased rapidly and is now close to the OECD average. The OECD has recently estimated that the UK health system achieved life expectancy levels in 2003 that were roughly as expected, given spending levels and other national circumstances such as income and educational attainment (Joumard *et al.*, 2008). In other words, after adjusting for external conditions, productivity of the UK health system is close to the OECD average.

Health care reforms

38. The Department of Health has, since the NHS Plan was published in 2000, implemented a set of NHS ‘system reforms’ that have sought to modernise all elements of the health care system. The focus has been on improving system outcomes (measured in terms of health gain, responsiveness and reduced inequalities in health outcomes) and productivity (value for money). The fundamental sources of revenue for the NHS (national taxation and low user charges) have remained untouched. However, attempts have been made to reform most other aspects of the health system. The key principles underlying the reforms have been: Improved strategic purchasing (commissioning) of health services; enhanced choice of provider for patients; increased plurality of health care providers, including the development of not-for-profit ‘Foundation Trusts’ and private providers; better alignment of payment mechanisms with work undertaken (diagnosis-related group (DRG) financing or ‘Payment by Results’); and changes to employee contracts to raise quality and productivity.

Commissioning

39. Commissioning involves the strategic purchasing of health care services to secure the best quality care and health outcomes for local populations, within a fixed budget. The introduction of the purchaser/provider separation started in 1991, when purchasing became the responsibility of the health authorities. General practitioners could also voluntarily become GP fundholders, alongside health authority purchasers, having responsibility (in a limited way) for devolved budgets for purchasing elective care and prescribing. There is little evidence that health-authority purchasing secured many material benefits in the 1990s (Le Grand, Mays and Mulligan, 1998). However, evidence suggests that the financial incentives associated with GP fundholding (which was abolished in 1998) were successful in controlling activity and reducing waiting times (Dusheiko, Gravelle and Jacobs, 2004; Dusheiko *et al.*, 2006).

40. Since 1991 there have been major changes in the organisation, budgetary arrangements and provider markets for health care commissioners, as well as in the number, size and budgetary responsibilities of commissioners. Commissioning is now the responsibility of the 152 Primary Care Trusts (PCTs). It is at the heart of many of the other system reforms taking place in the NHS, including enhanced patient choice; managing new types of providers; the shift to legal status for healthcare contracts; the use of fixed DRG tariffs; the focus on providing care closer to home; and the need to adhere to the many standards and targets set for quality of care. Thus, through their responsibility for the bulk of NHS expenditure, commissioners face one of the biggest challenges in the NHS.

41. Attempts have been made to enhance the capabilities and capacity of PCTs to undertake their tasks, culminating in the *World Class Commissioning* initiative (Department of Health, 2007). This sets out the Department of Health’s view of the competencies required of PCTs, with the aim of supporting them

where they fall short and giving them greater freedom where they are doing well. PCTs will be held to account for their performance in achieving the desired system outcomes through a national assessment system. A range of (mainly non-financial) penalties and rewards have been designed to incentivise PCTs. Greater intervention by the strategic health authority and potential designation as a “challenged” organisation is the main penalty for under-performance. The requirements of PCT commissioning are now well-understood, and there are signs that the NHS is engaged in the process. However, it is too early to judge the impact of World Class Commissioning on patients and health outcomes.

42. As part of the commissioning reforms, the Department of Health reintroduced from 2005 a form of GP purchasing known as Practice Based Commissioning (PBC). This follows the principles outlined in the NHS Plan that commissioning should take place as close to the patient as possible. PBC seeks to give indicative budgets to the general practices within a PCT, carved out from the PCT budget. A typical general practice will be responsible for about 10 000 patients. PCTs remain legally responsible for the commissioning process, while GPs are expected to take greater responsibility for the financial consequences of their referral decisions and to commission services that suit their patients, re-designing such services where necessary. PBC is also viewed as a major tool in managing demand through the use of financial incentives to control activity, mirroring the successful approach taken in GP fundholding.

43. Independent assessment of the early impact of PBC has highlighted a number of potential problems and obstacles to achieving the ultimate aim of improving health for local people. The Audit Commission’s first overview of PBC indicated that engagement of GPs with PBC was limited. Its later survey showed some progress had been made but many PCTs were still at an early stage of implementation in 2006–07 (Audit Commission, 2007). In particular, although progress had been made in setting up processes and policies related to the organisation of PBC, many crucial aspects of financial management were still to be developed.

44. The specific issues identified as crucial to success of PBC included: good quality and timely information for monitoring; provision of robust indicative budgets using a methodology understood and approved by GPs; training and analytical capacity; freedom for GPs to use savings to develop services and support for change; good governance arrangements especially where practices purchase services from themselves; and shared ownership of decisions on strategic objectives between practices and the PCT (Healthcare Commission and Audit Commission, 2008). There are more recent signs of some improvements noted by GPs (Department of Health, 2009).

45. A persistent theme of the NHS commissioning process throughout its many manifestations has been the apparent inertia in the pattern of commissioned services. Despite two decades of reform, there is little evidence of significant shifts in the nature or provider of commissioned services (Dusheiko *et al.*, 2008). One of the expectations of PBC is that it will finally result in the development of new and innovative services and re-design of services to meet local needs better. Some examples have been documented, such as GPs undertaking minor surgery or the introduction of new patient pathways that reduce waiting times.

46. Although it is early days to expect to see significant large scale progress in service change, the latest Department of Health survey reports that trends appear to be moving in the right direction. The percentage of practices commissioning new services as a direct result of PBC continues to rise, with 61% stating they had done so in the most recent survey (Department of Health, 2009). The early stages of GP fundholding were dominated by enthusiastic practices that drove forward the reform, whilst others were at first more reluctant to engage. A similar pattern appears to be emerging with PBC. If commissioners eventually do become more active in re-shaping the provider market, they are likely to encounter significant problems associated with the implementation of change in the NHS at local level. In particular, any rationalisation of services through relocation, merger or closure of “failing” services is likely to be

perceived locally as detrimental to access. It will, therefore, be politically highly charged and possibly face legal challenges by local communities. If the pressure to avoid such thorny issues inhibits the pursuit of changes that are justified in terms of the overall benefits, then the principles underlying much of the reform process may be undermined. The emerging role of the new Cooperation and Competition Panel may be important in this domain.

47. Some argue that there are inherent limitations in trying to maintain a division between commissioners and providers in a publicly funded health care system in which providers often have greater market power than purchasers and where the complexity of health care means that the costs of writing contracts and monitoring performance are substantial. However, there are clearly costs associated with ensuring good performance regardless of how the healthcare system is organised and the issue of which approach is most efficient remains unresolved (Ham, 2008). At least in principle, PBC does seem to offer some promise in making commissioning more sensitive to patient needs whilst containing expenditure. Many challenges nevertheless remain for the future, such as securing better engagement of GPs in PBC; ensuring the probity of the system if GPs move towards providing some secondary care themselves; and measuring and making public the performance of GPs as commissioners.

48. It is worth noting one final policy development related to commissioning: the possibility of allocating ‘individual budgets’ directly to patients with certain chronic conditions, with which they can purchase care in line with their own preferences. This policy will be tested with some small scale pilot studies. It follows from similar experiments in the social care sector, and takes the principle of devolved decision-making and personalised care to its logical conclusion. Individual budgets raise many issues, however, relating to information for patients, financial control, health outcomes and risk sharing.

Patient choice

49. The expansion of patient choice has been a major plank of health reform (Department of Health, 2003). There are several strands to the choice policy, including: choice of provider for elective care (Department of Health, 2003); choice of type of antenatal and postnatal maternity care and choice of place of birth (Department of Health and Partnerships for Children, 2007); and choice in care planning and treatment regime for specialist groups or treatments (e.g. mental health). However, it is choice of location of service for elective care that has been at the centre of the reforms. Since April 2008, PCTs have been obliged to offer most patients a choice among providers (hospital, not physician) at the time of first referral by a GP, including any NHS hospital in the country and many private sector providers.

50. There are several stated aims of choice policies, such as enhancing consumer empowerment; stimulating supply side competition, efficiency and diversity; improving quality and responsiveness; and improving access. In particular the national system of case payments (see below) seeks to ensure that money is directed wherever patients choose to go. The intention is to make providers more responsive to patient preferences. Choice is therefore seen as desirable in its own right and as a means of enhancing market efficiency.

51. Several initiatives have been designed to help patients make effective choices. “NHS Choices” is a website that facilitates comparisons of hospitals by providing information on hospitals, such as waiting times and re-admission rates; it also includes comments and ratings from patients (Department of Health, 2008f). The Department of Health reports this site received over seven million visits in March 2009. The “Choose and Book” system allows people to book electronically or by telephone their first hospital appointment at their chosen hospital, once they have a confirmed referral from their GP (Department of Health, 2008e). The Department of Health reports that almost 10 million patients have been referred through this system since it began in summer 2004. More GP practices are using the system and in July and August 2008, over 80% of practices were participating.

52. Patients would be better positioned to make choices if they were given better information on outcomes at the procedure, hospital and surgeon level (Department of Health, 2003). However, there are currently few indicators of clinical quality to inform patients' choices. As a move towards more general performance reporting, from April 2009 patient reported outcome measures (PROMS) will be routinely collected for four hospital interventions: knee and hip replacement, varicose vein surgery, and hernia repair. This is a significant innovation and England is at the forefront of development in this area. However, the NHS has not been as good in collecting good data on quality beyond information about significant adverse events (readmissions or death) until recently, and it is noteworthy that one of the first initiatives for collating and disseminating performance information for the public was the work of the private sector concern Dr Foster Intelligence (www.drfooster.co.uk).

53. Offering choice over the timing of appointments, location of care and treatments is popular with the public. However, it is less clear whether some of the other market consequences of choice, such as closure of under-utilised hospitals, are so readily accepted (Appleby and Philips, 2009). Furthermore, although the proportion of patients reporting that they are aware that they are entitled to choice, and remembered being offered a choice, has increased over time, the most recent increases have been very modest (Department of Health, 2008h). Moreover, it has proved difficult to assess the impact that increased choice has had on health system performance, as distinct from the impact of other policies. A review of the available evidence concluded that there is not yet any convincing evidence that choice has improved quality of services (Robinson and Thorlby, 2008) and this conclusion has been supported by recent qualitative findings. There are nevertheless plans to enhance treatment choice for those with long-term conditions and mental health problems and facilitating choice and easier switching of GP. The prospect of allocating personalised budgets to patients with some long-term conditions, if implemented, would give patients even more direct control over healthcare purchasing decisions.

54. There are some potential conflicts between the choice policy and other strands of the NHS reforms. Most importantly, commissioners are required to commission strategically. To do so, they need to be able to exercise some control, or at least influence, over the treatments patients receive taking into account cost/quality and which providers should be used, whilst at the same time ensuring choice. Similarly, Practice Based Commissioning provides incentives for GPs to provide certain services that were previously provided elsewhere. This may result in a conflict of interest for GPs in offering independent advice to their patients on what choices are available. The General Medical Council issued guidelines in 2006 (titled 'Good Medical Practice') that set out how GPs are expected to behave to ensure probity and transparency when faced with a potential conflict.

55. However, most of the other reforms seek to facilitate and reinforce improved choice. For example, the increased range of provider has led to the creation of the "Extended Choice Network", which allows GPs to offer choices to patients from approximately 147 approved independent providers, including independent sector treatment centres. Similarly, the use of the national tariff (Payment by Results) rewards those providers chosen by patients with increased business, thereby, in principle, providing an incentive for increased quality and responsiveness.

Plurality in provision

56. A common thread running through the system reforms is the diversification of the provider "market". New types of providers include the independent sector, most notably through Independent Sector Treatment Centres (ISTCs); Foundation Trusts; and the "third sector", which includes not-for-profit organisations such as social enterprises, voluntary groups and charities. The policy has several aims: encouraging competition and innovation; improving responsiveness; and increasing access and capacity.

57. ISTCs were envisaged specifically as an instrument to encourage private sector entry into routine elective care, with the objective of reducing waiting times. The NHS Plan emphasised the potential for the private sector to play a bigger role in providing services and allow purchasers to secure gains in efficiency and enhance choice. The ISTCs now cover a range of elective and diagnostic procedures, but activity by ISTCs has been limited, accounting for only 1.8% of total elective activity in 2007–08. Unpublished research suggests that the ISTC programme has had no statistically significant impact on the reduction in waiting times either for those PCTs in which ISTCs are located or more generally across the system as a whole.

58. Foundation Trusts (FTs) were created by the Health and Social Care Act in 2003 and gave NHS hospital trusts the opportunity to become independent not-for-profit public benefit corporations. Whilst remaining in the public sector, they were granted greater autonomy from central control and a range of financial and other freedoms. These include greater financial flexibility (they do not have to break even but must remain financially viable and are allowed to retain surpluses); they can invest in buildings and new services; they manage their own assets; and they can recruit and reward staff with higher salaries, although many of these freedoms have also been extended to NHS Trusts. This reform was part of the general strategy to shift away from a centrally managed system to one managed locally.

59. Applying for FT status is voluntary but a successful application depends on performance. Only those trusts performing well (gaining three stars, the top rating, in the Healthcare Commission's performance rating system) are allowed to apply. FTs were introduced in a phased manner and in October 2008 there were 107 FTs, of which 31 were mental health trusts. The ultimate aim is for all NHS Trusts to convert to FT status, but progress has not been as fast as originally envisaged.

60. The quality of care provided by FTs remains subject to the scrutiny of the Care Quality Commission (which undertakes quality and performance regulation for all NHS organisations). FTs also have to satisfy their PCT commissioners in terms of adherence to national targets such as those for waiting times. However, they are free from direct management by the Department of Health. Instead, they are authorised and supervised by Monitor, an independent regulator created to oversee and license FTs.

61. FT status was intended to bring a range of benefits. The governance structure of FTs involves a bigger role for local communities, a form of "social ownership" in which local people and FT staff have the right to become members and vote for a board of governors. The intention was to make service provision more responsive to local communities and to enhance staff morale. In addition, the financial freedoms enjoyed by FTs are expected to help them improve their financial management, efficiency and performance. In particular, FTs are expected to reinvest surpluses in innovative services and delivery mechanisms.

62. Monitor reports that FTs are performing well as a group. A recent review reported that all were meeting national core standards and targets, including progress towards the 18 week waiting list target (Monitor, 2008). The main challenge identified was in terms of hospital acquired infection, with several FTs declaring a risk of not reaching their targets. Monitor concluded that six trusts were in "significant breach" of their terms of authorisation, five due to their performance with hospital infection rates, although this problem is widespread amongst NHS hospitals and not confined to FTs. The latest performance assessment by the Healthcare Commission identified FTs as doing very well as a group when compared to non-FTs – with 38 out of the 42 highest rated trusts having FT status, and just one FT rated 'weak' for quality of service (Healthcare Commission, 2008). However, a recent report by the Commission identified serious failings in the quality of emergency care at the Mid Staffordshire NHS Foundation Trust. It found, amongst other things, that the Board's emphasis was on financial savings and securing Foundation Trust status, and that it lost sight of its responsibilities to deliver acceptable standards of health care (Healthcare

Commission, 2009). The report has led to an increased emphasis on cooperation between regulators and on clinical safety being a board level concern.

63. FTs had been warned by Monitor that they needed to make bigger surpluses if they were to invest in new services and renew their assets. The most recent assessment suggests this is now happening, with FTs as a whole delivering revenues and surpluses in excess of planned amounts. However, detailed analysis of the relative financial performance of early waves of FTs and non-FTs suggests that much of the superior performance of hospitals with FT status existed before their transfer to FT status (Marini *et al.*, 2008). It is therefore not clear that the FT policy itself is responsible for creating strong financial performance.

64. Similar arguments apply to other aspects of performance, as most comparisons between FTs and non-FTs are undertaken on a crude basis and do not allow for the self-selection of successful FT applicants. For example, the timing of improvements in quality ratings does not seem to be clearly linked to the timing of achieving FT status. Furthermore, there are examples of new services provided by FTs, such as critical care units, networks of radiotherapy services, and “self pay” dermatology services not provided free by the NHS. There is also evidence of speedy resolution of innovative deals, such as a partnership between a charity and FT to deliver mobile chemotherapy services (House of Commons Health Committee, 2008b). But it is not possible to attribute these innovations specifically to the FT regime.

65. However, financial management methods adopted by FTs appear to represent a marked improvement on former practices. The NHS as a whole is moving towards financial reporting practices adopted by Monitor. Furthermore, many FTs have adopted ‘service line reporting’, in which budgets are allocated to medical departments. Such improvements in cost accounting are essential if providers are to understand their cost structures and pursue innovation.

Payment by Results

66. The introduction of an activity-based funding mechanism for reimbursement of providers for hospital care has been a key element of the NHS reforms (Department of Health, 2002). It is rather misleadingly known as Payment by Results (PbR), since it directly rewards only output activity and not the quality of outcomes. It is based on DRG finance systems used in many other health systems and was designed to support the related policies of patient choice and practice based commissioning. Providers are reimbursed according to a case mix adjusted tariff determined by the Department of Health, based mainly on the average of all hospital costs for that procedure. Patient categorisation is according to a system of Healthcare Resource Groups (HRGs) (similar to DRGs), with separate tariffs for elective and non elective care.

67. A national tariff is used, with limited scope for local variation apart from an adjustment to account for unavoidable regional cost differences and top-up payments applicable for a small number of specialised services. In general the tariff seeks to reflect all relevant costs, including most capital expenditure. The policy has been phased in since 2002–03 and there are now over 1 000 HRGs covered by the tariff for acute elective and non-elective activity, outpatient attendance and day cases. Refinement of existing HRGs and expansion of the PbR approach to mental health, ambulance services, long-term conditions and community care are planned (Department of Health, 2007).

68. One of the difficulties in assessing the impact of PbR is that it is a policy with multiple aims. The objectives for PbR are: increase efficiency; where needed, encourage expansion of activity; support patient choice; increase patient satisfaction; encourage providers to be responsive to patient and commissioner preferences; keep costs under control; introduce fairness and transparency in funding providers; encourage the development of new, cost-effective treatment pathways; and shift patterns of service provision away

from historical patterns and improve quality. Some of the objectives are long term, others short term; some are very ambitious and several may conflict with other policy intentions (Miraldo, Goddard and Smith, 2006). For instance, providers are expected to increase activity and this has indeed been the experience in many countries where prospective payment has been introduced. The specific emphasis in England was to tackle waiting lists for elective and outpatient care. However, the payment mechanism also gives providers an incentive to increase activity in any area where the tariff is greater than their marginal costs and this may affect the mix of activity or may inhibit desirable shifts in activity from hospital to community settings. There is a tension therefore between the desire to stimulate activity and the need to promote efficient provision and operate within the fixed NHS budget.

69. In principle, it may be possible to design a payment system that offers a reduced tariff for activity beyond a target level based on historical activity levels. If the level of payment is not specified in advance, providers have an incentive to stay within target activity levels. This has been tried in Australia (Street and Maynard, 2007). In England, more direct ways of managing activity have been introduced in the form of referral management centres that operate at the interface between GPs who refer patients and the hospital specialists who treat them. The centres can monitor and even block referrals, but they have been controversial and their effectiveness has yet to be evaluated (Davies and Elwyn, 2006).

70. Experience in other countries indicates that the success in achieving many of the stated aims will depend crucially on the precise nature of the tariff. Currently, the tariff is based on national average costs. One way of rewarding providers who undertake innovative treatments or use treatments that are known to produce health gains may be to introduce higher prices for such treatments. There is also discussion about basing tariffs on the costs of more efficient providers, rather than the national average (Street and Maynard, 2007).

71. As with the other reforms, identifying the specific contribution of PbR to changes in system behaviour is difficult. Some research has suggested that (at least in the early stages of the policy) PbR has contributed to and reinforced, rather than driven, the observed increases in elective activity and reductions in elective length of stay (Audit Commission, 2008). The experience in England has been compared with that in Scotland, where the tariff system was not adopted. Econometric analysis suggests that where PbR was implemented: (a) unit costs fell more quickly; (b) length of hospital stay fell more quickly; and (c) the proportion of elective cases treated as day cases increased more quickly (Farrar *et al.*, 2007). The volume of inpatient activity also increased but results were less clear for outpatient treatment. These gains did not appear to be made at the expense of quality as proxied by inpatient mortality rates, 30 day post-surgery mortality or emergency re-admission following hip fracture treatment.

72. It has also been possible to compare, within England, the 15 HRGs initially subject to the tariff in the early days of the PbR policy, with all other HRGs (Street and Miraldo, 2007). The results suggested that relative unit costs had not been affected by the policy. In addition, although there was a faster rate of growth in elective activity in the subset of 15 HRGs to which PbR applied, this could not necessarily be attributed to PbR because there was already a long-standing upward trend in activity growth for these HRGs. Similar difficulties were experienced in attributing to PbR the reductions in waiting times observed in the 15 HRGs subject to the tariff. It was also associated with a higher rate of growth in day case activity.

Workforce contracts

73. Since 2004, there have been substantial changes in the contractual arrangements for GPs and for hospital consultants and other NHS staff. Two key policy reforms are the GP contract and the hospital specialist contract.

General practitioner (GP) contracts

74. GPs form the backbone of primary care services. They can practice either single-handedly or as groups in GP practices. 85% of GPs are independent contractors, with two thirds of those practising under the national General Medical Services (GMS) contract. In the light of a perceived shortage of GPs, causing access difficulties for patients, the apparently low morale of GPs, and a desire to modernise the primary care services, the government negotiated a new contract with GPs that was implemented in April 2004. Table 4 summarises the differences between the old and new GMS contracts (National Audit Office, 2008). The remuneration and terms of employment of salaried GPs generally reflect the contents of the new GMS contract.

75. Central aims of the new national contract were to stimulate supply of general practitioners and to provide high quality care. There was a general recognition that this would require higher expenditure levels. However, much of the controversy around the initial impact of the new contract has centred on the high costs of implementing the contract, which in the first three years of operation were 9.4% higher than intended. The over-spend was mainly due to an underestimate of the cost of implementing a new quality framework and also to higher than expected costs of the new ways of providing out of hours care.

Table 4. The new General Medical Services contract

Contract held between PCT	Old General Medical Services contract Individual GP	New General Medical Services contract GP Practice
Funding for core service	Individual GP patient list provides a small fee per patient registered and a fee for each item of service provided. There was also a Basic Practice Allowance.	Each practice receives its main funding for the provision of essential services via a “global sum” based on the weighted needs of the practice’s pooled patient list. The global sum payment is based on a national allocation formula, calculated according to lists size and adjusted for the age and needs of the local population. This is supplemented by a Minimum Practice Income Guarantee which was negotiated to ensure that practice funding was not reduced in the first few years of the contract.
Service delivery	GPs can claim for a limited range of additional services.	Flexible structure allows practices and Primary Care Trust to opt in to provide a portfolio of enhanced services, which can be innovative or tailored to meet specific patient need.
Out of hours	GPs responsible for out of hours service but many delegated this to other providers.	The new contract defined “core hours” (8am to 6.30pm) as when practices are responsible for providing a full range of primary medical care services. Responsibility for out-of-hours urgent care was removed. Practices can opt to provide out-of-hours urgent care under a separate contract (defined as Monday to Friday 6.30pm to 8am, weekends and bank holidays).
Quality rewards	Some small sums available for quality rewards, for example some payments for cervical cytology. There was also a range of quality schemes in the later years of the old GMS, including “Investing in Primary Care” schemes.	Practices are financially incentivised for delivering measurable levels of quality in-patient care, via the evidence-based Quality and Outcomes Framework (QOF). Between 10–15% of the new money tied to the contract is available to reward practices for providing higher quality services.
Staffing	Funding follows GP, so no incentive to develop other staff.	Encourages development of different skill mix within a practice by linking some funding to activity carried out by nurses and other practice staff (through the Quality and Outcome Framework).

Source: Department of Health, National Audit Office (National Audit Office, 2008).

76. A fundamental quality tool implemented within the new GMS contract was an ambitious incentive regime known as the Quality and Outcomes Framework (QOF). The QOF consists of a set of about 150 performance indicators measuring aspects of the quality of primary care, within 4 broad domains: clinical, organisational, patient experience and additional services. The level of performance on each indicator yields a score, and a practice’s aggregate score determines its quality bonus. Approximately 25% of a practice’s income is determined by performance on the QOF.

77. There has been much debate on what gains have been achieved from the new contract in return for the extra funding. One aim was to increase the number of doctors recruited to and retained in general practice. This has indeed happened, with numbers of GPs increasing by 15% since 2002–03 and some reports of better morale (Department of Health, 2008a). Attempts to direct extra GPs into the most “under-doctored” and needy areas have been less successful, and more targeted policies have recently emerged to tackle this issue. The job satisfaction of GPs with their working lives has also improved since the introduction of the contract, despite perceptions of increased workload, and GPs appear positive about the impact of the contract on the quality of care (Whalley, Gravelle and Sibbald, 2008).

78. A second aim was to increase productivity in the primary care sector and the evidence that this has happened is fairly limited, and open to dispute, because of the difficulties inherent in measuring productivity in the health care sector. GPs have performed very highly on the QOF. On average, practices have achieved over 90% of the maximum points available in each year since 2004–05 (National Audit Office, 2008). Although there is some scope for manipulation of the QOF by practices seeking to maximise income, preliminary research suggests that this appears to have been limited. Indeed many GPs delivered quality of care at levels in excess of those required merely to maximise their income (Gravelle *et al.*, 2008). However, as indicated above, the quality of primary care was already improving rapidly at the time the QOF was introduced, and it is consequently difficult to determine how much of the improvement is due to the QOF incentives. Improvements have been more rapid in certain areas (such as asthma and diabetes) when the QOF was introduced, although even these effects are fairly modest (Campbell *et al.*, 2007). Similarly, health inequalities in terms of the gap between the most and least deprived areas, have also declined for some procedures (*e.g.* blood pressure monitoring) (Ashworth, Medina and Morgan, 2008). However, concerns remain about the overall impact on equality amongst some groups and on the impact on non-incentivised conditions and procedures.

79. Other aims of the contract, such as delivering new types of services and reducing the administrative burden on GPs, have been assessed as being only partially achieved to date. Some of the stated aims were so broad that it is difficult to judge whether they have been achieved or the degree to which improvements can be attributed to the new contract rather than to other factors.

80. The Department of Health has recently completed a consultation exercise on the future development of the QOF, with the intention of improving the evidence base for the QOF and for increasing the transparency by which decisions on the content of the QOF are taken. In particular, NICE is to have a central role in decisions on the QOF indicators from April 2009.

Consultant contracts

81. Senior hospital specialists in the NHS are known as consultants. They operate under a national employment contract, which was reformed in 2004. The new contract was intended to align consultants’ pay more closely than hitherto to the objectives of the NHS, by providing stronger management control over their activities. Previously, there had been widespread dissatisfaction on the part of both doctors, who faced no limitations on the work expected of them, and managers, who found it difficult to influence the work of consultants or monitor the amount of work they chose to undertake in the private sector. The new contract was expected not only to reward consultants along a fairer and more transparent salary scale, but also to improve productivity and increase the contribution of consultants to the NHS. The contract negotiations were contentious, particularly concerning the amount of private practice to be allowed under the new contract and the degree of managerial control of job plans. The contract eventually agreed involved some substantial concessions by the Department of Health (Maynard and Bloor, 2003).

82. Independent reviews of the new contract suggest that it has had only a limited impact to date (Williams and Buchan, 2006; National Audit Office, 2007b). The focus on job planning has resulted in

greater transparency, which has the potential to enhance consultant productivity. However, this has not yet been achieved in practice to any measurable extent. To a modest degree, the contract has channelled more attention to NHS work, and into research and teaching, with a slight decline in hours spent on private practice. There has also been an increase in the number of consultants recruited and a fall in vacancy rates (at a time when demand for consultants exceeded supply). However, there is no evidence of an increase in the hours spent on direct patient care or any changes in the nature of services provided, such as evening clinics. Furthermore, the costs of implementation in the first three years have been higher than predicted, mainly due to an under-estimate of the baseline activities of consultants and because the contract was implemented in some trusts without due attention to the funding allowances that had been made by PCTs. Nevertheless annual earnings growth for consultants in the five years following implementation of the new contract has been lower than for the previous five years. Earlier evidence suggests that there are substantial variations in activity rates between consultants (Bloor, Maynard and Freemantle, 2004) which may imply a role for tailoring part of the contract to individual activity rates.

Conclusions and recommendations

83. Since the publication of the NHS Plan in 2000, the NHS has steadily evolved from a being a conventionally planned, centrally controlled organisation, towards one relying much more on increased local autonomy, with regulation to secure national standards. The extent to which this evolution has been informed by a long-term strategy is a matter of debate. An independent 'Capability Review' of the Department of Health in 2007 (Cabinet Office, 2007) noted that "There is currently no single clear articulation of the way forward for the whole of the NHS, health and well-being agenda." This suggests that – at the very least – the strategy underlying the reforms had not been communicated successfully beyond the Department. However, the emerging model of health system organisation and delivery can be viewed as a coherent package (Stevens, 2004). There are nevertheless areas for further improvement (Box 1).

84. The reform programme since 2000 covered many aspects of the organisation of health care including commissioning, provision and the mechanisms of rewarding NHS staff. Many of the reforms have the potential to improve efficiency, responsiveness and ultimately patient outcomes. Indeed, the English NHS can be seen as a health system 'laboratory'. However, evaluation of the impact of specific reforms is very difficult, as they are often inter-related, have multiple aims, and have been implemented universally and simultaneously, with little consideration for the need to evaluate. It is therefore impossible to identify with any confidence which elements of the reforms have been of most value in effecting some of the improvements achieved over the last decade. Major challenges lie ahead if the NHS in its current form is to remain sustainable financially.

Box 1. Recommendations concerning health care reform

The government's reform programme provides a broad vision for the health system. Most, though not all of the reforms are pulling in the same direction, consistent with the stated objectives of improving outcomes for patients, population health, and value for taxpayers' money. However, in many domains it remains too early to state with any confidence whether the reforms are delivering improvements. The recommendations therefore relate to addressing weaknesses and contradictions within the emerging system architecture.

- The commissioning process is at the heart of the NHS reform strategy and commissioners face a considerable challenge ahead. PCTs and general practices require practical support and investment in skills and capabilities in order to fulfil their commissioning responsibilities. Urgent attention should be given to remedying any lack of necessary capacity within PCTs and general practices. A recent programme (World Class Commissioning) is seeking to improve PCT's technical commissioning capability and the health outcomes achieved. Results from the assessment of progress made in the first year (2008/09) show that PCTs have further improvement to make, although the initiative is at an early stage and the full benefits may not be apparent for some time.
- The increased devolution of decision-making implicit in the reforms may result in variations in services, and it is not clear that unelected PCTs have the democratic legitimacy necessary to make coverage decisions on behalf of their populations. PCTs have a statutory duty to involve patients and the public in decision making. It is important that this local engagement is achieved, and progress should be kept under review.
- Many of the reforms imply potentially radical changes to provider markets: new entry by a range of different providers both public and private sector; the re-design of services by commissioners to meet local needs; and the impact of patient choice on the sustainability of existing providers of services. This suggests the need for much clearer policies on the entry, merger and exit of provider organisations. Although some progress has been made in defining processes, reconfigurations on the provider side often give rise to profound local political difficulties, and there is a clear case for improving the level of public debate in this domain. Much greater efforts are needed to improve the consistency and transparency of local service reconfigurations. The work of the new Co-operation and Competition Panel will be central in this domain.
- One of the strengths of the NHS has been the especially high levels of financial protection it offers in times of sickness, with user charges rarely used to any significant extent. However, most OECD countries have modest user charges, mainly to moderate demand rather than act as a significant source of finance. The recent deliberations over "top-up" fees have opened up a debate over the use of private funds that could usefully be extended to a broader discussion of the role of user charges and voluntary health insurance in the NHS of the future.
- There are considerable doubts as to whether the information flows currently available in the health system are adequate to support the model of regulation and choice. For example, there is doubt whether PCTs can make informed decisions about commissioning and whether patients can make informed choices about providers. Attention has been given to reassessing the information needs of the health system and this needs to continue.
- The PbR payment mechanism is a central instrument of the new NHS to which has been attached an enormous range of objectives, some of which are in conflict. The Department of Health needs to ensure that its future development is carefully aligned with all relevant system objectives. In particular, the current reform programme should be used to reflect priority activities and developed to reward higher quality rather than merely reflecting passively costs. Consideration should be given to aligning the remuneration of personnel more closely with activity.
- NICE has made a major contribution to the assessment of new technologies. However, its role and methodologies are coming under increasing scrutiny. For example, there is doubt, whether issuing of mandatory guidance is appropriate in a more decentralised system. The methods of NICE should be kept under review as the nature of the health system evolves.
- The Healthcare Commission has introduced innovative new approaches towards performance assessment. A key issue for its replacement, the Care Quality Commission, will be striking the right balance between assuring minimum standards and promoting quality improvement.
- Population health and health inequalities have been a stated priority of successive governments. However, progress has been modest and there is a dearth of evidence on which to base policies. Greater attention should be given to designing and evaluating public health initiatives so that policies and priorities can become better informed.

- A consistent theme emerging from the discussion above has been the difficulty of evaluation, and the paucity of relevant research. Researchers are now examining the impact of some of the reforms. However, many of the reforms are associated with considerable resource implications, so that future implementation should be undertaken with evaluation in mind. Adequate data should be put in place and research commissioned to monitor and evaluate the impact of all reforms in a timely fashion. Collection of comparable data across the entire UK would be one concrete step towards improved evaluation.

BIBLIOGRAPHY

- Appleby, J. and M. Philips (2009), "Satisfied now?" in A. Park, J. Curtice, K. Thomson, M. Phillips and E. Clery (ed), *British Social Attitudes: The 25th Report*, London, Sage.
- Ashworth, M., J. Medina and M. Morgan (2008), "Effect of Social Deprivation on Blood Pressure Monitoring and Control in England: a Survey of Data from the Quality and Outcomes Framework", *British Medical Journal*, 28 October, No. 337.
- Audit Commission (2007), *Putting Commissioning into Practice*, London: The Audit Commission.
- Audit Commission (2008), *The Right Result? Payment by Results 2003–2007*, London: The Audit Commission.
- Bloor, K., A. Maynard and N. Freemantle (2004), "Variation in Activity Rates of Consultant Surgeons and the Influence of Reward Structures in the English NHS", *Journal of Health Services Research and Policy*, No. 9.
- Cabinet Office (2007), *Capability Review of the Department of Health*, London.
- Campbell, S., D. Reeves, E. Kontopantelis, E. Middleton, B. Sibbald and M. Roland (2007), "Quality of Primary Care in England with the Introduction of Pay for Performance", *New England Journal of Medicine*, No. 357(2).
- Davies, M. and G. Elwyn (2006). "Referral Management Centres: Promising Innovations or Trojan Horses?", *British Medical Journal*, No. 332.
- Department of Health (2000), *The NHS Plan: a Plan for Investment, a Plan for Reform*, London, TSO.
- Department of Health (2002), *Reforming NHS Financial Flows: Introducing Payment by Results*, London: Department of Health.
- Department of Health (2003), *Building on the Best. Choice, Responsiveness and Equity in the NHS*, London: Department of Health.
- Department of Health (2007), *Options for the Future of Payment by Results: 2008/09 to 2010/11*, London: Department of Health.
- Department of Health (2007), *World Class Commissioning. Competencies*, London, Department of Health.
- Department of Health (2008a), *Equitable Access to Primary Medical Care*, London: Department of Health.
- Department of Health (2008b), *Health Inequalities: Progress and Next Steps*, London, TSO.
- Department of Health (2008c), *High Quality Care for All: NHS Next Stage Review Final Report* (Lord Darzi's review), Command paper 7432, London: Department of Health.
- Department of Health (2008d), <http://www.18weeks.nhs.uk/Content.aspx?path=/>.

- Department of Health (2008e), <http://www.chooseandbook.nhs.uk/>.
- Department of Health (2008f), <http://www.nhs.uk/Pages/homepage.aspx>.
- Department of Health (2008g), *Patient Experience Scores for the PSA Target – November 2008*, London: Department of Health.
- Department of Health (2008h), *Report on the National Patient Choice Survey*, January.
- Department of Health (2008i), *Tackling Health Inequalities: 2007 Status Report on the Programme for Action*, London, TSO.
- Department of Health (2009), *Practice Based Commissioning GP Practice Survey*, fourth quarterly survey, August. London: Department of Health.
- Department of Health and F. a. M. Partnerships for Children (2007), *Maternity Matters: Choice, Access and Continuity of Care in a Safe Service*, London: Partnerships for Children, Families and Maternity.
- Dusheiko, M., M. Goddard, H. Gravelle and R. Jacobs (2008), "Explaining Trends in Concentration of Healthcare Commissioning in the English NHS", *Health Economics*, No. 17(8).
- Dusheiko, M., H. Gravelle and R. Jacobs (2004), "The Effect of Practice Budgets on Patient Waiting Times: Allowing for Selection Bias", *Health Economics*, No. 13.
- Dusheiko, M., H. Gravelle, R. Jacobs and P. Smith (2006), "The Effect of Financial Incentives on Gate Keeping Doctors: Evidence from a Natural Experiment", *Journal of Health Economics*, No. 25(3).
- Farrar, S., J. Sussex, D. Yi, M. Sutton, M. Chalkley and A. Ma (2007), *National Evaluation of Payment by Results*, Report to the Department of Health. Aberdeen: HERU.
- Ferriman, A. (2000), "Blair Will Have Difficulty in Matching European Spending." *British Medical Journal*, No. 320 (7230).
- Gravelle, H., M. Sutton, A. Ma and C. Herp (2008), *Doctor Behaviour under a Pay for Performance Contract: Further Evidence from the Quality and Outcomes Framework RP34*, York: Centre for Health Economics.
- Ham, C. (2008), "World Class Commissioning: a Health Policy Chimera?", *Journal of Health Services Research and Policy*, No. 13(2).
- Healthcare Commission (2008), *Annual Health Check 2007/08*.
- Healthcare Commission (2009), *Investigation into Mid Staffordshire NHS Foundation Trust*, London: The Healthcare Commission.
- Healthcare Commission and Audit Commission (2008), *Is the Treatment Working? Progress with the NHS System Reform Programme*, London: The Healthcare Commission.
- Hippisley-Cox, J., Y. Vinogradova and C. Coupland (2007), *Time Series Analysis for Selected Clinical Indicators from the Quality and Outcomes Framework 2001-2006*, Leeds: QRESEARCH and The Information Centre.

- House of Commons Health Committee (2006), *Independent Sector Treatment Centres*, Fourth report of session 2005/06, HC 934-I, London: TSO.
- House of Commons Health Committee (2008a), *National Institute for Health and Clinical Excellence*, Sixth report of session 2007-08, October, HC 833-I, London: TSO.
- House of Commons Health Committee (2008b), *Foundation Trusts and Monitor*, Sixth report of session 2007-08, October, HC 833-I, London: TSO.
- Jourard, I., C. Andre, C. Nicq and O. Chatal (2008), "Health Status Determinants: Lifestyle, Environment, Health Care Resources and Efficiency", *Economics Department Working Paper*, No. 627. Paris: OECD.
- Kennedy, I. (2008), "The Future of the Annual Healthcheck", *Health Services Journal*, 12 November 2008.
- Le Grand, J., N. Mays and J. Mulligan, Eds. (1998), *Learning from the NHS Internal Market*, London: King's Fund Institute.
- Marini, G., M. Miraldo, R. Jacobs and M. Goddard (2008), "Giving Greater Financial Independence to Hospitals - Does it Make a Difference? The Case of English NHS Trusts", *Health Economics*, No. 17(6).
- Maynard, A. and K. Bloor (2003), "Do those who Pay the Piper Call the Tune?", *Health Policy Matters*, No. 8.
- Miraldo, M., M. Goddard and P. Smith (2006), *The Incentive Effects of Payment by Results*, London: Dr Foster Intelligence.
- Monitor (2008), *NHS Foundation Trusts Review of Three Months to 30 June 2008*, London: Monitor.
- National Audit Office (2006a), *The Department of Health: the National Programme for IT in the NHS*, London: The Stationery Office.
- National Audit Office (2006b). *Progress in Achieving Government Efficiency*, London: NAO.
- National Audit Office (2007a), *The Efficiency Programme: a Second Review of Progress*, NAO, February 2007.
- National Audit Office (2007b), *Pay Modernisation: a New Contract for NHS Consultants in England*, London: TSO.
- National Audit Office (2008), *NHS Pay Modernisation: New Contracts for General Practice Services in England*, London: TSO.
- Office for National Statistics (2008), *Public Service Productivity: Health Care*, London: Office for National Statistics.
- Office of Health Economics (2008), *Compendium of Health Statistics*, Oxford: Radcliffe Publishing.
- Robinson, R. and R. Thorlby (2008), *Patient Choice - a Briefing Paper*, London: King's Fund.

- Smith, P. (2007), "Performance Budgeting in England: Public Service Agreements", in M. Robinson (ed), *Performance Budgeting: Linking Funding and Results*, Washington DC, International Monetary Fund.
- Stevens, S. (2004), "Reform Strategies for the English NHS", *Health Affairs*, No. 23(3).
- Street, A. and A. Maynard (2007), "Activity Based Financing in England: the Need for Continual Refinement of Payment by Results", *Health Economics, Policy and Law*, No. 2(4).
- Street, A. and M. Miraldo (2007), *The Impact of the Reform of Hospital Funding in England*, York: Centre for Health Economics.
- Verdecchia, A. et al. (2007), "Recent Cancer Survival in Europe: a 2000-02 Period Analysis of EURO-CARE-4 Data", *Lancet Oncology*, No. 8.
- Wanless, D. (2002), *Securing Our Future Health: Taking A Long-Term View*, London: HM Treasury.
- Wanless, D., J. Appleby, A. Harrison and D. Patel (2007), *Our Future Health Secured? A Review of NHS Funding and Performance*, London: King's Fund.
- Whalley, D., H. Gravelle and B. Sibbald (2008), "Effect of the New Contract on GPs' Working Lives and Perceptions of Quality of Care: a Longitudinal Survey", *British Journal of General Practice*, No. 58(546).
- Williams, S. and J. Buchan (2006), *Assessing the New NHS Consultant Contract. A Something for Something Deal?*, London: King's Fund.
- World Health Organization (2000), *The World Health Report 2000. Health Systems: Improving Performance*, Geneva: World Health Organization.

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