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**FINANCING MEDICAL EDUCATION  
IN THE UNITED KINGDOM**

**By**

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## Introduction

The National Health Service (NHS) was established on 5<sup>th</sup> July 1948 and will be celebrating its 60<sup>th</sup> anniversary in a few years time. It is funded by the taxpayer and managed by the Department of Health, and provides everybody with access to free medical care. The NHS provides 85% of the UK's Healthcare, compared to an Organisation for Economic Co-operation and Development's average for public sector provision of 72%. The NHS is commonly quoted in the UK as being the largest healthcare delivery organisation worldwide, but Medicare in the US has a significantly larger tax-funded budget, some companies have larger turnovers and Wal-Mart employs more staff.

## **Major trends in healthcare costs since 1990**

### Aggregate expenditure

In common with healthcare systems worldwide, the UK has faced a relentless demand for increases in expenditure on health. Aneurin Bevan, the Founder of the NHS, foresaw that expectation always exceeds capacity; the NHS, he predicted, would always appear inadequate as a consequence.

In the run up to the 1990s there was an attempt to restructure the NHS to improve efficiency, and a general management tier was introduced in the mid-eighties. As a result of constrained NHS resources waiting lists grew inexorably, and the NHS management became a monolith of bureaucracy. The UK had relatively old infrastructure and a shortage of doctors. The NHS & Community Care Act 1990 introduced the "Internal Market", the objective of which was to invoke efficiency through competition among "Purchasers (health authorities and some general practitioners) and "Providers"(hospitals).

The current Labour government took office in 1997 and increasing spending on healthcare in real terms was a key part of their manifesto, together with a pledge to replace the Internal Market with a more collaborative approach. This was heralded by an increase in NHS funding of £1.5bn in 1998/99 with additional increases each year to date. Since 1999/00, healthcare expenditure has been rising at 7.5% per year in real terms, or about 10% in cash terms.

Table One: Expenditure on Healthcare 1990/91 to 2007/08

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99
	£m								
Spend	27,500	31,200	33,000	34,220	38,427	40,778	42,400	44,468	47,148

Table One: Continued

	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07
	£m	£m	£m	£m	£m	£m	£mEst*	£mEst*
Spend	49,412	54,161	59,726	66,178	74,718	81,200	89,000	98,000

Source: HM Treasury Public Expenditure Statistical Analysis, Chapter 8. Published annually

\*Estimate based on 10% growth forecast in the Chancellor's budget speech 17<sup>th</sup> March 2004

The UK government has been committed to sustained growth in the NHS and between 2003 and 2008 there will have been a cumulative increase of 43% in real terms, whilst most other healthcare systems have been trying to constrain their costs.

### Per Capita Healthcare expenditure

In 1987 total expenditure on the NHS was £22bn, equal to £400 per head. Twenty years on the spend per head is over £1,400. Table 2 provides the per capita healthcare expenditure figures for this time period.

Table 2: Per capita health spend

	87/88	90/91	91/92	92/93	93/94	94/95	95/96	96/97
	£	£	£	£	£	£	£	£
Per capita spend	400	480	543	574	593	664	703	729

Table Two: Continued

	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07
	£	£	£	£	£	£	£	£	£	£
Per capita spend	763	806	842	920	1,010	1,116	1,255	1,375	1,483*	1,628*

\* Estimated

### Healthcare expenditures as a percentage of GDP

In 1987 only about 6% of GDP was spent on healthcare, one of the lowest proportions in the western world. In January 2000 the government pledged to match the European average of 8% GDP spending on healthcare within five years. The UK's GDP spend on healthcare has risen steadily to 8.3% in 2004/05, but particularly since 2002/03, when, following the Wanless Review on future health finance needs, it was announced that NHS spending would increase by 7.4% in real terms between 2002/03 and 2007/08. Healthcare expenditure as a percentage of GDP is predicted to reach 9.4% at the end of this time period.

Table 3: Healthcare expenditures as a percentage of GDP

	90/91	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
% of GDP	6	6.9	7	6.7	6.8	6.8	7.0	7.3	7.7	8.1	8.3	8.7*	9*	9.4*

\*Estimate

The UK GDP is £1,005,023million currently. The percentage of GDP spent on healthcare includes 1.1 % non-NHS expenditure.

### **Postgraduate Medical Education (PGME) Costs**

The NHS has been subjected to a great deal of change in the last fifteen years or so and this very dynamic environment produces compound difficulties in collecting data that is comparable. In 1991/92 a “Purchaser/Provider” interface was introduced to promote better decision-making, more effective use of resources, and better-cost control. “Capital Charges” were introduced to facilitate the costs of capital being factored into financial and management decisions. Resource Budgeting gradually replaced cash Accounting in two stages, and “Payments by Results” is being implemented which will modernise financial flows.

In 1992 NHS Trusts were established, and later, Primary Care Trusts and Foundation Trusts. Special Health Authorities were abolished. At the management level, Health Authorities were replaced with Strategic Health Authorities; NHS Regional Health Authorities were abolished and replaced with Department of Health Regional Offices, later replaced by Directorates of Health and Social Care, which were then abolished shortly afterwards. Throughout all this time the NHS bodies and the Department of Health were regularly restructuring themselves, with organisations merging and then reforming into separate organisations. Postgraduate Deaneries reformed to reflect changes in the boundaries of the NHS and Department of Health organisations that they related to. This list is by no means exhaustive but gives a flavour of the evolving nature of the healthcare environment in the public sector.

In the UK postgraduate education for doctors and dentists is managed by Deaneries. There are 15 Deaneries in England, four in Scotland, and one each in Wales and Northern Ireland. Deaneries are responsible for the commissioning, management and quality monitoring of postgraduate medical and dental education to standards set by the General Medical Council, the General Dental Council, and the Postgraduate Medical Education and Training Board (PMETB), once it has fully subsumed the Specialist Training Authority and the Joint Committee on Postgraduate Training for General Practice. The main functions of Deaneries include:

- Implementing national policies on postgraduate medical and dental education
- Maintaining a database of doctors and dentists in training and of approved posts
- Ensuring that the quality of training at all grades and in all specialties is of the appropriate standard
- Ensuring equality of opportunity in recruitment and progress through the training programmes
- Ensuring performance and progress of all doctors and dentists in training is regularly, reliably and fairly assessed and recorded.

PGME costs are almost entirely met by public funds. It is difficult to provide accurate comparative data on the expenditure on PGME going back to 1990 because, over time, the ways in which costs have been captured and recorded have altered. It was

the introduction of the “Purchaser/Provider” environment that prompted separately identifiable budgets for PGME to be established in April 1991, in order to remove the direct education costs of doctors and dentists in training grades from the pricing of service contracts. However, PGME was funded by regional and national top slicing, and not being managed centrally, the expenditure data is not available. A Medical and Dental Education Levy (MADEL) on Health Authorities replaced this arrangement on 1<sup>st</sup> April 1996, to realise the aspiration that PGM(D)E be funded and managed as a core NHS activity, rather than as a discretionary and periphery activity. PGME expenditure, or MADEL, includes:

- 50 – 100% basic salaries for doctors in training
- 100% non-recurrent related costs, such as removal expenses
- study leave
- training infrastructure (medical education centres, libraries)
- training managers at local level – clinical tutors in hospitals, dental tutors, GP tutors, course organisers in primary care
- regional PGMDE management – “the Deanery”, including support to Specialist Training Committees which oversee the training programmes.

Figures for the years 1996/97 to 2004/05 are supplied in table 4. A key point to note is that about 80% of this expenditure represents funding passed to employers to offset the salary costs of medical and dental trainees. .

Table 4: PGME Costs

Year	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06
	£m									
PGME	677	749	793	839	1,018	1,079	1,396	1,497	1,629	1,709

*Sources: Department of Health, and the Offices for Wales, Scotland and Northern Ireland*

Interestingly, whilst the proportions of the total PGME spend have remained fairly constant over this period for Wales and Northern Ireland, at 4-5% and 2-3% respectively, the proportion for Scotland has reduced from 14.2% to 10.9% and that for England has increased from 78.7% to 82.4%.

A general break-down of the budget for PGME for a typical deanery is detailed in Table 5 below, but all Deaneries will vary, including describing activity and costs differently.

Table 5: PGME budget detail

Budget	Expenditure areas
Training Grades	50% or 100% of basic salaries for junior doctors paid to NHS bodies through Education Contracts contribution paid to NHS bodies for the salary costs of trainees working on a less than full time basis Recruitment to of Specialist Registrars Trainees with exceptional training needs

Postgraduate Centres & Libraries	Postgraduate centre infrastructure costs, eg premises, staff, running costs, paid to NHS bodies through Education Contracts Study leave budgets managed by Clinical Tutors Training the trainers Development budgets, including the modernising education agenda Induction programmes for trainees from overseas, including refugee doctors
Public Health	Public Health trainees' salaries Public health trainee's non-pay education costs Administration support for Public health training
General Practice Training Costs	GPR salaries, paid to NHS Primary Care Trusts GPR Recruitment General Practice deans Administrative support for deans Non-pay departmental costs Support for vocational training schemes GPR study leave Training the trainers GP Course organisers and GP tutors
Deanery Infrastructure Costs	Medical and dental deans Administrative support for deans Support services, eg finance and HR departments Medical Staffing department Non-pay costs for Deanery infrastructure, eg rent, utilities Clinical Tutors sessional pay costs Dental education costs

Independent Sector Treatment Centres (ISTCs) currently have a small toe-hold in the provision of healthcare funded by the NHS. It is anticipated that the numbers of ISTCs will grow and the benefits of private sector investment will be harnessed to the "Payments by Results" financial flows system, enabling NHS patients to receive treatment free at the point of use, at little or no additional cost to the public purse. ISTCs typically treat patients on NHS waiting lists; apart from having to wait less time for routine operations, patients will also benefit from increased choice regarding where and when they are treated, and should not have their operations cancelled for non-clinical reasons. In some instances, NHS staff may work in ISTCs, generally on a secondment basis. In the future ISTCs could train NHS staff employed on a secondment basis. Comparable training would, therefore, be provided within an independent sector basis but at public sector expense. This arrangement applies currently to palliative medicine trainees working in independent sector hospices.

PGME is funded by the private sector in only a very small way, for example, when a pharmaceutical company makes a funding contribution towards the salary costs of a trainee engaged in research.

## **Strategies to expand the medical workforce**

A great deal has changed in the last ten years. In 1996, in a document called 'The Future Healthcare Workforce,' it was predicted "*Shortfalls in the supply of medical staff will pose major challenges over the next decade with recruitment problems for consultant and junior hospital grades and also GP trainees.*" Even more alarmingly it was asserted: "*there will certainly be fewer doctors in training.*" This sharply contrasts with the reality that today we have 14,000 more junior doctors than we did then. Indeed, in the summer of 2005 we had around 120 more newly registered trainees than we had posts, and many hundreds of international medical graduates looking for work, and plans to increase the number of posts in 2006 were brought forward as a result.

In the 1980's, junior doctors typically took 12-14 years to become a consultant after leaving medical school. Junior doctors worked hours that were notoriously excessive, and would typically be up to 120 hours per week. The junior doctors provided all of the service in the Accident & Emergency Departments and the hospitals at night and the weekends, the sickest patients often treated by the most junior staff. A lot has changed since then:

- Length of training has reduced
- Working hours have reduced
- The service is increasingly consultant-led

Junior doctors can now reach the consultant grade within 8 or 9 years after graduation, although many take longer in practice. This reduction follows two major changes to the structure of medical training in the last ten years.

The Department of Health has been taking steps to reduce working hours for junior doctors. "The New Deal" introduced a target maximum working week of 58 hours for junior doctors, and this has been reinforced by the introduction of the European Working Time Directive (EWTD). The EWTD applied to all European Union (EU) workers from 1998, but junior doctors were exempted until August 2004, and will apply fully by 2009. The EWTD introduces a maximum average 48-hour working week as a health & safety initiative. This is being implemented by introducing more staff, new ways of working, new support roles and better information technology.

In order to make sure that junior doctors are properly trained in fewer years whilst working significantly shorter working weeks, it has been a major imperative for employers and Postgraduate Deaneries to ensure that trainees do not perform tasks inappropriate to their grade and that as high a proportion of their time as practicable yields a high quality education and training dividend.

The modernisation of the NHS has led to a deliberate lessening of reliance on junior doctors to provide service, especially at night and at early stages of training. Whilst the PGME budgets have increased markedly as the number of trainees has rapidly expanded, it has not been a straight-line correlation. The bulk of additional funding for additional trainees is applied to salary costs, and the sums available for education and its management have not grown proportionately. Economies of scale and more

effective ways of working have evolved, but with the merger in recent years of all the budgets for education for all grades of NHS staff, the PGME budget is no longer ring-fenced and has to compete with other workforce groups for funding.

Following the NHS Plan, the Department of Health published “Shifting the Balance of Power” (July 2001) which described the reforms that were required to empower patients, empower frontline staff, and to change the culture and structure of the NHS. As the name suggests, this initiative sought to devolve responsibility and to devolve the resources alongside. In practice, the reality for PGME is rather different; Postgraduate Deans on the ground have to refer decisions up the chain of command that they would previously have either taken for themselves or had greater influence over.

The expansion in numbers of doctors in training, as decreed in the NHS Plan, was achievable in large part because of the funding arrangements for training posts. Since 1992 the Postgraduate Deans have funded the basic salary of junior doctors at 100% (two grades) and 50% (one grade) as a proxy for education costs to trusts. Deaneries have contracted with NHS trusts through educational contracts to ensure that in return for the salary funding the trust provides postgraduate education and facilities to monitored standards. When the deaneries became responsible for the basic salaries of trainees, the philosophy was that a post could not be recognised as a training post unless it was deanery funded. NHS hospitals that had previously declined to employ more junior doctors because they either didn't have the resources or didn't have a service need, were motivated to employ more trainees and utilise their training capacity. For several years the funding mechanism suited the growth imperative very well.

Developments in recent years have altered this funding strategy, to the extent that in the future it will be modified, or even replaced.

Briefly, these developments are:

The funding for trainees does not meet all the costs, such as training the trainers, or management costs, and therefore sustained growth in numbers of trainees places pressure on the existing deanery and trust infrastructure in place to support training.

The change that has most undermined the current funding arrangements is that of removing the requirement that all training posts be deanery funded. NHS trusts sought to further expand their trainee workforce as a strategy to meet the European Working Time Directive. It became allowable for trusts to employ and fund doctors in training grades without direct funding reference to the deanery.

Deaneries hold the funding for training posts' salary costs and hence manage the numbers. When trusts want to employ trainees but their deanery will not, for a variety of reasons, fund a further training post, the trust response is to recruit to “trust doctor” posts, in order to get round this obstacle to recruitment. These non-training trust-funded posts tend to be occupied by doctors at the same level and with the same aspirations as those occupying deanery funded training posts. The effect is to stretch the educational resources locally and to lengthen the time it can take to become a consultant because any period as a trust doctor is not recognised as approved training and does not count.

‘Payments by Results’ (PbR) is being implemented in the drive to reform financial flows and modernise accounting arrangements The PbR tariff (standard price

list) is based on reference data and excludes the costs of training. Previously the funding for additional training posts would be transfer to the deaneries from SHA budgets but to do this would now distort the purity of the accounting information. There was an attempt to identify and quantify the true costs of education in trusts but it did not come to fruition. We therefore have a dual economy with the basic salary costs of some training posts funded by the deaneries and some funded by the trusts. In some deaneries these trust-funded posts are a significant proportion of the trainee population and create pressures on those deaneries that have not been resourced for the increase in population but remain responsible for it.

Finally, experience has shown that MADEL, being such a large budget, is vulnerable to demands for cost savings because, in theory, a budget of that size should be able to find cash releasing efficiencies. In practice, however, the bulk of the budget is passed directly to trusts for trainees' basic salaries and PGME infrastructure, and the cost savings can only be found by passing the cost pressure onto trusts, which individually may find this very difficult to cope with, or from the residual of the budget which provides PGME infrastructure by deaneries. As this latter element has had to be stretched ever more thinly as the number of trainees has grown, deanery budget cuts exacerbate the situation.

### **The financial and work force interface**

Medical staffing policy has always been to ensure an adequate and affordable supply of appropriately trained doctors across the country and specialties, in order to provide a cost effective quality service to patients. A fundamental review of the existing and projected medical workforce requirements was published as "Hospital medical Staffing: Achieving a Balance" in 1987, identifying a need for larger numbers of consultants in order to improve patient care by increasing the amount provided by consultants, and sensible planning of the number of trainees to fill the projected consultant expansion. Shortly afterwards the Registrar and Senior Registrar training grades were replaced with a single training grade, the Specialist Registrar, potentially reducing the training period. Table 6 illustrates the main changes to the medical career between 1995 and 2005.

**Table 6: Changes in the medical Workforce between 1995 and 2005**

#### The Medical Workforce 1995

Grade	Typical duration at grade	Source of Funding	Control of numbers
Medical Students	5 years	5 yrs DFEE plus SIFT from DOH (see note 1)	MWSAC, HEFCE (see note 2)
Pre registration House Officer (PRHO)	1 year	MADEL 50%, Trusts 50% (see note 3)	Numbers set to ensure UK/EC graduates accommodated
Senior House Officer (SHO)	3 years (range 2-6)	MADEL 50%, Trusts 50%	Postgraduate Deans
Registrar (see note 4)	2 - 3 years	MADEL 50%, Trusts 50%	SWAG (see note 6)

GP Registrar (GPR)	1 year	GMS (see note 5)	No central controls
Senior Registrars (see note 4)	4 -5 years	MADEL 50%, Trusts 50%	SWAG (see note 6)
Staff grade		Trusts	No controls (see note7)
Clinical Assistant		Trusts	No controls
Associate Specialist		Trusts	Re-grading or open-competition
GPs		GMS	No controls
Consultant		Trusts	No controls

### The Medical Workforce 2005

Grade	Typical duration at grade	Source of Funding	Control of numbers
Medical Students	4 Or 5 years	5 yrs DE&S plus SIFT from DOH (see note 1)	MWSAC, HEFCE (see note 2)
Foundation Programme Yr 1 (Replaced PRHO in 2005)	1 year	MADEL 100%	Numbers set to ensure UK/EC graduates accommodated
Foundation programme yr 2 (phased in 2006 onwards)	1 year	MADEL 50%, Trusts 50%	Postgraduate Deans
SHO (in transition)	3 years (range 2-6)	MADEL 50%, Trusts 50%	Postgraduate Deans
GP Registrar (GPR)	1 year (see note 5)	MADEL 100%	Recommendation from WRT (note 8)
Specialist Registrars (SpRs) (see note 4)	4 - 6 years	MADEL 100%	Recommendation from WRT (note 8)
Staff grade		Trusts	No controls
Trust Doctor		Trusts	No controls
Clinical Assistant		Trusts	No controls
Associate Specialist		Trusts	Re-grading or open-competition
GPs		GMS	No controls
Consultant		Trusts	No controls

Notes:

- 1) Department of Further Education and Employment (DFEE) replaced by Department for education and Skills (DE&S) Service Increment for Teaching (SIFT) is a Department of Health funded levy which Strategic Health Authorities allocate to Trusts to offset the costs of clinical placements.
- 2) Medical Workforce Standing Advisory Committee (MWSAC); Higher Education Funding Committee (HEFCE)
- 3) Funded 100% by MADEL with effect from April 1997
- 4) The SpR grade started to replace the registrar and senior registrar grades in 1996.
- 5) Funded 100% by MADEL from April 1998, follows 2 years vocational training at SHO level in designated hospital specialties.
- 6) Specialist Workforce Advisory Committee (SWAG)
- 7) National ceiling on staff grade numbers removed April 1997
- 8) Workforce Review Teams advise on numbers of trainees required

The Department of Health published the NHS Plan in July 2000, which set out the ways in which the government's plans for improving the NHS would be achieved. The NHS Plan promised:

***“More and better paid staff using new ways of working”*** to be realised in five years time by having a significant increase in the numbers of healthcare workers including 7,500 more consultants, 2,000 more GPs, 1,000 more SpRs, 450 more GPRs, and, a further 1,100 medical school places by 2005 in addition to the 11,000 places created in 2002, as well as a variety of initiatives aimed at improving working lives. Table 7 details the growth in numbers of NHS medical staff in the period 1994 to 2004.

***“Reduced waiting times and high quality care centred on patients”*** delivered through an increase of 7,000 additional beds, and a range of improvements to service delivery.

***“Improvements in local hospitals and surgeries”*** to be achieved by providing more than 100 new hospitals and 500 new one-stop primary care centres by 2010, modernising over 3,000 GP premises

The drive to increase the numbers of staff in the NHS rapidly, culminating in the targets set out in the NHS Plan, reflect the many and various pressures on the workforce:

- Increasing UK population, especially the oldest old (more than 85 years)
- Increasing demand for healthcare, reflecting higher patient expectations around quality of life, of healthcare provision, access and choice
- Reduction in the working week
- An aging GP workforce
- Increasingly consultant-led service
- An increasing number of less-than-full-time staff reflecting an increasing proportion of females employed and the development of family friendly employment practices

The general population grew by 2.5% between 1998 and 2004; the number of consultants and GPs increased by 23%, and the numbers of doctors in training grew by 37%. This rate of increase in the number of medical staff has resulted in a ratio of approximately 1.6 medical staff per 1,000 populations at the beginning of this 7-year time frame increasing to 1.9 per 1,000 in 2004.

### **The outlook for healthcare spending**

Modernising Medical Careers (MMC) is being implemented in 2005, having been successfully piloted over the last one or two years. MMC is an innovation in PGME. Its purpose is to ensure clear, consistent, transparent, standardised and quality controlled education. MMC will reduce the variations between regions, NHS trusts and specialties. MMC represents a professional and modern approach to PGME and its delivery, as exemplified in the explicit funding at national level of the costs associated with infrastructure and training during the early years of training. This represents a 21<sup>st</sup> century approach to PGME and its funding, as opposed to the less explicit nature of PGME and its funding in the last decade or more.

*The NHS has been manoeuvred into a position where it can practicably tackle these more sophisticated targets for service performance. Sir Nigel in December 2004:*

*“84% of staff deliver frontline services, with 13% maintaining the infrastructure, whilst 3% are managers. We have reduced the size of the Department of Health by one third. We are reducing the number of national requirements and targets and their associated paperwork, and plans are underway to reshape the bodies and agencies that support health and social care, reducing the number by almost half, with savings of £0.5 billion.”*

In the future the NHS can expect to be funded more modestly, and while resources will increase to take account of inflation, growth in real terms will be sustained but in much smaller terms than in the first five years of this millennium. The additional funds required for the building up of capacity have already been put in place, and service improvements and increased capacity will from now on be largely financed through cash releasing efficiency savings, and more effective ways of managing; delivering service and training; and controlling costs. Now that the NHS is approaching the stage where it is as big as it needs to be, and the investment in healthcare is comparable with our EU neighbours, the focus will be increasingly on maximising output improving service quality through modernisation and careful husbandry of resources.

We are halfway through the ten year NHS Plan published in 2005. The NHS Chief Executive, Sir Nigel Crisp, said in May 2005: *“This is still a service in transition with a great deal more to do”*.

In the first five years of the plan the emphasis was targeted service improvements and increasing investment in real terms, matching the EU average GDP expenditure, to develop capacity in terms of staff and facilities. In the first five years, medical school places increased by 2,100, and medical staff increased by nearly 20,000.

The emphasis in the latter half of the NHS Plan will shift to qualitative and performance criteria; new buildings, premises renewal, and increases in NHS staff will continue but more modestly, reflecting a gradual organic growth and maintenance. Targets for rapid growth and development are being replaced with a range of goals to promote patient choice; deliver services in a more tailored manner; finding new service providers such as Independent Sector Treatment Centres, and communicating best practice as efficiently as possible. The NHS will be subject to new financial incentives, particularly ‘Payment by Results’ that transparently rewards the volume and complexity of activity through a standard tariff. Delivering best value for money for the public is an explicit goal.

Over the next ten years costs will be driven by National Service Frameworks that implement plans to improve health outcomes for the major life threatening diseases, and the investment required to take advantage of medical technology. The rate of growth in healthcare expenditure will be determined by the extent to which the population engages with healthy lifestyle choices, and the level of productivity improvements that can be achieved.

Table 7 : NHS Medical Staff 1994 - 2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<u>Workforce headcount</u>											
All doctors incl retainers	81,319	84,459	86,584	89,619	91,837	94,953	97,436	100,319	104,460	109,964	117,806
All doctors excl retainers	81,319	84,459	86,584	89,619	91,837	93,981	96,319	99,169	103,350	108,993	117,036
GP Retainers						972	1,117	1,150	1,110	971	770
others	7,579	7,960	8,198	8,443	8,968	9,146	9,744	9,910	10,183	10,330	10,604
Consultants	18,155	19,524	20,402	21,474	22,324	23,321	24,401	25,782	27,070	28,750	30,650
GPs	27,290	27,465	27,811	28,046	28,251	28,467	28,593	28,802	29,202	30,358	31,523
GPRs	1,445	1,404	1,305	1,343	1,446	1,520	1,659	1,883	1,980	2,235	2,562
Hospital trainees	26,850	28,106	28,868	30,313	30,848	31,527	31,922	32,792	34,915	37,320	41,697
All trainees	28,295	29,510	30,173	31,656	32,294	33,047	33,581	34,675	36,895	39,555	44,259
Trainees as % of all doctors	34.8	34.9	34.8	35.3	35.2	34.8	34.5	34.6	35.3	36.0	37.6



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