THE NHS SINCE 1997

MODEST IMPROVEMENTS AT IMMODERATE COST

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CONTENTS

CHAPTER ONE
INTRODUCTION AND SUMMARY

The main purpose of this paper is to assess, as far as the data allow, whether there has been a "step change" in the improvements of the NHS since 1997, given the undoubted "step change" in the level of funding. Under the previous 1992-97 Major Government, there were undoubtedly advances in health outcomes and increased NHS activity rates (see chapter 3), despite the tight spending plans, and the NHS was far from in a state of "collapse" when the Labour Government took over in 1997.

Since 1997, there have been further improvements, albeit patchy, but at very considerable extra cost to the taxpayer. It is hardly surprising that there is a widespread feeling that the Government's experiment of pouring considerable funding increases into an unreformed NHS and directing from the centre by target has resulted in many wasted resources. The result has been an NHS in the paradoxical situation of being flush with cash yet short of money. Expectations of major improvements have been sadly disappointed.

The main conclusions to this paper are outlined below.

RESOURCES (CHAPTER 2)

- The average annual growth of public funding on health between 1997/98 and 2003/04 (at over 9%) was twice that of the period between 1992/93 and 1997/98 in cash terms. The NHS share of GDP was around 5½% in 1997/98 (lower than in 1992/92); in 2004/05 it was nearly 7% (2.1).

- Moreover, according to the current Government's spending plans for 2005/06 to 2007/08, expenditure on the NHS will continue to grow by around 10% per annum, easily outstripping the growth of GDP (2.1).
- Much of the cash increase has, however, been absorbed by substantial and rapid pay rises. As the NHS specific unit costs index has risen in recent years at around 5% annually, so, on these data, about half of the 10% annual cash increase has been absorbed by inflation (2.2).
- The growth in manpower has been rapid since 1997, especially since 2000. Total staff numbers rose by 272,000 (25%) between 1997 and 2004 (England only) but, reflecting increased part-time working, the increase in full time equivalents over this period was less – 225,000 (2.3).
- Most staff groups grew between 1997 and 2004 but the number of GPs (up 16%) and the number of ambulance staff (also up 16%) rose relatively modestly. The number of Consultants rose by 30%. But the clear winners were the bureaucrats in central services (up by 41%) and the managerial strata (up by 70%). The number of managers and senior managers, taken together, rose at 2½ times the rate of the professional staff (2.3).
- Over 85% of NHS spending is financed by the taxpayer with the rest being met by the employers' and employees' contributions via the National Insurance Scheme (around 12 to 13 %) and a small part (2%) by patients' payments. The NHS is not solely financed through the National Insurance Scheme as has been suggested by the Chancellor on a number of occasions (2.4).

OUTPUT AND PRODUCTIVITY (CHAPTER 3)

- On health trends there has been, unsurprisingly, no "step change" in the improvements in either life expectancy or healthy life expectancy (HLE). If anything, HLE advanced at a quicker rate under the Conservative Government than since 1997 (3.1).
- Mortality rates for cancer and early coronary heart disease have continued to improve since 1997, though at a slower rate than for the period 1992 to 1997 (3.1).
- The current Government has a large range of targets for the NHS. Priorities have included cutting waiting lists ("disappointing" in the words of *The Economist*[1] and subject to "inappropriate adjustments" according to the National Audit Office[2]) and reducing waiting times – though the jury is out on the latter (3.2).
- The annual growth rate of key NHS activity measures (for both hospitals and family health services) has tended to be higher since 1997 than in the previous five year period. But the improvements are far from being a "step change", and disappointing given the major increase in funding (3.2).

- Reports including those from the Picker Institute Europe and the King's Fund confirm that there have been improvements in the performance of the NHS, but they are patchy. (3.2)
- Because funding increases have outstripped increases in the NHS's activity index, the NHS's "efficiency index", a crude productivity measure, has fallen since 1997, as much of the extra funding as been absorbed by higher pay costs (3.2).
- A recent YouGov poll suggested that 60% of those polled felt that the NHS's extra money had been mostly wasted (3.2).
- The ONS estimates that health service productivity fell by an annual average of between 0.75% and 1.35% since 1997, as the growth in the inputs (in volume terms) comfortably outstripped the growth in output (in volume terms). (3.3)

References

1. "British election 2005: an expensive cure", *The Economist*, 9 April 2005.
2. National Audit Office, *Inappropriate adjustments to NHS Waiting Lists*, NAO, December 2001.

CHAPTER TWO
RESOURCES

2.1 PUBLIC SPENDING ON HEALTH

Health spending in the UK is overwhelmingly public sector. In 2002 public sector spending accounted for 86% of total health spending in the UK compared with an EC15 average of 77%, an OECD average of 60% and 45% in the USA.[1] Moreover, as public sector spending has increased in the UK in recent years, so has its share has risen.

The table below demonstrates the rapid increase in spending on the NHS in recent years (especially since 2000). The average annual growth of public funding on health between 1997/98 and 2003/04 (at over 9%) was twice that of the period between 1992/93 and 1997/98 in cash terms. The growth increase in real terms (as deflated by the GDP deflator) was even greater. (Spending in real terms will be discussed further below.)

PUBLIC SPENDING ON HEALTH, UK

	Conservatives (1992/93-1997/98)			Labour (1997/98-2003/04)		
	1992/93	1997/88	1992/93 over 1997/98*	1997/98	2003/04	2003/04 over 1997/98*
Total health TME:*						
Cash (£bn)	35.6	44.4	1.25 (4.6)	44.4	75.6	1.70 (9.3)
Real terms† (£bn)	45.0	50.2	1.12 (2.3)	50.2	73.5	1.46 (6.5)
DEL‡ (cash terms, £bn)						
Total health, of which:	Na	Na		Na	65.5	
NHS	Na	Na		Na	63.7	
NHS as % of GDP:	5.8%	5.4%	-0.4%	5.4%	6.9%•	+ 1.5%

* Average annual growth rate in brackets (%)

\+ Total Managed Expenditure (TME)

† 2002/03 prices, deflated by the GDP deflator.

‡ Departmental Expenditure Limit (DEL)

• Data for 2004/05

Sources: HM Treasury and National Statistics, *Public Expenditure Statistical Analyses (PESA) 2003*, TSO, Cm 5901, May 2003; HM Treasury and National Statistics, *Public Expenditure Statistical Analyses (PESA) 2004*, TSO, Cm 6201, April 2004; HM Treasury, 2004 Spending Review.

Moreover, if the current Government's plans are adhered to, the rapid increase in NHS spending will continue until 2007/08. The next table shows the Departmental Expenditure Limits (DELs) for NHS spending from 2003/04 through to 2007/08, the last year of the 2004 Spending Review. (For more on the Spending Reviews see annex table 1 and for public expenditure definitions see the glossary in the annex.)

DEPARTMENTAL EXPENDITURE LIMITS FOR NHS SPENDING: 2003/04 TO 2007/08

	NHS DEL (£bn)	Cash increase (£bn)	Cash growth (%)	GDP deflator (%)	Real terms growth (%)
2003/04	63.7	Na	Na	Na	Na
2004/05	69.4	5.7	9.0%	2.31%	6.5%
2005/06	76.4	7.0	10.1%	2.52%	7.4%
2006/07	83.8	7.4	9.7%	2.68%	6.9%
2007/08	92.1	8.3	9.9%	2.70%	7.0%

Source: DH, *Review Body on Doctors' and Dentists' Remuneration (2005): written evidence from the Health Departments of Great Britain*, October 2004. These figures are consistent with the 2004 Spending Review.

Over the four years from 2004/05 to 2007/08, cash spending is planned to rise by an annual average of 9.5% and real terms growth, as deflated by the GDP deflator, is planned to rise by nearly 7%. These increases are quite unprecedented and have, without the necessary reforms, arguably led to large amounts of taxpayers' money being wasted on unproductive activity.[2] This issue will be discussed further in chapter 3.

Reflecting the rapid growth in health spending, health's share of GDP has, of course, risen and is projected to increase further to over 9% by 2007/08 (comprising 7.8% for public spending and 1.4% for private spending).[3] In rich, ageing, countries it is unsurprising that a larger share of GDP should be devoted to healthcare. Expanding services and expensive treatments as well an older population all add to healthcare costs. The impact of an older population is illustrated by the fact that in 2001/02 the NHS Hospital and Community Services (HCHS) in England spent an average of £1,793 for every person aged between 75 and 84, and £3,314 for every person aged 85 years and older. These spending levels are several times greater than the average outlay on a person of working age (16 to 64 years), which was £442. People aged 75 and over accounted for only 7.5% of the population, but used one quarter of the HCHS budget during 2001/02.[4]

2.2 NHS SPENDING ALLOCATIONS AND COSTS

Total NHS spending comprises spending on the Hospital and Community Health Services (HCHS) and the Family Health Services (FHS). The FHS includes the General Medical Services (GMS, which covers General Medical Practitioners), the General Pharmaceutical Services (GPS), the General Dental Services (GDS, including General Dental Practitioner) and the General Ophthalmic Services (GOS). The spending on the HCHS is approximately 2½ the size of the spending on the FHS.[5]

The "real terms" data mentioned in section 2.1 (above) were deflated by the conventional GDP deflator, but this deflator, arguably, is inappropriate for the NHS because pay costs are a high proportion of NHS spending and pay rates tend to rise quicker than average prices in the economy at large. Indeed the pay bill is by far the largest single component of NHS costs and has been estimated to be 59% for financial years 2002/03[6] and 2003/04.[7] In 2003/04 the drugs bill amounted to 15% of total NHS spending; medical equipment, catering, cleaning accounted for 10%; buildings, equipment and training accounted for a further 10%; and supplies accounted for 6%.

As the next table shows, pay rates have greatly increased since 1998/99, putting pressure on NHS resources. These large increases have been significantly higher than for the economy as a whole and are especially difficult to justify as there were few signs that, outside certain pockets, there were particularly serious vacancy problems in the late 1990s. According to Nurses Pay Review Body reports for Nursing Staff, Midwives and Health Visitors[8] and for Professions Allied to Medicine (including physiotherapists)[9], groups with serious shortages were well-defined and identifiable and, as such, they should have been tackled using specific pay agreements. The vacancies were limited to certain specialties (for example geriatric nursing and physiotherapists) and, geographically, to all the Thames regions. Concerning the shortage of doctors, this problem reflects the historic restrictions on the number of students entering medical schools, which is a problem that is not addressed by higher pay.

The following table also shows the annual growth rates for NHS specific unit costs (allowing for all costs and not just the pay bill) and, for comparison, changes in the GDP deflator. The discrepancy between the GDP deflator and the NHS costs becomes especially marked from 2000/01 onwards.

NHS PAY COST INDEX, NHS COSTS AND THE GDP DEFLATOR (% YEAR-ON-YEAR CHANGES)

	Pay Cost Index	NHS specific unit costs	GDP deflator
1994/95	3.4	Na	Na
1995/96	4.4	3.7	3.0
1996/97	3.3	2.9	3.3
1997/98	2.5	2.1	3.0
1998/99	4.9	3.9	3.3
1999/00	6.9	3.9	3.3
2000/01	7.2	3.9	2.4
2001/02	8.3	5.1	2.7
2002/03	5.0	5.0	3.0

Sources: (1) For the Pay Cost Index: Hemingway, "Sources and methods for Public Sector Productivity: Health", ONS, *Economic Trends*, December 2004 (data are for England). (2) For the NHS specific unit costs and the GDP deflator: Professor Nick Bosanquet, *The NHS in 2010*, Reform, December 2004.

Deflating cash spending by the NHS specific unit costs index clearly reduces the resources available in "real terms" (and this is, of course, fully acknowledged by the Treasury, the ONS and the DH).[10] Taking the table on Departmental Expenditure Limits from section 2.1 (above) and taking 5% for the unit costs annual inflation rate (as a working assumption) instead of the GDP deflator suggests a considerable shortfall in real terms spending growth, as shown in the next table.

DEPARTMENTAL EXPENDITURE LIMITS FOR NHS SPENDING: 2003/04 TO 2007/08, WITH ANNUAL 5% INCREASE IN THE NHS UNIT COSTS: ILLUSTRATIVE DATA

	NHS DEL (£bn)	Cash increase (£bn)	Cash growth (%)	GDP deflator		NHS unit costs	
				GDP deflator (%)	Real terms growth (%)	Annual increase (%)	Real terms growth (%)
2003/04	63.7	Na	Na	Na	Na	Na	Na
2004/05	69.4	5.7	9.0%	2.31%	6.5%	5.0%	3.8%
2005/06	76.4	7.0	10.1%	2.52%	7.4%	5.0%	4.9%
2006/07	83.8	7.4	9.7%	2.68%	6.9%	5.0%	4.5%
2007/08	92.1	8.3	9.9%	2.70%	7.0%	5.0%	4.7%

2.3 MANPOWER RESOURCES IN THE NHS

The number of staff in the NHS has increased significantly in recent years, especially since 2000, as the following table demonstrates. According to the Department of Health, there were approximately 1.3 million people in the NHS in England in September 2004.[11, 12]

TOTAL NUMBERS OF NHS STAFF (1993-2003), HEADCOUNT, ENGLAND, ROUNDED TO NEAREST THOUSAND

	Staff	Growth over 1993
1993	1,046,000	Na
1997	1,059,000	1.2%
2000	1,118,000	6.9%
2003	1,282,000	22.6%
2004	1,331,000	27.2%

Sources: Nick Bosanquet, *The NHS in 2010*, Reform, December 2004 and Department of Health, *NHS hospital and community health services (HCHS) non-medical staff in England (1994-2004)*, Statistical Bulletin 2005/04, March 2005 (for 2004). These data include GP and practice staff.

Apart from the rapid increase in manpower resources since 1997, there are two developments of note. The first relates to the changing working patterns, which can be picked up by comparing changes in headcount and changes in WTEs (whole-time equivalents or full time equivalents). The second relates to the mix in personnel.

The numbers of managers and senior managers, taken together, have risen at 2½ times the rate of the professional staff.

The next table shows, for some key groups, the changes to their respective full time equivalents and headcounts. It can be seen that the total headcount (including GPs and Practice staff) showed an increase between 1997 and 2004 of over 272,00 (comprising a fairly modest increase of 59,000 from 1997 to 2000, but a whopping 213,000 for the years from 2000 to 2004). In full term equivalents, however, the increase was still large (225,000) but it was moderated by the move towards greater part-time working. The move towards part-time working was especially marked in the case of GPs, reflecting the increasing proportion of women GPs, and to a lesser extent in the nursing staff and support staff. There was a move in the opposite direction in the case of HCHS qualified medical and dental staff where the increases in full time equivalent manpower resources rose more than the crude headcount.

NHS STAFF, SELECTED GROUPS, BY WORKING PATTERN, ENGLAND.

	Full time equivalent			Headcount		
	1997	2000 growth since 1997 in brackets	2004 growth since 2000 in brackets	1997	2000 growth since 1997 in brackets	2004 growth since 2000 in brackets
Total staff:						
Inc GPs & Practice staff	846,298	892,230 (45,932)	1,071,203 (178,973)	1,058,686	1,117,841 (59,155)	1,331,087 (213,246)
HCHS only	758,059	801,493 (43,434)	968,435 (166,942)	935,856	990,940 (58,084)	1,188,793 (197,853)
Total non-medical:						
Inc GPs & Practice staff	761,540	801,982 (40,442)	961,979 (159,997)	969,067	1,021,522 (52,455)	1,214,051 (192,529)
HCHS only	700,961	739,399 (38,438)	889,973 (150,574)	869,020	919,252 (50,232)	1,101,797 (182,545)
All doctors, of which:	84,758	90,248 (5,490)	109,224 (18,976)	89,619	96,319 (6,700)	117,036 (20,717)
▪ GPs	27,660	28,154 (494)	30,762 (2,608)	29,389	30,252 (863)	34,085 (3,833)
▪ HCHS medical & dental	57,099	62,094 (4,995)	78,462 (16,368)	66,836	71,688 (4,852)	86,996 (15,308)
(2) Nursing staff (inc. Practice nurses)	256,093	266,987 (10,894)	315,440 (48,453)	318,856	335,952 (17,096)	397,515 (61,563)
Support to clinical staff*	215,129	234,683 (19,554)	284,394 (49,711)	283,871	307,225 (23,351)	368,285 (61,060)
NHS infrastructure staff†	141,637	144,048 (2,411)	178,098 (34,050)	170,623	173,733 (3,110)	211,489 (37,756)

* Support to doctors & nursing staff; scientific, therapeutic and technical staff; and ambulance staff.

† Comprising staff in Central Functions; hotel, property and estates; and managers and senior managers.

Sources: Department of Health, *NHS hospital and community health services (HCHS) non-medical staff in England (1994-2004)*, Statistical Bulletin 2005/04, March 2005 (for 2004). Data as at 1 October 1997 and 30 September 2000 and 2004. For a more comprehensive set of data see annex table 3.

The next table shows for some key groups, the changing mix of the staff employed by the NHS.

NHS STAFF, ENGLAND, HEADCOUNT

	1997	2000 % increase 1997 to 2000 in brackets	2004 % increase 2000 to 2004 in brackets	% increase 1997 to 2004
Total staff:				
Including GP & Practice staff	1,058,686	1,117,841 (5.6%)	1,331,087 (19.1%)	25.7%
HCHS only	935,856	990,940 (5.9%)	1,188,793 (20.0%)	27.0%
(A) Professionally qualified clinical staff, of which	519,714	552,936 (6.4%)	660,706 (19.5%)	27.1%
(1) All doctors, of which:	89,619	96,319 (7.5%)	117,036 (21.5%)	30.6%
▪ GPs	29,389	30,252 2.9%)	34,085 (12.7%)	16.0%
▪ HCHS medical & dental, of which:	66,836	71,688 (7.3%)	86,996	30.2%
-- Consultants	21,474	24,401 (13.6%)	30,650 (25.6%)	42.7%
(2) Nursing staff (inc. Practice nurses)	318,856	335,952 (5.4%)	397,515 (18.3%)	24.7%
(3) Qualified scientific, therapeutic & technical staff (inc. PAMs*)	96,298	105,910 (10.0%)	128,883 (21.7%)	33.8%
(4) Qualified ambulance staff	14,941	14,755 (-1.2%)	17,272 (17.1%)	15.6%
(B) Support to clinical staff†	283,871	307,225 (8.2%)	368,285 (19.9%)	29.7%
(C) NHS infrastructure staff, of which	170,623	173,733 (1.8%)	211,489 (21.7%)	24.0%
(1) Central functions	70,647	77,628 (9.9%)	99,831 (28.6%)	41.3%
(2) Hotel, property & estates	77,803	70,849 (-8.9%)	73,932 (4.3%)	-5.0%
(3) Manager & senior manager, of which:	22,173	25,256 (13.9%)	37,726 (49.4%)	70.1%
▪ Manager	14,645	16,369 (11.8%)	25,885 (58.1%)	76.7%
▪ Senior Manager	7,528	8,887 (18.1%)	11,841 (33.2%)	57.3%

Sources: Department of Health, *NHS hospital and community health services (HCHS) non-medical staff in England (1994-2004)*, Statistical Bulletin 2005/04, March 2005 (for 2004). Data as at 1 October 1997 and 30 September 2000 and 2004.

* PAMs = Professions Allied to Medicine

† Support to doctors & nursing staff; scientific, therapeutic and technical staff; and ambulance staff.

Overall total staff numbers rose by just over 25% between 1997 and 2004. Excluding the staff working in the "hotel, property and estates" functions where the number actually fell over this period, the other groups that have experienced relatively modest growth are GPs (exacerbated by the move towards part-time working) and ambulance staff. The big winners have been those in the bureaucracy, which has expanded to cope with the much-disliked targets, red tape and ever-evolving initiatives imposed by the Department of Health.[13] The number of consultants has also increased impressively. The increases in "central functions" and, especially, in the managerial strata have been eye-watering. The numbers of managers and senior managers, taken together, have risen at 2½ times the rate of the professional staff.

Despite the Chancellor's implicit claims to the contrary, only 13% of NICs go directly to the NHS.

2.4 FINANCING THE NHS

Around 85% of NHS expenditure is financed directly by the taxpayer, with the rest being met by the employers' and employees' contribution via the National Insurance Scheme[14] and a small part by patients' payments. The proportion met by general taxation increased, mainly reflecting the fall in patients' payments, during the Major years (1992 to 1997) but has held steady since 1997 (at least up to 2002).

UK NHS SOURCES OF FINANCE

	Conservatives (1992-1997)			Labour (1997-2002)		
	1992†	**1997†**	**1997/1992***	**1997†**	**2002†**	**2002/1997***
Taxation	29,548	39,064	1.32	39,064	60,319	1.54
	(83.4%)	(85.6%)	(5.7%)	(85.6%)	(85.9%)	(9.0%)
NHS contribution‡	4,612	5,691	1.23	5,691	8,494	1.49
	(13.0%)	(12.5%)	(4.2%)	(12.5%)	(12.1%)	(8.3%)
Patients' payments	1,276	906	0.71	906	1,384	1.53
	(3.6%)	(2.0%)	(-6.6%)	(2.0%)	(2.0%)	(8.9%)
Total NHS income	**35,436**	**45,660**	**1.29**	**45,660**	**70,196**	**1.54**
			(5.2%)			**(9.0%)**
	1992	**1997**	**1997-1992**	**1997**	**2002**	**2002-1997**
NHS income as a % of UK government receipts	15.8	15.1	-0.7	15.1	17.8	2.7

* Average annual growth rate in brackets (%)

† % NHS income in brackets

‡ NHS contributions paid by employers and employees via the National Insurance Scheme.

Source: Peter Yuen, *OHE Compendium of health statistics, 16th edition, 2004-2005*, Office of Health Economics (OHE), September 2004.

Only a modest proportion of total NICs goes towards the funding of the NHS. According to the ONS, total NICs in 2002 were nearly £64 billion[15] – thus the share going to the NHS was around 13%. The Chancellor's implied claim that the 2003 increase in NICs was exclusively for funding the NHS was inaccurate. The vast majority of the NHS spending increases have been met by and will continue to be met by rises in general taxation.[16]

REFERENCES

1. Peter Yuen, *OHE Compendium of health statistics, 16th edition, 2004-2005*, Office of Health Economics (OHE), September 2004.
2. "British election 2005: An expensive cure", *The Economist*, 9 April 2005, wrote "The health service may have been awash with money, but it has not responded in kind" and went on to compare the rapid increase in inputs with the significantly less rapid increase in outputs.
3. HM Treasury, *2004 Spending Review*, TSO, Cm 6237, July 2004.
4. Peter Yuen, op. cit.
5. Ibid.
6. Peter Yuen, op. cit. Until 1990/91 salaries and wages of directly employed personnel accounted for around 76% of gross annual revenue expenditure in the HCHS in England. This proportion appeared to drop markedly in the following year to 63%, but this reflected the inclusion of capital charges within measured revenue expenditure from that year onwards.
7. Richard Woods and Jonathan Carr-Brown, "The sickly patient's condition is improving", *Sunday Times*, 20 March 2005.
8. Nurses Pay Review Body, *14th report on Nursing Staff, Midwives and Health Visitors*, Cm 3538, February 1997, TSO.
9. Ibid.
10. ONS, *Public Sector Productivity: Health*, Paper 1, ONS, October 2004, discusses the deflators used for compiling volume measures of NHS labour inputs and items of intermediate consumption.
11. The rest of this section deals with NHS data on England, which accounts for just over 80% of the total workforce in the NHS (UK). Annex table 2, provides data on the medical and dental workforce for GB.
12. The main sources for data on England are: (1) Department of Health (DH), *Hospital, Public Health Medicine and Community Health Services Medical and Dental staff in England (1994-200)*, Statistical Bulletin 2005/03, March 2005 and (2) Department of Health (DH), *NHS hospital and community health services (HCHS) non-medical staff in England (1994-2004)*, Statistical Bulletin 2005/04, March 2005. They are available from the DH's website: www.dh.gov.uk.
13. Patrick Hennessy, "Chaos lays bare Downing Street claim about NHS", *Sunday Telegraph*, 10 April 2005, discussed the dangers of targets within the NHS.
14. All National Insurance contributions payable by employers, employees and the self-employed strictly go into the National Insurance Fund (a statutory fund). The National Insurance Fund then provides the funding for most contributory social security benefits though the NHS receives some funding from the National Insurance Fund.
15. National Statistics, *Public sector finances*, March 2005, ONS and HM Treasury.
16. But see Neil Collins "When is a tax not a tax? When it's the Fund", *Daily Telegraph*, 9 April 2005, who wrote "a new Act was rushed through Parliament in April 2005 that officially classified NICs as revenue, just like income tax and VAT." He also reported that about a billion went straight from the National Insurance Fund to the Treasury and the cost of running several departments were also met from the Fund.

CHAPTER THREE
OUTPUT AND PRODUCTIVITY

Measuring the output of taxpayer funded public services, where market signals and the price mechanism do not operate, is notoriously difficult. This chapter looks at three broad approaches to the "output" of Britain's health care provision:

3.1 Overall measures of health improvement: health trends

3.2 NHS measures of activity and efficiency

3.3 ONS estimates of output and productivity

3.1 OVERALL MEASURES OF HEALTH IMPROVEMENT: HEALTH TRENDS

In health economics the success of a health care system is how much it adds to "health". This is known as the "health gain", which incorporates aspects of both mortality and morbidity. Any calculations of health gains are, however, fraught with difficulties, not least of all because many changes to health are not a product of a country's healthcare system but other factors such as advances in technology, general lifestyle, smoking, nutrition and clean air.[1]

With these caveats in mind, it is nevertheless instructive to compare some basic data on health outcomes for, firstly, the period of the 1992 to 1997 Major Government and, secondly, since the year 1997, bearing in mind just how much extra funding has been allocated to the NHS since 1997. The table below comprises data on key "health trends".

HEALTH TRENDS: LIFE EXPECTANCY (GB)

	Conservatives (1992-1997)			Labour (1997-2001)		
	1992	1997	1997/1992*	1997	2001	2001/1997*
Life Expectancy at birth, years:						
Males	73.4	74.5	1.015 (0.3%)	74.5	75.7	1.016 (0.4%)
Females	78.8	79.6	1.010 (0.2%)	79.6	80.4	1.010 (0.25%)
Healthy Life Expectancy, at birth, years:						
Males	66.4	66.85	1.007 (0.1%)	66. 85	67.0	1.002 (0.05%)
Females	68.55	68.7	1.002 (0.2%)	68.7	68.8	1.0015 (0.05%)

* average annual growth rate in brackets (%)

Sources: Life Expectancy: National Statistics, *Health Statistics Quarterly*, Winter 2004, TSO, 2004 and National Statistics, Healthy Life Expectancy for GB, July 2004. Available on the ONS's website: www.statistics.gov.uk.

Life expectancy continued to improve during both the 1992 to 1997 period and, at a slightly faster rate, since 1997 (the available data only go up to 2001.) The current Government has specified a target for hospital services relating to life expectancy.[2] The target is that, by 2010, life expectancy at birth in England should increase to 78.6 years for men and to 82.5 years for women. In 2001 the life expectancy at birth in England was 76.0 years for men and 80.6 years for women.

The ONS's Healthy Life Expectancy measure combines life expectancy and population data on the health of the population to give an index of the expected remaining years of healthy life.[3] The index improved modestly under the Major years (especially for women), but changed little between 1997 and 2001.

The following table incorporates mortality rate indicators for infant deaths, for the most common cancers and for "early death" from coronary heart disease (CHD). The data on cancers and CHD have been chosen because they represent two of the three most important "killers" (the third being cerebro-vascular diseases).

It is notable that on all of these data, the rates of improvement were quicker under the Major years. It will be interesting to note how the improvement rates change for the years after 2003, in the light of the continuing large cash injections into the NHS and the Government's targeting of cancer as a priority disease.

HEALTH TRENDS: MORTALITY RATES, PER 100,000 POPULATION

	Conservatives (1992-1997)			Labour (1997-2003)†		
	1992	1997	1997/1992*	1997	2003†	2003/1997*
Infant death rates:						
Males	7.4	6.4	0.86 (-3.0%)	6.4	5.7	0.89 (-1.9%)
Females	5.7	5.3	0.93 (-1.5%)	5.3	4.9	0.925 (-1.3%)
Cancer death rates (age standardised):						
Breast: females	39.2	33.5	0.85 (-3.2%)	33.5	29.4	0.88 (-2.1%)
Prostate: males	30.1	27.7	0.92 (-1.7%)	27.7	27.2	0.98 (-0.3%)
Bowel: M&F	25.4	21.5	0.85 (-3.2%)	21.5	18.9	0.88 (-2.1%)
Lung cancer: M&F	52.4	45.6	0.87 (-2.7%)	45.6	40.9	0.90 (-1.7%)
Lung cancer: males	82.9	67.1	0.81 (-4.1%)	67.1	58.0 (2002)	0.86 (-3.0%)
Lung cancer: females	30.9	29.8	0.96 (-0.8%)	29.8	29.0 (2002)	0.97 (-0.6%)
Coronary heart disease mortality rates, aged 45 to 64 years (E&W):						
Males	288	207	0.72 (-6.4%)	207	159 (2002)	0.77 (-5.1%)
Females	82	56	0.68 (-7.4%)	56	42 (2002)	0.75 (-5.6%)

* average annual growth rate in brackets

† 2003, except where marked with a different end-year.

Sources: Data for infant mortality from National Statistics, *Annual Abstract of Statistics, 2005 edition*, Palgrave, 2005; data for cancer from Cancer Research UK (February 2005); and data for coronary heart disease from Peter Yuen, *OHE Compendium of health statistics, 16th edition, 2004-2005*, Office of Health Economics (OHE), September 2004.

3.2 NHS MEASURES OF ACTIVITY AND EFFICIENCY

"Health trends" and health outcomes are one way of looking at the "output" of a healthcare system (albeit a most imperfect one). Another way is to look at the direct measures of NHS activity and efficiency. The NHS maintains a vast database of data on activity measures, many of which are subject to Government targets.[4]

NHS data are subject to the criticism that they are administrative data, kept for administrative convenience rather than statistical purity. For example, the "Finished Consultant Episode" (FCE) relates to the period that a hospital inpatient spends under the care and responsibility of one consultant. If a patient is transferred from the care of one consultant to another, even within the same hospital or ward, it constitutes a new FCE. But these are the data that are widely available and, given the caveats, may be considered to provide a fair impression of how activity rates are changing in the NHS. Another criticism is that the data cannot capture "quality changes" (however defined) in the treatments, which is a fair point but difficult, if not impossible, to allow for.

3.2.1 Targets

The priority of the first Labour Government was to reduce waiting lists for elective (non emergency) surgery, which stood at 1.6 million in 1997. They were down to 1.3 million in 1998 and are now down to around 845,000. This is progress, but progress which *The Economist* rates as "disappointing".[5] There is also some disquiet that trusts have "inappropriately adjusted" their waiting lists in order to meet targets.[6]

One of the second term priorities also related to reducing waiting times, but this was more a matter of maintaining the falling trend in waiting times seen since the early 1990s rather than any "step change" in direction. In the early 1990s, for example, about 10% of inpatients waited for over one year; by 1996 there were virtually none.[7] The 2002 Spending Review[8] contained the following two targets:

- Reduce the maximum wait (waiting time) for inpatient treatment to six months by end 2005 (currently nine months) from GMP referral.
- Reduce to four hours the maximum wait in A&E from arrival to admission, transfer or discharge by the end of 2004.

There does appear to be some progress on reducing waiting times, but the quantitative evidence is ambiguous. This arises because there are two sets of data for waiting times and the evidence conflicts: [9]

- The official DH measurement of waiting time, which is taken from the Waiting List returns. The waiting statistics show that the average waiting time has fallen most years since 1998.
- Data from the Hospital Episodes Statistics data warehouse (HES), which is the only national source for information on the time waited for any specific operation or condition. The HES average time waited by admitted patients had risen most years since 1998.

The following table points out the conflicting picture from the two sets of data. Suffice to say in this paper, that the jury is out as to whether waiting times are falling. The evidence is simply not sufficiently clear.

WAITING TIME DATA: COMPARATIVE MEASURES

	Official waiting time	HES total wait for all admissions in year starting yyyy		Cataract operations	Hip operations
	Median	Mean	Median		
31/3/96	83	82.2	40	Na	Na
31/3/97	92	89.3	41	Na	Na
31/3/98	104	98.9	45	Na	Na
31/3/99	90	90.5	43	176	197
31/3/00	90	92.9	44	164	212
31/3/01	88	95.7	47	153	220
31/3/02	89	98.7	49	147	229
31/3/03	84	Na	Na	Na	Na

Sources: Sheila Dixon, "Trends in waiting time to date and total time waited: are the sources compatible?", *Health Statistics Quarterly*, ONS, Winter 2004, TSO, for the general data. Reform, *NHS Performance*, Reform, November 2004, for data on cataract operations and hip operations (these data are from the HES).

Many of the Government's targets are reported to be widely disliked and resented by NHS staff, especially clinical staff, and they are undoubtedly behind the explosion of bureaucratic jobs discussed in chapter 2. Clinicians feel the management targets can distort clinical judgement and undermine their ability to exercise their professional judgement.

The hospital waiting-time targets, which put pressure on hospitals to squeeze in as many patients as possible and increase bed occupancy, have been partly blamed for the increase in MRSA infections.[10, 11] And it is claimed that 4-hour A&E target to see a patient, which has improved waiting times in A&E, has resulted in threats to patient safety.[12]

For more on targets, see the glossary in the annex, under Public Service Agreements (PSAs).

3.2.2 The DH's key data on activity, performance and efficiency

The Department of Health (DH) collects a plethora of data on NHS activities. The key ones are easily accessed in the DH's annual departmental reports. The two tables below show the main activity data for, firstly, hospitals and, secondly, the general medical, dental and ophthalmic services.

HOSPITAL ACTIVITY TRENDS, ENGLAND, THOUSANDS

	Conservatives (1992/93-1997/98)			Labour (1997/98-2002/03)		
	1992/93	1997/98	1997/98 over 1992/93*	1997/98	2002/03	2002/03 over 1997/98*
General and acute, admissions, first FCEs†, of which:	7,557	8,178	1.08 (1.6)	8,178	9,317	1.14 (2.7)
▪ Elective admissions	4,031	4,459	1.11 (2.1)	4,459	5,320	1.19 (3.5)
▪ Emergency and other admissions (non-elective admissions)	3,526	3,718	1.05 (1.0)	3,718	3,997	1.075 (1.5)
Geriatrics, admissions, first FCEs	459	401	0.87 (-2.3)	401	360	0.90 (-2.1)
Maternity, admissions, first FCEs	905	827	0.91 (-1.9)	827	906	1.10 (1.9)
New outpatients, first attendances, all specialties, of which:	9,342	11,529	1.23 (4.2)	11,529	13,032	1.13 (2.5)
▪ General and acute	8,488	10,643	1.25 (4.6)	10,643	12,246	1.15 (2.8)
▪ Geriatrics	77	107	1.39 (6.8)	107	117	1.09 (1.7)
▪ Maternity	612	590	0.96 (-0.8)	590	502	0.85 (-3.2)
Mental Health	238	290	1.22 (4.1)	290	276	0.95 (-1.0)
Learning disabilities	4	6	1.50 (8.4)	6	7	1.17 (3.2)
New A&E, first attenders	10,993	12,794	1.16 (3.0)	12,794	12,945	1.01 (0.2)
Ward attenders	1,029	1,034	1.00 (0)	1,034	1,179	1.14 (2.7)

* Average annual growth rate in brackets (%)

† Finished Consultant Episode (see the glossary for definition)

Source: DH, *Departmental Report 2004*, Cm 6204, April 2004, TSO.

Using the data on Finished Consultant Episodes (FCEs), there is some evidence that the rate of activity for general and acute admissions, especially for elective admissions, has increased since 1997 compared with the period between 1992 and 1997. But the rate of growth recorded prior to 1997 gives a fair impression of an NHS expanding its activity perfectly commendably. It most certainly does not give the impression of an NHS on the verge of "collapse". The growth rate for the outpatients activity data was higher in the 1992 to 1997 period than since 1997, as was the number of new attenders at A&E.

Turning from hospital services to the family health services, the following table shows that the activity rates of the General Ophthalmic and the General Medical Services have picked up since 1998/99, whilst the activity of the General Dental Services has been flat.

FAMILY HEALTH SERVICES: GENERAL MEDICAL, DENTAL AND OPHTHALMIC SERVICES, ENGLAND

	Conservatives (1992/93-1996/97)†			Labour (1998/99-2002/03)†		
	1992/93	1996/97	1996/97 over 1992/93*	1998/99	2002/03	2002/03 over 1998/99*
General Medical Services:						
Consultations, total number (millions)	273	256	0.94 (-1.5)	220	241	1.085 (2.7)
Total number of consultations per GMP	8,790	9,500	1.08 (1.9)	8,000	8,600	1.075 (2.4)

	Conservatives (1992/93-1998/99)†			Labour (1998/99-2002/03)†		
	1992/93	1998/99	1998/99 over 1992/93*	1998/99	2002/03	2002/03 over 1998/99*
General Dental Services:						
Adult courses of treatment (thousands)	25,141	26,171	1.04 (0.7)	26,171	26,284	1.00 (0)
General Ophthalmic Services:						
NHS sight tests (thousands)	5,528	6,992	1.26 (3.9)	6,992	9,662	1.38 (11.2)

* Average annual growth rate in brackets (%)

† Because of unavailability of data, 1996/97 (for the GMS) and 1998/99 (for the GDS and GOS) have had to be taken as the end dates for the Conservative Government. 1998/99 has been taken as the start data for Labour.

Source: DH, *Departmental Report 2004*, Cm 6204, April 2004, TSO.

3.2.3 Is the NHS improving?

There is little doubt that the NHS is registering improvements. Waiting lists are down, hospital activity rates have continued to rise (following the trends of 1992 to 1997) and family health services activity rates are higher. But evidence from well-respected reports suggests that the improvements are patchy and in some cases there is even deterioration.

One such report is a recent report from Picker Institute Europe, entitled *Is the NHS getting better or worse?*.[13] The conclusion was that the NHS had improved but only in areas directly targeted by the DH. In other areas they found that the service had languished or even deteriorated. Patients' top

concerns included dirty hospitals (and hospital acquired infections) and a lack of information about medical treatments. There was little evidence of the NHS becoming more patient-friendly. Specific areas which were allegedly getting worse included family doctor services. A recent King's Fund independent audit concluded that there had been improvements, but the NHS as a whole had not "been transformed". [14]

Modest improvements to the NHS have been brought at great expense to the taxpayer.

So there have been improvements but they are at great expense to the taxpayer. Moreover, with funding increases outstripping increases in the NHS's activity index, the NHS's "efficiency index" (a crude measure of productivity) has been falling since 1997.[15] (See the glossary for more on the cost-weighted efficiency index.)

Finally, there is a widespread feeling that much of the extra NHS money has been wasted. According to a YouGov poll (April 2005) on the NHS, nearly 60% of those polled said that the extra money that had gone into the NHS had been mostly wasted and only 25% said that it had been well spent. Nearly 30% said that the service had improved, 40% said that it had deteriorated (though expectations were probably rising over this period) and about 30% said that it had stayed the same.[16]

3.3 ONS ESTIMATES OF OUTPUT AND PRODUCTIVITY

The Office of National Statistics (ONS) is responsible for calculating government output data (including the output of the NHS) and, hence, productivity. From the 1960s to 1998, the output of the government sector in the national accounts was measured, by convention, as of value equal to the total value of the inputs (the output = input convention), rather than by direct measurement. But since 1998 the ONS has moved increasingly towards the replacement of the output = input approach by direct measures of the volume of government output, including health.[17, 18] The calculation of the output of the public health sector now involves the hospital cost-weighted activity index and activity measures for the Family Health Services including the number of GP consultations.

Whilst there is much to be said in support of the direct measurement of output, the changes to methodology have, nevertheless, led to some major changes in estimates for the output of the health sector, as the next table demonstrates. These changes influence, of course, the GDP data and the estimates for health productivity.

As can also be seen from the table, the ONS estimated (in October 2004) that health output (in volume terms, but not allowing for any quality changes) had increased by around 27½% between 1995 and 2003. Note also that, even on the October 2004 estimates, the output of public sector healthcare was increasing at around 3% to 4% per annum at a time when cash spending was rising by 9% to10% per annum.

GENERAL GOVERNMENT FINAL CONSUMPTION EXPENDITURE ON HEALTH, CHAINED VOLUME MEASURE: UK (YEAR-ON-YEAR % INCREASES)

									Cumulative change (%)	
	1996	1997	1998	1999	2000	2001	2002	2003	1995-2003	1996-2003
May '04	2.6	2.3	2.6	2.1	0.9	1.9	2.6	2.6	19.0	16.0
June '04	3.9	1.3	1.8	3.1	3.0	4.2	4.1	4.1	28.5	23.7
Oct. '04	2.9	1.5	1.8	3.1	3.0	4.2	4.1	4.1	27.6	23.9

Sources: ONS, *Public Sector Productivity: Health*, Paper 1, ONS, October 2004); ONS, *Measurement of Government Output and Productivity for the National Accounts, (Atkinson Review: Final report)*, Palgrave, January 2005. Cumulative changes between 1995 and 2003 are author's calculations for May 2004 and June 2004.

On the ONS's most favourable estimate, NHS productivity has fallen by an annual average of 0.75%. By its least favourable estimate, it has fallen by an average of 1.35%. Meanwhile, private sector productivity has increased by 2% pa.

The ONS has recently calculated the public health's productivity performance for the years 1995 to 2003 using the October 2004 output data.[19] Its methodology was as follows:

- It calculated NHS inputs, in volume terms, deflating the cash figures by eight different NHS pay and price deflators (but all based on their "improved deflation method"). Between 1995 and 2003 the eight deflators rose by between 28% to 37%. Cash inputs rose by around 80% over this period, thus inputs in volume terms increased by between 32% (using the deflator which had increased by 37%) and 39% (using the deflator which had increased by 28%).
- Taking the rise in output (27½%) and the range of rises in inputs (32% to 39%), the ONS then calculated the range of productivity estimates. Between 1995 and 2003 productivity fell by between 3½% and 8½%, as shown in the table below.
- In the table, deflator A refers to the 3½% fall in productivity and deflator B refers to the 8½% fall in productivity.

The conclusion is stark. NHS productivity has fallen significantly since 1995 and especially since 1997, even on the ONS's more sophisticated estimates. Since 1997, the ONS's most favourable estimate shows productivity falling by an annual average of 0.75%, whereas their least favourable (but nevertheless acceptable) estimate shows productivity falling by an annual average of 1.35%. This is at a time that the private sector managed annual productivity increases of around 2%. So, other things being equal, transferring resources from the private sector to the NHS has undermined economic growth.

NHS OUTPUT AND PRODUCTIVITY (USING DIFFERENT DEFLATORS FOR INPUTS)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2003/1995*	2003/1997*
Output data:											
NHS output (%)	-	2.9	1.5	1.8	3.2	3.0	4.2	4.1	4.1	1.276 (3.1%)	1.220 (3.4%)
NHS output (2001=100)	84.9	87.4	88.7	90.3	93.2	96.2	100.0	104.1	108.3	1.276 (3.1%)	1.220 (3.4%)
Productivity (2001=100):											
Using deflator A†	101.8	101.1	102.7	102.0	99.8	95.5	100.0	98.4	98.2	0.965 (-0.4%)	0.956 (-0.75%)
Using deflator B†	105.3	103.8	104.7	103.3	100.7	99.7	100.0	97.7	96.5	0.916 (-1.1%)	0.922 (-1.35%)

* Annual average growth rates in brackets (%).

† Explanatory note on the deflators: deflator A, which rose by 37% between 1995 and 2003 and resulted in inputs volume rising by 32% and productivity dropping by 3½%, is described by the ONS as "improved deflation method, including cost of all items, using revised Blue Book data, adding an allowance for capital services and estimating missing years using average previous 3 years' growth"; deflator B, which rose by 28% between 1995 and 2003 and resulted in inputs volume rising by 39% and productivity dropping by 8½%, is described by the ONS as "improved deflation method, including cost of existing items and using revised Blue Book data".

Source: ONS, *Public Sector Productivity: Health*, Paper 1, ONS, October 2004. Author's calculations for the 1997 to 2003 data.

REFERENCES

1. Ruth Lea, *Healthcare in the UK: the need for reform*, IoD, June 2000, discusses these issues.
2. The 2004 Spending Review (HM Treasury, *2004 Spending Review*, TSO, Cm 6237, July 2004), quoting *The NHS Improvement Plan* (DH, July 2004).
3. National Statistics, *Healthy Life Expectancy for GB and England*, July 2004. Available on the ONS's website: www.statistics.gov.uk.
4. According to Lois Rogers, "Inside the NHS", *Sunday Times*, 20 March 2005, hospitals are faced with 500 performance targets – but just four affect the hospital league tables. They are: seeing 98%of A&E patients within 4 hours of arrival; seeing urgent cancer cases within 14 days of referral by their GPs; seeing outpatients within 13 weeks; and keeping nobody waiting more than 9 months for an operation.
5. See (1) "Getting the NHS right", *The Economist*, 23 April 2005 and (2) "British election 2005: An expensive cure", *The Economist*, 9 April 2005.
6. National Audit Office, *Inappropriate adjustments to NHS Waiting Lists*, NAO, December 2001.
7. Richard Woods and Jonathan Carr-Brown, "The sickly patient's condition is improving", *Sunday Times*, 20 March 2005.
8. HM Treasury, *2002 Spending Review: Opportunity & security for all: investing in an enterprising, fairer Britain (2003-2006)*, TSO, Cm 5570, July 2002.

9. Sheila Dixon, "Trends in waiting time to date and total time waited: are the sources compatible?", *Health Statistics Quarterly*, ONS, Winter 2004, TSO. The article is a well-researched attempt to explain the differences in the two sources of data for waiting times.

10. The Economist, "Getting the NHS right", *The Economist*, 23 April 2005.

11. National Statistics, *MRSA: deaths continue to increase in 2003*, Press release, 24 February 2005. The ONS reported that the number of death certificates mentioning Staphylococcus Aureus by Methicillin Resistance for England and Wales had increased every year from 1993 to 2003. The number on death certificates increased by 19% in 2003, though the number according to laboratory reports of MRSA compiled by the Health Protection Agency increased by 7%.

12. Patrick Hennessy, "Chaos lays bare Downing Street claim about NHS", *Sunday Telegraph*, 10 April 2005.

13. Nigel Hawkes, "NHS survey says improvements are only patchy", *The Times*, 18 April 2005.

14. Richard Woods and Jonathan Carr-Brown, "The sickly patient's condition is improving", *Sunday Times*, 20 March 2005. The King's Fund website is www.kingsfund.org.uk.

15. Richard Woods and Jonathan Carr-Brown, "The sickly patient's condition is improving", *Sunday Times*, 20 March 2005.

16. "Getting the NHS right", *The Economist*, 23 April 2005.

17. Alwyn Pritchard: "Understanding Government output and productivity", ONS, *Economic Trends*, July 2003, TSO, was an early article on the subject.

18. ONS, *Measurement of Government Output and Productivity for the National Accounts, (Atkinson Review: Final report)*, Palgrave, January 2005.

19. ONS, *Public Sector Productivity: Health*, Paper 1, ONS, October 2004.

ANNEX 1

GLOSSARY

Age standardised mortality rates: mortality rates (deaths per unit of population) adjusted (standardised) to allow for different age distributions.

Annually Managed Expenditure (AME): see Total Managed Expenditure.

Cost-weighted efficiency index (CWEI): is the cost weighted activity index, divided by the index of volume changes in NHS spending. It is a crude measure of productivity. According to the DH the CWEI does not accommodate quality changes and they are developing two new measures of value for money (VfM) growth that, between them, encompass both cost efficiency and quality. They are the "NHS cost efficiency growth measure" and the "NHS service effectiveness growth measure". See DH, "The 'Experimental' NHS Cost Efficiency Growth Measure", October 2004.

Day case: day case patients are those admitted electively to a hospital ward for investigation or treatment and who do not occupy a bed overnight.

Departmental Expenditure Limits (DEL): see Total Managed Expenditure.

Family Health Services (FHS): include the General Medical Services (GMS), General Pharmaceutical Services (GPS), General Dental Services (GDS) and General Ophthalmic Services (GOS).

Finished Consultant Episode (FCE): measure of hospital inpatient activity. The period of time that one hospital inpatient spends under the care and responsibility of one consultant within one care provider. If a patient is transferred from the care of one consultant to another, even within the same hospital or ward, it constitutes a new FCE. The birth of a (live) infant in hospital also constitutes a FCE. The FCE is an example of Hospital Episode Statistics (HES), which are generally used for measuring activity.

Full time equivalent: see Whole-time equivalent.

General Dental Practitioner (GDP).

General Medical Practitioner (GMP): A GMP contracted to the NHS and providing the full range of medical services is described as an unrestricted principal. Most GMPs are unrestricted principals. A GMP contracted to the NHS and providing the full range of medical services is described as an unrestricted principal; most GMPs are unrestricted principals. The list size is the number of people registered with a GMP.

Hospital and Community Health Services (HCHS). The main elements of the HCHS are the provision of both hospital and community services, which are mainly commissioned by Health Authorities and provided by NHS trusts.

Inpatient: a person occupying a hospital bed for at least one night in contrast to an outpatient.

Life expectancy: the average further number of years that a person at a specified age, for example at birth, may expect to live.

Methicillin-Resistant Staphylococcus Aureus (MRSA).

National Insurance Fund: the statutory fund into which all National Insurance contributions payable by employers, employees and the self-employed are paid, and from which expenditure on

most contributory social security benefits are met. The NHS also receives an element of funding from this. Source: DH, *Departmental Report 2004*, Cm 6204, April 2004.

Outpatient: a patient attending a hospital for consultation without staying there overnight.

Primary care: family health services provided by family doctors, dentists, pharmacists, optometrists and ophthalmic medical practitioners.

Primary Care Trust (PCT): in England, with the responsibility of identifying the health needs of their community services, developing primary and community services, commissioning secondary services as well as providing directly a range of community health services.

Public Service Agreements (PSAs): plans setting out what a department will deliver in the form of measurable targets over the public expenditure review period in return for its agreed spending. They have been specified in Spending Reviews since 1998. The 1998 targets included (HM Treasury, *Comprehensive Spending Review*, TSO, Cm 4011, July 1998):

- Improve the efficiency of the NHS and social services by some 3% a year.
- Reduce the NHS waiting lists to 100,000 less than the "inherited" level by the end of the Parliament.

The current set of targets include (from the 2002 Spending Review, source HM Treasury, www.hm-treasury.gov.uk/performance/health.cfm):

- Reduce the maximum wait (waiting time) for an outpatient appointment to 3 months (from GMP referral).
- Reduce the maximum wait (waiting time) for inpatient treatment to 6 months by end 2005 (currently 9 months) (from GMP referral).
- Reduce to 4 hours the maximum wait in A&E from arrival to admission, transfer or discharge by the end of 2004.
- Guarantee access to a primary care professional within 24 hours and to a primary care doctor within 48 hours by 2004.
- Reduce the mortality rates from the major killer diseases by 2010.
- Improve value for money in the NHS and personal social services by at least 2% per annum, with improvements of 1% in both cost efficiency and service effectiveness.

The 2004 Spending Review (HM Treasury, *2004 Spending Review*, TSO, Cm 6237, July 2004) included the following targets for hospital services, quoting *The NHS Improvement Plan* (DH, July 2004):

- By 2010 increase life expectancy at birth in England to 78.6 years for men and to 82.5 years for women.
- By the end of 2008, waiting times will have been reduced to a maximum of 18 weeks from GMP referral to hospital treatment.
- By the end of 2005, patients will have the right to choose from at least 4 or 5 different healthcare providers.
- From 2008, patients will have the right to choose from any provider that meets clear NHS standards within the NHS national maximum price.

Real terms: cash figures adjusted for the effects of general inflation by deflating with a price index, frequently the GDP deflator.

Secondary care: care provided in hospitals.

Targets: see Public Service Agreements.

Throughput: a measure of hospital activity. The number of patients treated in a given time per bed.

Total Managed Expenditure (TME): total public sector spending, comprising public sector current expenditure and public sector gross investment (but net of sales of fixed assets). TME replaced the previous system of classifying public spending (as the annual "control total" plus cyclical social security plus debt interest) in 1998.

It can also be divided into:

- Departmental Expenditure Limits (DEL): the three year limits for a department's programme spending, and
- Annually Managed Expenditure (AME): the spending that is not easily subject to firm multi-year limits. AME includes social security benefit spending, public service pension payments and central government debt interest.

Waiting times: begin from the date the clinician decides to admit the patient. Patients subsequently offered a date but unable to attend have their waiting times calculated from the most recent date offered. These are known as self-deferred cases and are included in total waiting. Source: DH, statistical press release, 8 April 2005.

Whole-time equivalent (WTE): a measure of the work of part-time staff. For example, one part-timer working 3 days a week is equivalent to 0.6 WTE. The term "full time equivalent" is also used.

ANNEX 2
TABLES

TABLE 1: DEPARTMENTAL EXPENDITURE LIMITS (DELS) (£BN): HEALTH (OF WHICH NHS)

		1998/9	1999/00	2000/1	2001/2	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8
SR1998	Health	37.2	40.2	43.1	46.0						
	NHS	36.5	39.6	42.4	45.2						
SR2000	Health		40.9	45.3	49.5	54.4	59.0				
	NHS		40.2	44.5	48.2	52.3	56.7				
SR2002	Health				52.2	58.0	63.9	70.3	77.3		
	NHS				50.9	55.8	61.3	67.4	74.4		
SR2004	Health							71.5	78.5	86.0	94.4
	NHS							69.4	76.4	83.8	92.1

Sources: HM Treasury, *Comprehensive Spending Review: Modern public services for Britain: investing in reform,* (1999-2002), TSO, Cm 4011, July 1998; HM Treasury, *Spending Review 2000: Prudent for a purpose: building opportunity & security for all (2001-2004)*, TSO, Cm 4807, July 2000; HM Treasury, *2002 Spending Review: Opportunity & security for all: investing in an enterprising, fairer Britain (2003-2006)*, TSO, Cm 5570, July 2002; HM Treasury, *2004 Spending Review: Stability, security and opportunity for all: investing in Britain's long-term future (2005-2008)*, TSO, Cm 6237, July 2004.

TABLE 2: NUMBER OF DOCTORS AND DENTISTS IN THE NHS (GB): WHOLE-TIME EQUIVALENT AND HEADCOUNT

	2001		2002		% change	
	WTE	**Headcount**	**WTE**	**Headcount**	**WTE**	**Headcount**
Hospital medical & dental staff	72,920	83,110	78,070	87,340	7.1	5.1
Public health & community medical staff	2,100	3,100	1,900	2,760	-9.4	-11.0
Community dental staff	1,340	1,730	1,410	1,860	5.8	7.6
Sub-total	**76,360**	**87,940**	**81,380**	**91,960**	**6.6**	**4.6**
GMPs	34,790	38,160	35,100	38,650	0.9	1.3
GDPs	Na	22,080	Na	22,390	Na	1.4
Ophthalmic Medical Practitioners	Na	750	Na	670	Na	-10.2
Sub-total	**Na**	**60,990**	**Na**	**61,710**	**Na**	**1.2**
Grand total	**Na**	**148,930**	**Na**	**149,050**	**Na**	**0.1**

Source: Review Body on Doctors' and Dentists' Remuneration, *33rd report (2004)*, Cm 6127, March 2004, TSO.

TABLE 3: NHS STAFF, BY WORKING PATTERN, ENGLAND.

	Full time equivalent			Headcount		
	1997	**2000**	**2004**	**1997**	**2000**	**2004**
Total staff (inc. GP & Practice staff)	846,298	892,230	1,071,203	1,058,686	1,117,841	1,331,087
Total (HCHS only)	758,059	801,493	968,435	935,856	990,940	1,188,793
Total non-medical (Inc GP & Practice staff)	761,540	801,982	961,979	969,067	1,021,522	1,214,051
Total non-medical (HCHS only)	700,961	739,399	889,973	869,020	919,252	1,101,797
(A) Professionally qualified clinical staff, of which	436,646	460,972	549,836	519,714	552,936	660,706
(1) All doctors, of which:	84,758	90,248	109,224	89,619	96,319	117,036
GPs	27,660	28,154	30,762	29,389	30,252	34,085
HCHS medical & dental, of which:	57,099	62,094	78,462	66,836	71,688	86,996
Consultants	19,661	22,186	28,141	21,474	24,401	30,650
(2) Nursing staff (Inc Practice nurses)	256,093	266,987	315,440	318,856	335,952	397,515
(3) Qualified scientific, therapeutic & technical staff (Inc PAMs*)	81,601	89,632	108,585	96,298	105,910	128,883
(4) Qualified ambulance staff	14,193	14,104	16,587	14,941	14,755	17,272
(B) Support to clinical staff†	215,129	234,683	284,394	283,871	307,225	368,285
(C) NHS infrastructure staff, of which	141,637	144,048	178,098	170,623	173,733	211,489
(1) Central functions	60,643	65,965	85,498	70,647	77,628	99,831
(2) Hotel, property & estates	59,560	53,830	56,593	77,803	70,849	73,932
(3) Manager & senior manager, of which:	21,434	24,253	36,007	22,173	25,256	37,726
Manager	14,090	15,664	24,642	14,645	16,369	25,885
Senior Manager	7,343	8,589	11,365	7,528	8,887	11,841
(D) Other non-medical or those with unknown classification	2,390	656	432	2,820	877	497
(E) Other GP Practice staff	50,497	51,872	58,443	81,658	83,070	90,110

Sources: Department of Health, *NHS hospital and community health services (HCHS) non-medical staff in England (1994-2004)*, Statistical Bulletin 2005/04, March 2005 (for 2004). Data as at 1 October 1997 and 30 September 2000 and 2004.

* PAMs = Professions Allied to Medicine

† Support to doctors & nursing staff; scientific, therapeutic and technical staff; and ambulance staff.