

Sixty Years of the NHS: Changes in Demographics, Expenditure, Workforce and Family Services

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Britain's National Health Service came into being on 5th July 1948. It was established with the aim of providing a comprehensive range of health services to all UK citizens, financed by general taxation and free at the point of use.

The UK health care market is dominated by the National Health Service and according to the World Health Organisation is amongst the largest public health services in the world.

This year the NHS is 60 years old and the OHE has produced a series of short articles which show how certain areas, associated with health, have changed over those years. These are based primarily on information available in the Compendium of Health Statistics, but also draw together other relevant facts and figures.

Sixty years of the National Health Service

The UK National Health Service (NHS) is, according to the World Health Organisation (WHO), amongst the largest public health care services in the world. The NHS was established on 5th July 1948, with the aim of providing a comprehensive range of health services to all UK citizens, financed by general taxation and free at the point of use.

When the National Health Service began in 1948, the UK population was 49.4 million, 60 years later the population stands at an estimated 61.4 million, an increase of 24%. By 2068 the UK population is expected to increase by a further 34% to 82.0 million (OHE estimate based on Government Actuaries Department (GAD) projections).

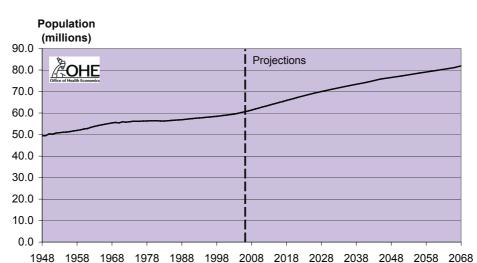


Figure 1 UK population 1948 - 2068

Notes:

Mid-year population estimates from 1982 have been revised based on the results of the 2001 Census

Data from 2002 has been revised due to improved methodology on international migration.

Projections from 2007 are based on 2006 mid-year estimates.

Projections for 2008 are OHE estimates using polynomial regression and based on population projections for available years

Sources: Annual Abstract of Statistics (ONS).

Population Projections Database (GAD).
Population Estimates and Projections (ONS).

Changes in the population have not been consistent across the constituent countries of the UK. In Northern Ireland the increase was 29% and in England & Wales was 24% but in Scotland the population increased by just 2% between 1948 and 2008. The largest increase in population between 2008 and 2068 is predicted to be in England & Wales (approx 37%), Northern Ireland's is predicted to rise by approximately 15% and Scotland's population is expected to fall by around 2.5%. A breakdown of the population by country is shown in Table 1.

Table 1

| millions | 1948 | 2008 (estimates) | 2068 (projections) |
|-------------------------------|------|------------------|--------------------|
| UK | 49.4 | 61.4 | 82.0 |
| England & Wales ¹ | 43.8 | 54.5 | 74.8 |
| Scotland ¹ | 5.1 | 5.2 | 5.1 |
| Northern Ireland ¹ | 1.4 | 1.8 | 2.1 |

Note: 1 Data shown in the 1948 column is as at 1951, since data was not available for 1948

Projections for 2068 are OHE estimates using polynomial regression and based on population

projections for available years.

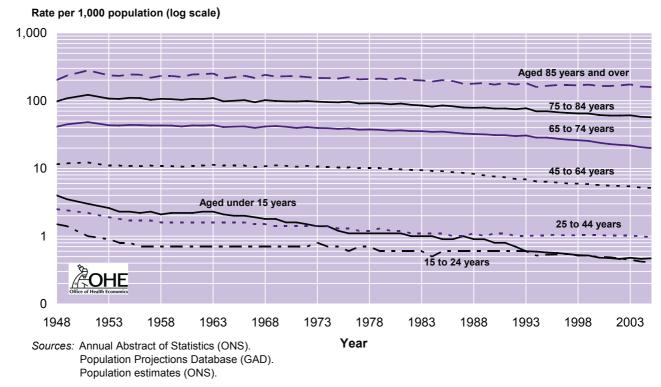
Sources: Compendium of Health Statistics (OHE).

Government Actuary's Department (GAD).

Population Estimates (ONS).

The annual number of live births in the UK has fluctuated over the last 60 years, reaching a high of 946,000 average in the three years 1960-1962, compared with a low of 669,000 in 2001 and 2002. However, the 2006 figure of 749,000 UK births is similar to that in 1940 of 703,000 (*Annual Abstract of Statistics, ONS*). While births are similar in numbers today to the 1940s, there have been dramatic improvements in infant mortality. In 1940 there were around 61 infant deaths per 1,000 live births but by 2006 the figure had dropped to just 5 per 1,000. Infant mortality is often used as a measure of living standards and the effectiveness of health care provision. Although the most marked improvements in mortality have been for infants and children, mortality rates have improved for all age groups in the population (see Figure 2).

Figure 2 Trends in age specific mortality rates, UK, 1948 - 2006



The main killers in 1948 were circulatory disorders, in particular rheumatic heart disease, respiratory disease and infection. In 2008 the picture is slightly different and the main killers today are heart disease, in particular coronary artery disease, and cancer. Mortality from three major causes of death in England and Wales - heart disease, stroke and infectious diseases – has fallen substantially since the birth of the NHS. However the age standardised mortality from cancer has changed very little and has become the major cause of death in both men and women (*Cancer Trends in England and Wales, 1950 – 1999, Health Statistics Quarterly 08, Winter 2000, Office for National Statistics*). Between 1975 and 2004, the overall age-standardised incidence rate for cancer increased in Great Britain by 25% (*Cancer Research UK*). Cancer is predominantly a disease of the elderly, and as the elderly population has increased the numbers diagnosed with cancer have also increased. However, changes in early diagnosis and treatment have meant that more and more people are surviving cancer. Cancer survival increased steadily for most, but not all, cancers in both sexes in recent years (*Cancer Research UK*).

In parallel with improvements around mortality, life expectancy¹ has improved considerably for both men and women since the start of the NHS. 1948 figures for the UK are not available, but for those born in England and Wales in 1948 the average life expectancy for men was 66 years and 70 years for women. The figures for those born in England and Wales in 2008² are 78.3 for men and 82.1 for women – 12 years greater life expectancy for both (*Source*: Life Tables, Centre for Demography Office for National Statistics). Similar, yet marginally lower, life expectancy figures are observed for the UK with male life expectancy at 78.0 years for men and 81.9 years for women in 2008 (See Figure 3). Projections are not available for the UK reaching forward 60 years, but by 2056 life expectancy in men is estimated to be 85.5 and for women 88.7. This is below the predictions for life expectancy in Japan – the longest lived nation – for the same period, suggesting that life expectancy in the UK may still have further room for improvement beyond this time.

Years of life remaining 90 OHE 80 At birth (female 70 60 At birth (male 50 40 At age 45 30 At age 45 (male) 20 At age 65 (female) 10 At age 65 (male) 0 1840 1860 1880 1900 1920 1940 1960 2000 Year Data presented is based on the data outlined below and has been smoothed

Figure 3 Trends in life expectancy in England and Wales, 1841 - 2008

Notes: Data presented is based on the data outlined below and has been smoothed using cublic splines. Projections from 2006 onwards are based on 2006 mid-year estimates. Figures from 1841 to 1932 are based on English Life Tables Figures from 1948 to 1973 are based on Abridged Life Tables. Figures from 1974 to 1980 are based on future lifetime. Figures from 1981 to 2005 are based on interim life tables using period life expectancy.

Sources: Population Trends (ONS). Life Tables (GAD).

therefore give the number of years someone could actually expect to live.

¹ Period life expectancy at a given age for an area is the average number of years a person would live, if he or she experienced the particular area's age-specific mortality rates for that time period throughout his or her life. It makes no allowance for any later actual or projected changes in mortality. In practice, death rates of the area are likely to change in the future so period life expectancy does not

² Figures are based on population estimates and the actual number of births and deaths over a three year period, centred on the year shown (i.e. figures for 2008 cover 2007-2009). These life expectancies have been calculated using historic mortality rates (from 1981 to 2006) and projected mortality rates from 2006-based national population projections (for 2007 onwards).

With more people living longer the numbers of elderly people are increasing steadily. Figure 4 compares the age breakdown of the population of the UK in 1948 and 2008. It illustrates the marked increase in the elderly population, particularly those aged over 85.

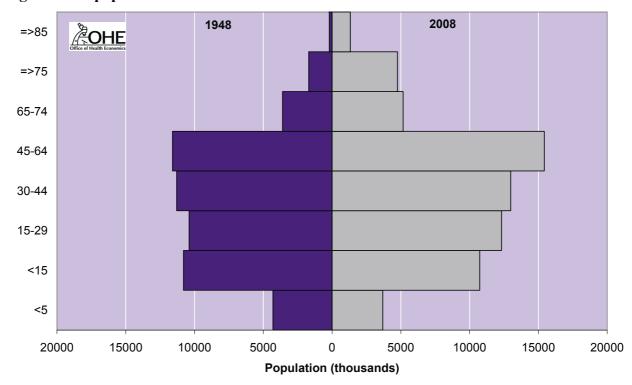


Figure 4 UK population 1948 and 2008

The elderly are the heaviest users of the health care system, along with children. For example Table 2 shows the percentage of each age group who consult an NHS GP in an average fortnight.

Table 2 Percentage of population consulting an NHS GP in a two-week period, Great Britain 1975 – 2006

| | 1975 | 1980 | 1985 | 1990/91 | 1995/96 | 2000/01 | 2005 | 2006 ² |
|--------------------|------|------|------|---------|---------|---------|------|-------------------|
| All | 11 | 13 | 14 | 16 | 16 | 14 | 14 | 13 |
| 0-4 | 13 | 18 | 21 | 24 | 21 | 16 | 15 | 15 |
| 5-15 ¹ | 7 | 10 | 10 | 12 | 11 | 8 | 7 | 6 |
| 16-44 ¹ | 10 | 13 | 12 | 14 | 14 | 12 | 12 | 12 |
| 45-64 | 11 | 13 | 14 | 16 | 16 | 16 | 15 | 14 |
| 65-74 | 14 | 17 | 16 | 18 | 20 | 21 | 19 | 20 |
| over 75 | 18 | 20 | 20 | 23 | 23 | 21 | 21 | 22 |

Notes: All figures relate to 14 days before survey interview

1 In 1975, figures relate to age groups 5-14 and 15-44, respectively.

2 Results for 2006 include longitudinal data with approximately 75% of the 2006 sample being re-interviews of the 2005 sample.

From 1988 to 2004 the General Household Survey was on a financial year basis with interviews taking place from April to the following March.

Alternative estimates from 1995 to 2006 based on different methodology are available from the information Centre (IC).

Source: Compendium of Health Statistics (OHE), based on data from GHS.

With the increasing number of elderly people in the UK and women out-living men, combined with a declining marriage rate, the result is an increasing number of people living on their own, with half of those aged 75 living alone in 2006 compared to 2 in 5 in 1973 (General Household Survey 2006) (see Table 3). 61% of women aged 75 and over, lived on their own in 2006 which compares with 32% of men of the same age.

Table 3 Percentage living alone in Great Britain, by age: 1973 to 2006

Percentage who lived alone

| | | _ | | | | | | | | |
|-----------------|------|------|------|------|------|-------------------|------|------|----------|------------|
| | 1973 | 1983 | 1987 | 1993 | 1996 | 1998 ¹ | 2000 | 2003 | 2005^2 | 2006^{3} |
| 75 and over | 40 | 47 | 50 | 50 | 47 | 48 | 50 | 48 | 48 | 50 |
| All aged 16 and | 9 | 11 | 12 | 14 | 14 | 17 | 17 | 16 | 17 | 16 |
| over | | | | | | | | | | |

Notes: 1 Figures from 1998 onwards are weighted.

Source: General Household Survey 2006.

 $^{2\ 2005}$ data includes last quarter of 2004/5 data due to survey change from financial year to calendar year.

³ Results for 2006 include longitudinal data.

Sixty years of the Family Health Services

The UK NHS Family Health Services (FHS) consist of General Medical Services (GMS), General Pharmaceutical Services (GPS), General Dental Services (GDS) and the General Ophthalmic Services (GOS). The FHS are provided in the community by general medical practitioners (GP's), dentists, pharmacists and opticians who, for the most part, are contracted to the NHS rather than being direct employees of it.

Family Health Services

As a percentage of NHS cost, expenditure on Family Health Services decreased from 36% to 22% between 1949/50 and 2006/07 (the most recently available data). Nevertheless, the gross cost of Family Health Services (FHS) has risen between 1949/50 and 2006/07 in money of the day from £159m to £23,234m, six times the cost in real terms (see Table 1). After taking out the effect of general price inflation, FHS spending in 2006/07 was six times the level in 1949/50. In terms of 2006/07 prices per capita expenditure has risen from £79 in 1949/50 to £383 in 2006/07.

Table 1
Gross cost of hospital services and Family Health Services (FHS), UK, 1949/50 - 2006/07

| | Gross o | | Gross cost (£ ca | | As % of NHS cost: | |
|------------------|-------------------------|----------------|---------------------|---------|-------------------|--|
| Year | FHS | All NHS | FHS | All NHS | FHS | |
| 1949/50 | 159 | 447 | 3 | 9 | 36 | |
| 1950/51 | 158 | 482 | 3 | 10 | 33 | |
| 1960/61 | 248 | 883 | 5 | 17 | 28 | |
| 1970/71 | 544 | 2,046 | 10 | 37 | 27 | |
| 1980/81 | 2,584 | 11,677 | 46 | 207 | 22 | |
| 1990/91 | 6,968 | 29,178 | 122 | 509 | 24 | |
| 2000/01 | 14,199 | 58,279 | 241 | 989 | 24 | |
| 2004/05 | 21,203 | 89,567 | 354 | 1,494 | 24 | |
| 2005/06 | 22,537 | 98,959 | 374 | 1,640 | 23 | |
| 2006/07 | 23,191 | 104,681 | 382 | 1,725 | 22 | |
| Expenditure at o | constant prices1 (Index | (1949/50=100) | | | | |
| 1949/50 | 100 | 100 | 100 | 100 | 100 | |
| 1950/51 | 98 | 105 | 98 | 105 | 93 | |
| 1960/61 | 101 | 127 | 97 | 122 | 79 | |
| 1970/71 | 148 | 197 | 134 | 178 | 75 | |
| 1980/81 | 187 | 300 | 167 | 268 | 62 | |
| 1990/91 | 274 | 408 | 241 | 358 | 67 | |
| 2000/01 | 421 | 614 | 360 | 524 | 69 | |
| 2004/05 | 564 | 845 | 473 | 710 | 67 | |
| 2005/06 | 587 | 915 | 489 | 763 | 64 | |
| 2006/07 | 587 | 941 | 487 | 780 | 62 | |

Notes: All figures relate to financial years and include capital expenditure and charges paid by patients.

1 As adjusted by the Gross Domestic Product (GDP) deflator, at market prices.

Sources: The Government's Expenditure Plans (DH).

Public Expenditure Statistical Analyses (HM Treasury).

NHS Board Operating Costs and Capital Expenditure, ISD Scotland (ISD).

Department of Health Departmental Report (DH).

NHS Summarised Accounts (House of Commons).

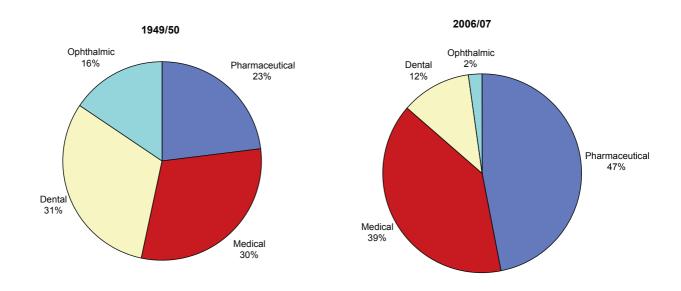
Scottish Health Statistics (ISD). Health Statistics Wales (NAW).

Annual Abstract of Statistics (ONS).
Population Projections Database (GAD).

Economic Trends (ONS).

The distribution of FHS between the services has altered over the past sixty years (see Figure 1). The proportion spent on GDS and GOS has decreased considerably over the period, whereas proportionately more has been allocated to the GPS and GMS. In 1949/50 31% of the FHS expenditure was spent on General Dental Services but by 2006/07 this had fallen to below 12%. The corresponding figures for General Ophthalmic Services were 16% and 2% respectively.

Figure 1 FHS expenditure distribution by service 1949/50 and 2006/07



All General Medical figures for England, reported up to and including 2003/04 were based on a former statement of financial Notes: allowance (SFA).

New GMS arrangements are wholly discretionary and are not "comparable against or reconcilable to" the figures shown up to 2003/04 (Departmental Report DH)

All figures include charges paid by patients. Except Welsh pharmaceutical and dental figures which are net of patient charges. 1 At constant prices, as adjusted by the Gross Domestic Product (GDP) deflator at market prices.

Health and Personal Social Services Statistics for England (DH) Sources:

Health Statistics Wales (NAW).

Scottish Health Statistics (ISD)

Annual Statistical Report (Northern Ireland CSA).

Annual Abstract of Statistics (ONS)

Department of Health Departmental Report (DH).

Economic Trends (ONS).

NHS Board Operating Costs and Capital Expenditure, (ISD Scotland).

Public Expenditure Statistical Analyses (HM Treasury)

General Medical Services

In terms of 2006/07 prices the cost of General Medical Services in 1949/50 stood at £1,200 million by 2006/07 this had risen to £9,103 million. The cost of the General Medical Services over the last 30 years, broken down by country, is illustrated in Table 2. The GMS expenditure per capita for the UK has risen from £6 in 1975/76 to £151 in 2006/07. When these figures are adjusted by the GDP deflator, the equivalent money in 1975/76 is £34, this represents a rise of almost 345% in the UK as a whole. This increase is seen across all countries of the UK, the biggest increase is seen in Northern Ireland (365%) followed by England (350%), Wales (326%) and then Scotland (301%).

Table 2
Cost of General Medical Services (GMS) per capita and per household, UK, 1975/76 - 2006/07

| Year | England | Wales | Scotland | Northern Ireland | UK | England | Wales | Scotland | Northern Ireland | UK |
|---------|---------|-------|----------|---------------------|-----------|-----------------|------------|-------------------------|---------------------|------------|
| | | | | GMS | S expendi | ture per capita | | | | |
| | | | (£ cash) | | | At cor | nstant pri | ces ¹ (Index | 1975/76=100 |)) |
| 1975/76 | 6 | 6 | ` ´6 | 6 | 6 | 100 | 100 | ` 100 | 100 | 100 |
| 1979/80 | 10 | 10 | 11 | 9 | 10 | 100 | 100 | 109 | 90 | 100 |
| 1989/90 | 33 | 34 | 36 | 31 | 33 | 163 | 166 | 178 | 152 | 164 |
| 1999/00 | 70 | 70 | 74 | 64 | 70 | 244 | 247 | 261 | 225 | 245 |
| 2000/01 | 76 | 74 | 80 | 63 | 76 | 262 | 256 | 276 | 219 | 261 |
| 2004/05 | 139 | 132 | 124 | 107 | 136 | 429 | 407 | 383 | 332 | 421 |
| 2005/06 | 153 | 142 | 137 | 123 | 150 | 464 | 429 | 417 | 372 | 456 |
| 2006/07 | 153 | 145 | 137 | 124 | 150 | 449 | 426 | 402 | 366 | 442 |
| | | | | GMS e | xpenditu | re per househol | d | | | |
| | | | (£ cash) | | | At cor | nstant pri | ces ¹ (Index | 1975/76=100 |)) |
| 1975/76 | 17 | 17 | 18 | 19 | 17 | 100 | 100 | 100 | 100 | 100 |
| 1979/80 | 28 | 28 | 31 | 27 | 28 | 97 | 97 | 105 | 86 | 97 |
| 1989/90 | 83 | 86 | 91 | 91 | 84 | 145 | 147 | 151 | 145 | 146 |
| 1999/00 | 170 | 172 | 174 | 176 | 171 | 211 | 208 | 206 | 199 | 210 |
| 2000/01 | 184 | 180 | 185 | 171 | 184 | 224 | 214 | 216 | 190 | 222 |
| 2004/05 | 329 | 310 | 279 | 281 | 323 | 360 | 331 | 291 | 280 | 350 |
| 2005/06 | 362 | 331 | 308 | 320 | 355 | 388 | 346 | 315 | 313 | 377 |
| 2006/07 | 360 | 336 | 305 | 321 | 352 | 374 | 342 | 303 | 305 | 364 |

Notes: All figures include salaries, fees, allowances, superannuation, directly reimbursed expenses (e.g. rent and rates) and

other expenses, in financial years ending 31st March.

Figures from 2004/05 for England based on new GMS contract figures.

All General Medical figures for England, reported up to and including 2003/04 were based on a former statement of financial allowance (SFA).

New GMS arrangements are wholly discretionary and are not "comparable against or reconcilable to" the figures shown up to 2003/04 (Departmental Report DH).

1 At constant prices, as adjusted by the Gross Domestic Product (GDP) deflator at market prices.

Sources: Th

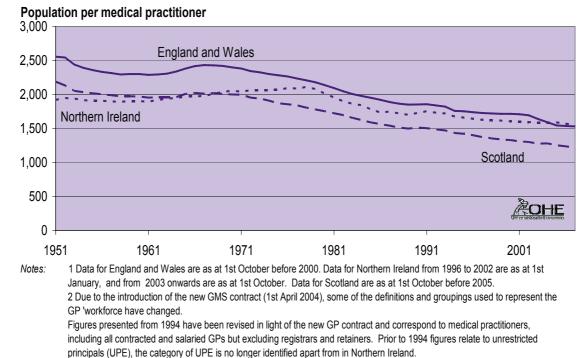
The Government's Expenditure Plans (DH).

Health and Personal Social Services Statistics for England (DH).

Scottish Health Statistics (ISD). Health Statistics Wales (NAW). Annual Abstract of Statistics (ONS). Economic Data (HM Treasury).

The increase in the percentage of the FHS expenditure dedicated to the GMS is in part due to the increasing numbers in GPs over the last sixty years. GP numbers have nearly doubled from 22,478 in 1951 to 43,692 in 2007. Consequently the number of patients per medical practitioner has fallen: there were 1,500 patients per GP in 2007, compared to nearly 2,500 per GP in 1951 (see Figure 2, which also provides a breakdown by country)

Figure 2 Population per medical practitioners in general practice 1951 – 2007



Sources: Health and Personal Social Services Statistics for England (DH).

Scottish Health Statistics (ISD).

Health Statistics Wales (NAW).

Annual Abstract of Statistics (ONS).

Annual Statistical Report (Northern Ireland CSA).

General Pharmaceutical Services

General Pharmaceutical Services expenditure includes the cost of dispensing medicines in the community (i.e. outside hospitals) and the cost of medicines dispensed.

Prescriptions are mainly written by GPs, although small proportions are written by dentists, hospital doctors and nurses. The majority of prescriptions are dispensed by chemists and appliance contractors of the General Pharmaceutical Services, although there are also a small number of GPs who also dispense (so-called dispensing doctors).

The total UK General Pharmaceutical Services cost has risen from £1,236 (2006/07 prices) in 1951/52 to more than eight times that level, namely £10,912 in 2006/07 (see Figure 3). As a percentage of NHS expenditure, the proportion spent on the GPS has fluctuated over the past 60 years, being 11% in 1952 and 10% in 2007 (following a fall in the proportion in recent years)

A contributing factor to this rise is the advances in treatment in the form of medicines that have meant more prescriptions been dispensed since the start of the NHS (see Figure 4). The chart also shows that the total cost of NHS prescriptions dispensed as a percentage of total NHS cost has fallen since 2000.

Figure 3 Gross cost of General Pharmaceutical Services (GPS), UK, 1951/52 – 2006/07

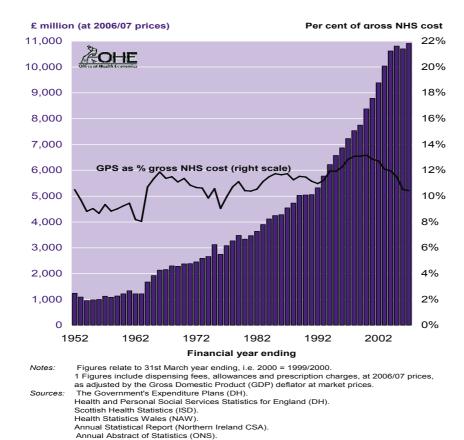
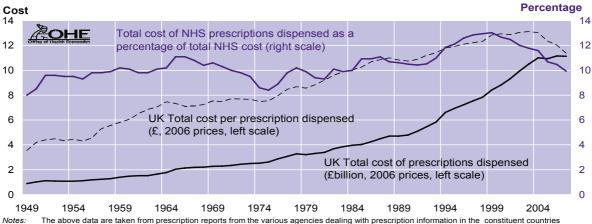


Figure 4 Total cost of NHS prescriptions (Rxs) dispensed, as a percentage of total NHS cost and total cost per prescription, UK, 1949 - 2006



of the UK and relate to the number of prescriptions (number of fees). Total cost shown includes charges paid by patients. For the years 1949-1963, total cost for the English and Welsh component of the UK consists of net ingredient cost, less discount, plus on-cost, dispensing fee, container allowance and oxygen delivery allowances. From 1964 total cost includes net ingredient cost, less discount, plus dispensing fee, container and on-cost allowances, oxygen payments and from 1973 value added tax for appliances.

1 From 1994 onwards figures relate to prescriptions dispensed by community pharmacists and appliance suppliers who are contracted to the

NHS and dispensing doctors.

Sources: Prescription Pricing Authority, England. Health of Wales Information Ser Information Services Division of NHS in Scotland. Health and Personal Social Services Statistics for England (DH). Annual Statistical Report (Northern Ireland CSA).

Central Services Agency, Northern Ireland Health Statistics Wales (NAW) Scottish Health Statistics (ICD) Annual Abstract of Statistics (ONS).

The number of prescriptions that have been dispensed by community pharmacists and appliance contractors over the last 60 years has increased by over 950%. Table 4 shows that prescriptions dispensed per capita vary, and have always varied, between the four countries of the UK. There are a greater number of prescriptions dispensed per capita in Wales than elsewhere in the UK.

Table 3

Number of NHS prescriptions (R_xs) (based on fees)¹ dispensed by community pharmacists and appliance contractors, UK, 1948 - 2007

| | | | (millions) |) | | | | Per capita | 1 | |
|-------------------|----------------------|--------------------|------------|---------------------|-------------------|----------------------|--------------------|------------|---------------------|-------------------|
| Year | England ² | Wales ² | Scotland | Northern Ireland | United Kingdom | England ² | Wales ² | Scotland | Northern Ireland | United Kingdom |
| 1948 ³ | 83.7 | - | 6.6 | 2.3 | 92.6 | - | - | - | - | - |
| 1950 | 217.1 | - | 19.5 | 6.6 | 243.2 | 5.0 | - | 3.8 | 4.8 | 4.8 |
| 1960 | 218.7 | - | 22.0 | 7.2 | 247.9 | 4.7 | - | 4.2 | 5.1 | 4.7 |
| 1970 | 247.7 | 18.9 | 28.9 | 10.5 | 306.0 | 5.4 | 6.9 | 5.5 | 6.9 | 5.5 |
| 1980 | 303.3 | 23.7 | 34.3 | 12.7 | 374.0 | 6.5 | 8.4 | 6.6 | 8.3 | 6.6 |
| 1990 | 360.5 | 28.3 | 42.4 | 15.4 | 446.6 | 7.6 | 9.9 | 8.3 | 9.7 | 7.8 |
| 2000 | 551.5 | 43.1 | 63.4 | 23.7 | 681.6 | 11.2 | 14.8 | 12.5 | 14.1 | 11.6 |
| 2001 | 587.7 | 46.1 | 65.5 | 24.6 | 723.9 | 11.9 | 15.8 | 12.9 | 14.5 | 12.2 |
| 2002 | 619.1 | 49.0 | 68.8 | 25.4 | 762.2 | 12.5 | 16.8 | 13.6 | 15.0 | 12.8 |
| 2003 | 652.7 | 51.3 | 71.5 | 26.4 | 801.8 | 13.1 | 17.5 | 14.1 | 15.5 | 13.5 |
| 2004 | 689.9 | 54.4 | 74.3 | 27.3 | 845.8 | 13.8 | 18.5 | 14.6 | 16.0 | 14.1 |
| 2005 | 724.6 | 56.7 | 76.4 | 28.0 | 885.6 | 14.4 | 19.2 | 15.0 | 16.2 | 14.7 |
| 2006 | 760.1 | 59.5 | 78.7 | 29.2 | 927.4 | 15.0 | 20.1 | 15.4 | 16.8 | 15.3 |
| 2007 | 803.9 | 62.8 | 81.5 | 30.7 | 979.0 | 15.7 | 21.1 | 15.9 | 17.5 | 16.1 |

Notes: Figures relate to community pharmacists and appliance suppliers who are contracted to the NHS. Figures for 1994 onwards include prescriptions dispensed by dispensing doctors.

1 Figures in this table differ from those shown in Table 4.25 as the above data are taken from prescription reports from the various agencies dealing with prescription information in the constituent countries of the UK and relate to the number of prescriptions (number of fees), as opposed to total count of items written and dispensed as in Table 4.25.

2 Figures from 1948 to 1965 relate to England and Wales.

3 From July to December.

Sources: Prescription Pricing Authority, England.

Health of Wales Information Service.

Information Services Division of the NHS in Scotland.

Central Services Agency, Northern Ireland.

Health and Personal Social Services Statistics for England (DH).

Scottish Health Statistics (ISD).

Health Statistics Wales (NAW).

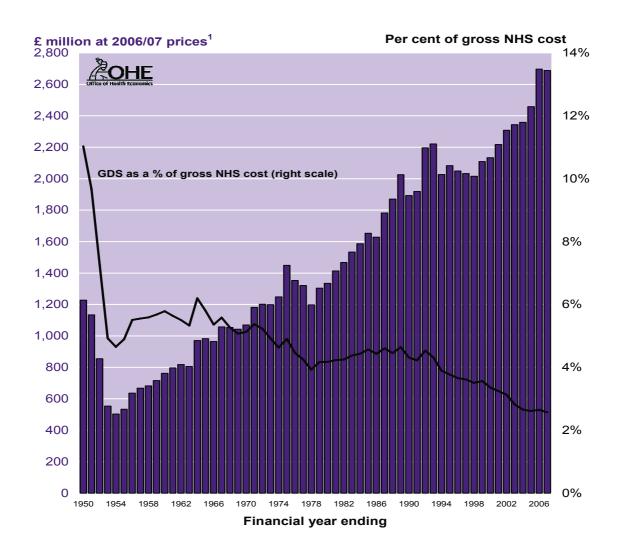
Annual Statistical Report (Northern Ireland CSA).

Annual Abstract of Statistics (ONS).

General Dental Services

Although the gross expenditure of General Dental Services has increased over the years, from £49 million in 1949 to £2,689 million in 2005 (an increase of 119% in real terms), the percentage of total NHS cost that this accounts for has been in steady decline since 1992 (see Figure 5).

Figure 5 Gross cost of General Dental Services (GDS) and per cent of Gross NHS cost, UK, 1949 – 2005



Gross cost includes patient charges.

Figures are for financial year ending 31st March e.g. 2000 = 1999/2000.

1 As adjusted by the Gross Domestic Product (GDP) deflator at market prices.

Health and Personal Social Services Statistics for England (DH). Health Statistics Wales (NAW).

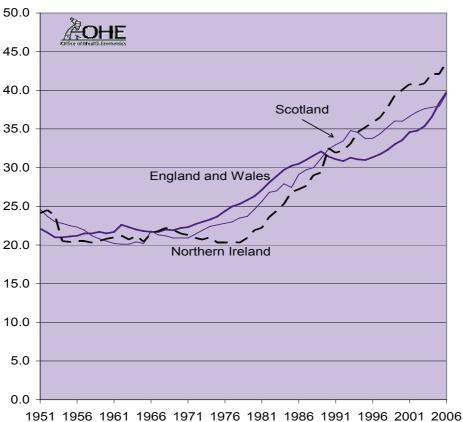
Scottish Health Statistics (ISD).

Annual Statistical Report (Northern Ireland CSA).

At the start of the NHS dental care was to be included, although there were too few dentists at that time to provide a full service to all members of the population, consequently priority was given to expectant and nursing mothers and young children. The availability of NHS dentists has doubled since then (Figure 6) but difficulties in accessing NHS dentists appear to remain in some parts of the UK.

Figure 6 Number of NHS dental practitioners per 100,000 population, by country, 1951 - 2006

Number of NHS dental practitioners



Note: Figures exclude assistants.

Sources: Annual Abstract of Statistics (ONS).

Health and Personal Social Services Statistics for England (DH).

Health Statistics Wales (NAW). Scottish Health Statistics (ISD).

Annual Statistical Report (Northern Ireland CSA).

NHS dental statistics (IC).

Statswales (NAW).

General Ophthalmic Services

In terms of 2006/07 prices the expenditure on NHS General Ophthalmic Services has fallen by 20% from £612 million in 1949/50 to £488 million in 2006/07. The following table shows the breakdown of expenditure by country. In 2006/07 Scotland has the largest expenditure per capita - partly due to ophthalmic services being made free to all in Scotland from 1st April 2006.

Table 4
General Ophthalmic Services (GOS) expenditure per capita and per household, UK, 1975/76 - 2006/07

| Year | England | Wales S | cotland N | orthern Ireland | UK | England | Wales | Scotland | Northern Ireland | UK |
|---------|---------|---------|-----------|--------------------|----------|------------------|------------|-------------|---------------------|-----|
| | | | | G | OS expen | diture per capit | a | | | |
| | | (£ | cash) | | | At con | stant pric | ces1 (Index | 1975/76=10 | 0) |
| 1975/76 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 100 | 100 | 100 | 100 | 100 |
| 1980/81 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 101 | 101 | 101 | 101 | 101 |
| 1990/91 | 2.32 | 2.65 | 2.70 | 2.60 | 2.38 | 64 | 73 | 74 | 72 | 66 |
| 2000/01 | 5.92 | 7.24 | 6.54 | 7.11 | 6.08 | 123 | 150 | 136 | 147 | 126 |
| 2001/02 | 6.10 | 7.50 | 6.66 | 7.39 | 6.25 | 124 | 152 | 135 | 150 | 127 |
| 2002/03 | 6.12 | 7.41 | 6.91 | 7.93 | 6.30 | 120 | 145 | 136 | 156 | 124 |
| 2003/04 | 6.45 | 7.50 | 7.10 | 8.20 | 6.61 | 123 | 143 | 135 | 156 | 126 |
| 2004/05 | 6.77 | 7.79 | 7.94 | 8.40 | 6.97 | 126 | 145 | 147 | 156 | 129 |
| 2005/06 | 7.10 | 8.01 | 8.97 | 9.18 | 7.37 | 129 | 146 | 163 | 167 | 134 |
| 2006/07 | 7.49 | 8.10 | 13.03 | 9.32 | 8.04 | 132 | 143 | 230 | 165 | 142 |
| | | | | GOS | expendit | ure per househ | old | | | |
| | | (£ | cash) | | | At con | stant pric | ces¹ (Index | 1975/76=10 | 0) |
| 1975/76 | 2.83 | 2.90 | 2.97 | 3.10 | 2.85 | 100 | 100 | 100 | 100 | 100 |
| 1980/81 | 5.46 | 5.57 | 5.63 | 6.10 | 5.50 | 97 | 97 | 96 | 99 | 97 |
| 1990/91 | 5.84 | 6.74 | 6.73 | 7.57 | 6.00 | 57 | 64 | 62 | 67 | 58 |
| 2000/01 | 14.39 | 17.55 | 15.17 | 19.18 | 14.74 | 105 | 126 | 106 | 128 | 107 |
| 2001/02 | 14.68 | 18.01 | 15.32 | 19.81 | 15.03 | 105 | 126 | 105 | 130 | 107 |
| 2002/03 | 14.64 | 17.65 | 15.77 | 21.08 | 15.05 | 101 | 120 | 104 | 134 | 104 |
| 2003/04 | 15.38 | 17.76 | 16.08 | 21.61 | 15.72 | 104 | 117 | 103 | 133 | 10 |
| 2004/05 | 16.10 | 18.38 | 17.89 | 21.98 | 16.52 | 106 | 118 | 112 | 132 | 108 |
| 2005/06 | 16.82 | 18.72 | 20.11 | 23.90 | 17.39 | 108 | 118 | 123 | 140 | 11 |
| 2006/07 | 17.66 | 18.82 | 29.06 | 24.10 | 18.90 | 110 | 115 | 173 | 138 | 117 |

Notes: Figures prior to 1986 include patient charges.

Figures for GOS expenditure per capita prior to 1988/89 are not available to a greater level of accuracy.

1 At constant prices, as adjusted by the Gross domestic Product (GDP) deflator at market prices.

Sources: Annual Abstract of Statistics (ONS).

Health and Personal Social Services Statistics for England (DH).

Health Statistics Wales (NAW).

Scottish Health Statistics (ISD).

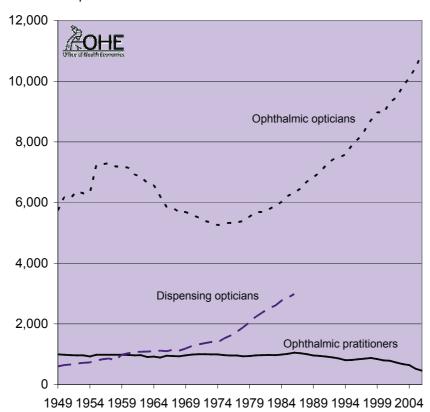
Annual Statistical Report (Northern Ireland CSA).

Economic Data (HM Treasury).

There are two types of practitioners working under contract to the NHS ophthalmic services. These are ophthalmic practitioners (doctors who test sight and prescribe spectacles) and ophthalmic opticians who are not doctors but are qualified to test sight, prescribe and supply glasses. The combined total of these is growing steadily, with ophthalmic opticians being the large majority.

Figure 7 Number of opticians by type, UK, 1949 – 2006/07

Number of opticians



Figures for 1949 and 1954 relate to England and Wales only

Figures from 1955 to 1968 relate to Great Britain only.

An ophthalmic medical practitioner is a medically qualifi dispense) glasses

An ophthalmic optician is entitled to test sight and dispense glasses

A dispensing optician is entitled only to dispense glasses. As a result of the introduction of voucher scheme on 1st July 1986, which led to the cessation of dispensing opticians' contracts, figures are no longer available for the UK from 1987

Health and Personal Social Services Statistics for England (DH).

Health Statistics Wales (NAW) Scottish Health Statistics (ISD).

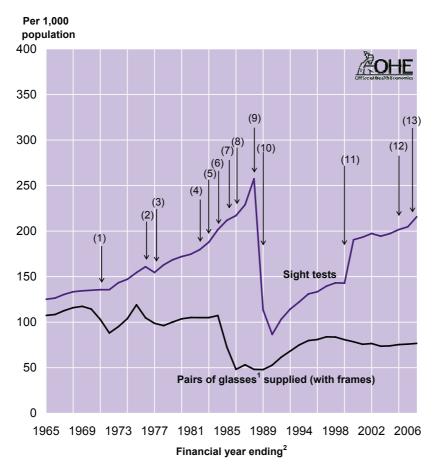
Annual Statistical Report (Northern Ireland CSA).

Annual Abstract of Statistics (ONS).

Until April 1989, the NHS General Ophthalmic Services (GOS) provided free sight test to the whole population. The access to these free services was restricted to certain groups including children under 16 years, full-time students aged under 19 years and people receiving income support. Free sight tests were reinstated from 1st April 1999 to those aged 60 and over throughout the UK, and reinstated in Scotland to all ages from 1st April 2006.

The following graph illustrates the dramatic effect that the abolition of free sight test had. From 1990 the trend has been an upward one but has not reached the peak seen in the 1980s.

Figure 8 Number of NHS sight tests and pairs of glasses supplied per 1,000 population, UK, 1965 – 2006/07



Notes: 1 From April 1989, figures relate to numbers of vouchers paid for.

 ${\it 2\;From\;1993/94\;onwards\;figures\;relate\;to\;financial\;year,\,ending\;31st\;March\;of\;year\;shown\;on}\\$

the x-axis (e.g. 2000 = 1999/2000).

Sources: Annual Abstract of Statistics (ONS)

Health and Personal Social Services Statistics for England (DH).

Health Statistics Wales (NAW).

Scottish Health Statistics (ISD).

Annual Statistical Report (Northern Ireland CSA).

- (1) 1 Jan 1971, charges increased to full cost for all types, max £3.50
- (2) 1 Jan 1976, charges increases to £2.25 per single-vision & £4.55 per bi-focal
- (3) 1 Apr 1977, charges increases to £2.90 per single-vision & £5.50 per bi-focal
- (4) 1 Apr 1982, charges increased to £3.70 per single-vision & £7.90 per bi-focal
- (5) 1 Apr 1983, charges increased to £4.00 per single-vision & £9.20 per bi-focal
- (6) 1 Apr 1984, charges increased to £4.25 per single-vision & £9.20 per bi-focal
- (7) 1 Apr 1985, charges abolished
- (8) 1 Apr 1986, voucher scheme introduced
- (9) 1 Jul 1988, voucher scheme extended to cover contact lenses
- (10) 1 Apr 1989, free NHS sight tests abolished except for children under 16 etc.
- (11) 1 Apr 1999, free NHS sight tests restored for people aged 60 or over

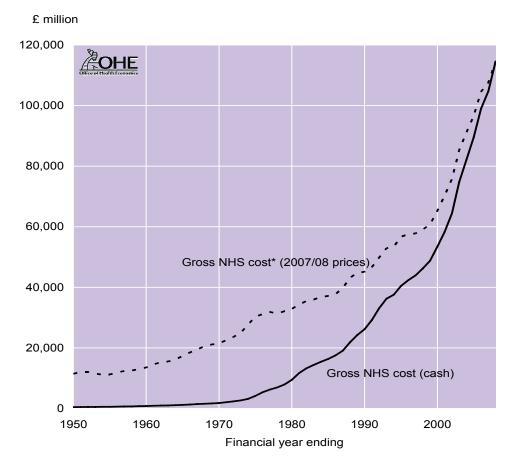
Maximum sight test fees increased between £15.52 in 2001 and £18.39 in 2005

- (12) Apr 2006, maximum sight fee test set to £18.85 in England, Wales and Northern Ireland. Free sight tests reinstated in Scotland
- (13) Apr 2007, maximum sight fee test set to £19.32 in England, Wales and Northern Ireland (see point (12)

Sixty years of NHS expenditure and workforce

Since the start of the National Health Service in 1948, its cost has risen enormously. In 1949/50 (the first full financial year of data) gross NHS expenditure was £447 million pounds in the UK as a whole, compared to an estimated £114,541 million in 2007/08. In terms of 2007/08 prices the figure in 1949/50 would have been £11,429 million, just one tenth of the current expenditure (see Figure 1).

Figure 1 Gross cost of NHS, in cash and real terms, UK, 1949/50 - 2007/08



Notes: All figures include charges paid by patients.

Figures are for financial year ending 31st March (e.g. 1990 = 1989/90).

2007/08 figures are OHE estimates

* As adjusted by the GDP deflator at market prices.

Sources: Consumer Trends (ONS).

Annual Abstract of Statistics (ONS).

Economic Trends (ONS).

The Government's Expenditure Plans (DH). Department of Health Departmental Report (DH).

Health Statistics Wales (NAW).

NHS Board Operating Costs and Capital Expenditure, ISD Scotland (ISD).

Public Expenditure Statistical Analyses (HM Treasury). Laing's Healthcare Market Review (Laing and Buisson).

Population Projections Database (GAD).

In 1949/50 NHS expenditure took up 4% of GDP, but this proportion had doubled to 8% of GDP by 2005/06. In parallel, NHS cost per person rose from £9 in 1949/50 (equivalent to £227 in 2007/08 prices) to £1,875 in 2007/08 (see Table 1).

Table 1 NHS expenditure, UK, 1949/50 - 2007/08

| | | | Total NHS cost | Total NHS c | ost |
|----------|---|-----------------------|--|-----------------------------------|--------------------------------|
| Year | Total NHS expenditure ^{1, 2} (£m) | Total NHS as % of GDP | per capita (2007/08 prices ³) | £m (2007/08 prices ³) | Index ³ 1949=100 |
| 1949/50 | 447 | 3.50 | 227 | 11,429 | 100 |
| 1950/51 | 482 | 3.56 | 239 | 12,045 | 105 |
| 1960/61 | 883 | 3.39 | 277 | 14,523 | 127 |
| 1970/71 | 2,046 | 3.87 | 405 | 22,565 | 197 |
| 1980/81 | 11,677 | 4.93 | 609 | 34,288 | 300 |
| 1990/91 | 29,178 | 5.14 | 814 | 46,629 | 408 |
| 2000/01 | 58,279 | 6.00 | 1,191 | 70,198 | 614 |
| 2001/02 | 64,430 | 6.36 | 1,281 | 75,793 | 663 |
| 2002/03 | 74,741 | 6.98 | 1,436 | 85,254 | 746 |
| 2003/04 | 82,202 | 7.23 | 1,528 | 91,124 | 797 |
| 2004/05 | 89,567 | 7.49 | 1,612 | 96,620 | 845 |
| 2005/06 | 98,959 | 7.92 | 1,733 | 104,543 | 915 |
| 2006/07 | 104,672 | 7.90 | 1,771 | 107,495 | 941 |
| 2007/08e | 114,541 | <i>8.15</i> | 1,875 | 114,541 | 1,002 |

Notes:

Sources:

GDP = Gross Domestic Product. Consumer Trends (ONS).

Annual Abstract of Statistics (ONS). Economic Trends (ONS).

The Government's Expenditure Plans (DH).

Department of Health Departmental Report (DH).

NHS Board Operating Costs and Capital Expenditure, ISD Scotland (ISD).

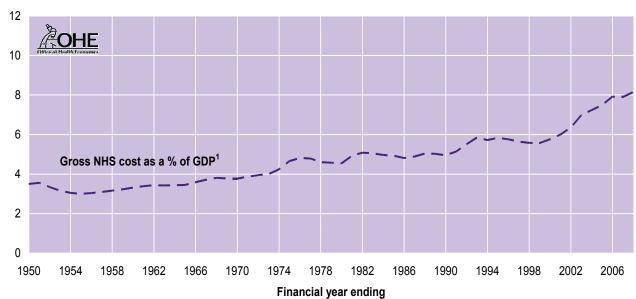
Public Expenditure Statistical Analyses (HM Treasury). Laing's Healthcare Market Review (Laing and Buisson).

Population Projections Database (GAD).

Health Statistics Wales (NAW).

Figure 2 Relationship between NHS cost as a percentage of GDP, UK, 1949/50 – 2007/08

As per cent of GDP



Notes: All figures include charges paid by patients.

Figures are for financial year ending 31st March (e.g. 2006 = 2005/06).

2007/08 figures are OHE estimates.

1 GDP = Gross Domestic Product at market prices.

Sources: Consumer Trends (ONS). Economic Trends (ONS).

Department of Health Departmental Report (DH).

NHS Board Operating Costs and Capital Expenditure, ISD Scotland (ISD).

Laing's Healthcare Market Review (Laing and Buisson).

Annual Abstract of Statistics (ONS).

The Government's Expenditure Plans (DH).

Health Statistics Wales (NAW).

Public Expenditure Statistical Analyses (HM Treasury).

Population Projections Database (GAD).

¹ Excluding patient charges.

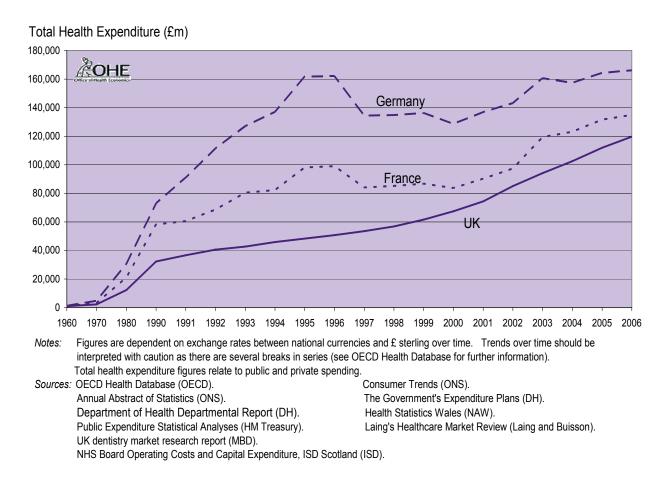
² Figures relate to NHS charges paid by patients for prescription medicines etc. Data on patient charges from 2004/05 onwards are not strictly comparable with earlier years

³ Figures have been adjusted by the GDP deflator at market prices.

e = OHE estimates, based on published data shown in italics.

While total health expenditure in the UK, public and private, has increased over the past 60 years, it has remained behind the level in Germany and France (see Figure 3).

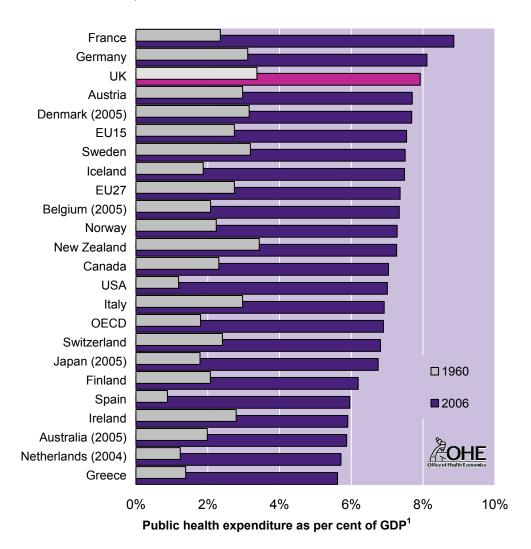
Figure 3 Total (Public and Private) Health Spend in UK versus Germany and France, 1960 - 2006



Comprehensive data across the EU and OECD countries is available since 1960 and over this period the weighted average of OECD countries expenditure on total health per capita has risen from £26 per person in 1960 to £1,928 in 2006, with the EU population weighted average over the same period haven risen from £16 per person to £1,849, compared to a rise from £19 to £1,976 in the UK.

The percentage of total health expenditure that is dedicated to public health the UK remains one of the highest at 87%, above Germany and France whose figures are 77% and 80% respectively. The average percentage of total health expenditure dedicated to public health for EU15 countries in 2006 was 77 % (weighted by total health expenditure). Figure 4 illustrates public health expenditure as a percentage of GDP and compares 1960 and 2005.

Figure 4 Public health expenditure as a percentage of GDP in selected OECD and EU countries, 1960 and 2006



Notes: 1 GDP = Gross Domestic Product at market prices.

Figures for OECD, EU27 and EU15 are weighted averages for countries for which data is

available.

EU15 as constituted before 1 May 2004 and EU27 as constituted since 1 January 2007. Those countries with no health care expenditure information for 1960 have not been included, Where 2006 data was not available the most recent data is shown, as indicated in brackets. Including patient payments (e.g. prescription charges).

Sources: OECD Health Database (OECD).

World Health Reports: Core Health Indicators (WHO). For sources of UK health expenditure data refer to Figure 1.

Economic Trends (ONS).

World Development Indicators (World Bank).

In 2006/07, the latest data available, Hospital services gross expenditure accounted for 43% of NHS cost, while the Family Health Services (FHS) accounted for 22%. This compares to 52% and 36% respectively in 1949/50, equating to a five fold rise in hospital expenditure per capita and four fold rise (in real terms) in FHS expenditure per capita over the same period (see Table 2). Further information on expenditure between the different sectors of the NHS will be presented in the final OHE article on the NHS at 60 years.

Table 2 Gross cost of hospital services and Family Health Services (FHS), UK, 1949/50 - 2006/07

| | Gross | cost: (£ millio | n cash) | Gross cost | per capita: | (£ cash) | As % of NHS cost: | | |
|------------|-------------------|-----------------|---------|------------|-------------|----------|-------------------|-----|--|
| Year | Hospital | FHS | All NHS | Hospital | FHS | All NHS | Hospital | FHS | |
| 1949/50 | 234 | 159 | 447 | 5 | 3 | 9 | 52 | 36 | |
| 1959/60 | 483 | 210 | 811 | 9 | 4 | 16 | 60 | 26 | |
| 1969/70 | 1,200 | 472 | 1,795 | 22 | 9 | 32 | 67 | 26 | |
| 1979/80 | 5,840 | 2,060 | 9,456 | 104 | 37 | 168 | 62 | 22 | |
| 1989/90 | 14,173 | 6,165 | 26,169 | 248 | 108 | 458 | 54 | 24 | |
| 1999/00 | 26,193 | 13,288 | 53,429 | 446 | 226 | 910 | 49 | 25 | |
| 2000/01 | 28,669 | 14,199 | 58,279 | 486 | 241 | 989 | 49 | 24 | |
| 2001/02 | 30,935 | 15,268 | 64,430 | 523 | 258 | 1,089 | 48 | 24 | |
| 2002/03 | 33,934 | 16,440 | 74,741 | 571 | 277 | 1,259 | 45 | 22 | |
| 2003/04 | 36,945 | 17,980 | 82,202 | 620 | 302 | 1,379 | 45 | 22 | |
| 2004/05 | 40,993 | 21,203 | 89,567 | 684 | 354 | 1,494 | 46 | 24 | |
| 2005/06 | 44,863 | 22,537 | 98,959 | 744 | 374 | 1,640 | 45 | 23 | |
| 2006/07 | 45,436 | 23,191 | 104,672 | 749 | 382 | 1,725 | 43 | 22 | |
| | e at constant pri | ces1 (Index | | | | | | | |
| 1949/50=10 | , | 100 | 100 | 400 | 400 | 400 | 100 | 400 | |
| 1949/50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| 1959/60 | 135 | 86 | 118 | 130 | 83 | 114 | 114 | 73 | |
| 1969/70 | 247 | 143 | 193 | 224 | 130 | 175 | 128 | 74 | |
| 1979/80 | 375 | 195 | 318 | 336 | 174 | 284 | 118 | 61 | |
| 1989/90 | 431 | 276 | 416 | 380 | 243 | 367 | 104 | 66 | |
| 1999/00 | 546 | 407 | 582 | 467 | 349 | 498 | 94 | 70 | |
| 2000/01 | 588 | 429 | 625 | 502 | 366 | 533 | 94 | 69 | |
| 2001/02 | 624 | 454 | 680 | 531 | 386 | 578 | 92 | 67 | |
| 2002/03 | 665 | 474 | 766 | 564 | 402 | 649 | 87 | 62 | |
| 2003/04 | 700 | 502 | 814 | 591 | 423 | 687 | 86 | 62 | |
| 2004/05 | 754 | 574 | 861 | 633 | 482 | 723 | 88 | 67 | |
| 2005/06 | 805 | 595 | 928 | 671 | 497 | 774 | 87 | 64 | |
| 2006/07 | 797 | 598 | 959 | 661 | 496 | 795 | 83 | 62 | |

All figures relate to financial years and include capital expenditure and charges paid by patients. From 1991/92, hospital

Notes:

expenditure includes capital charges.

1 As adjusted by the Gross Domestic Product (GDP) deflator, at market prices.

Sources:

The Government's Expenditure Plans (DH).

Public Expenditure Statistical Analyses (HM Treasury).

NHS Board Operating Costs and Capital Expenditure, ISD Scotland (ISD).

Department of Health Departmental Report (DH). NHS Summarised Accounts (House of Commons).

Scottish Health Statistics (ISD). Health Statistics Wales (NAW).

Annual Abstract of Statistics (ONS). Population Projections Database (GAD).

Economic Trends (ONS).

Estimated total expenditure on pharmaceuticals in the UK accounted for 8.3 % of the total NHS cost in 1969, increasing to 12.3% in 2002 but since then falling back to 10.5% in 2006. (Further information on community prescribing and expenditure in the UK is included in the upcoming Family Health Services article.)

Table 3 Estimated total NHS expenditure on pharmaceuticals at manufacturers' prices¹, UK, 1969 - 2006

£ million (cash)

| | 5 1 | . . | | T-4-1 NUIO | NHS medi | NHS medicines cost: | | | | |
|------|--------------------------------------|--------------------|-----------------------|------------------------|-------------------------|---------------------|------|--|--|--|
| Year | Pharmaceutical services ¹ | Dispensing doctors | Hospital ¹ | Total NHS medicines | Per capita ² | % total | % | | | |
| | | | | | £ (2006 prices) | NHS cost | GDP | | | |
| 1969 | 113 | 5 | 26 | 144 | 29.98 | 8.3 | 0.31 | | | |
| 1970 | 124 | 6 | 29 | 159 | 30.39 | 8.0 | 0.31 | | | |
| 1980 | 613 | 35 | 178 | 826 | 41.88 | 7.3 | 0.36 | | | |
| 1990 | 1,918 | 121 | 495 | 2,533 | 68.68 | 8.9 | 0.45 | | | |
| 2000 | 5,244 | 336 | 1,390 | 6,969 | 139.53 | 12.2 | 0.73 | | | |
| 2001 | 5,728 | 365 | 1,552 | 7,645 | 148.40 | 12.2 | 0.77 | | | |
| 2002 | 6,409 | 407 | 1,764 | 8,580 | 160.31 | 12.3 | 0.82 | | | |
| 2003 | 7,024 | 445 | 2,041 | 9,510 | 171.49 | 12.1 | 0.86 | | | |
| 2004 | 7,540 | 480 | 2,340 | 10,360 | 181.21 | 12.0 | 0.88 | | | |
| 2005 | 7,376 | 471 | 2,409 | 10,257 | 174.32 | 10.8 | 0.84 | | | |
| 2006 | 7,657 | 491 | 2,575 | 10,723 | 176.98 | 10.5 | 0.83 | | | |

Notes: All figures exclude dressings and appliances.

GDP = Gross Domestic Product at market prices.

1 These figures have been obtained by deflating the net ingredient cost (before discount) of prescriptions dispensed during the year with a standard manufacturers' discount rate of 12.5 per cent (15 per cent prior to 1980). They are also known as 'NHS sales at manufacturer's prices'. These figures are representative of NHS expenditure on medicines, although the discount rate may differ slightly to that used by the NHS, which varies from year to year.

2 At 2006 prices, as adjusted by the GDP deflator at market prices.

Sources: Prescription Pricing Authority Annual Reports.

Annual Abstract of Statistics (ONS).

Health and Personal Services Statistics for England (DH).

Health Statistics Wales (NAW).

Scottish Health Statistics (ISD). Economic Trends (ONS). Hospital Prescribing (IC).

Taxation accounted for 100% of NHS finance in 1949, when there were no patient charges. Today, patient charges fund 1.3% of the total NHS budget, with 98.7% paid from tax and national insurance contributions, see Table 4.

Table 4 UK NHS sources of finance, 1949 – 2006

| Year | Taxa | ation | | NHS contribution | | LHA ¹ | Patients' payments ² | | Total NHS income | NHS income as a % of UK government |
|------|--------|-------|--------|---------------------|-----|------------------|------------------------------------|------|------------------------|---|
| | £m | %NHS | £m | %NHS | £m | %NHS | £m | %NHS | £m | receipts 3 |
| 1949 | 437 | 100.0 | _ | _ | _ | _ | - | _ | 437 | 8.2 |
| 1950 | 477 | 100.0 | _ | _ | - | _ | - | - | 477 | 8.7 |
| 1960 | 671 | 77.5 | 118 | 13.6 | 77 | 8.9 | 43 | 5.0 | 866 | 9.8 |
| 1970 | 1,635 | 82.6 | 209 | 10.6 | 135 | 6.8 | 60 | 3.0 | 1,979 | 8.7 |
| 1980 | 9,951 | 88.4 | 1,042 | 9.3 | - | - | 264 | 2.3 | 11,257 | 11.5 |
| 1990 | 22,992 | 80.9 | 4,288 | 15.1 | - | - | 1,146 | 4.0 | 28,426 | 12.9 |
| 2000 | 49,103 | 86.0 | 6,905 | 12.1 | - | - | 1,058 | 1.9 | 57,067 | 15.2 |
| 2001 | 54,116 | 86.0 | 7,610 | 12.1 | - | - | 1,166 | 1.9 | 62,892 | 16.1 |
| 2002 | 62,169 | 86.2 | 8,732 | 12.1 | - | - | 1,263 | 1.7 | 72,164 | 18.3 |
| 2003 | 62,599 | 77.9 | 16,389 | 20.4 | - | - | 1,349 | 1.7 | 80,337 | 19.4 |
| 2004 | 67,576 | 77.0 | 18,861 | 21.5 | - | - | 1,288 | 1.5 | 87,726 | 19.8 |
| 2005 | 75,819 | 78.5 | 19,515 | 20.2 | - | - | 1,276 | 1.3 | 96,611 | 20.3 |
| 2006 | 82,916 | 80.3 | 18,997 | 18.4 | - | - | 1,331 | 1.3 | 103,244 | 20.3 |

Notes: All figures relate to calendar years.

Economic Trends (ONS).

%NHS refers to the percentage of NHS funding from each source.

1 LHA = Former Local Health Authorities. From 1974 onwards, services provided by LHAs were transferred to the NHS. 2 Patient charges for 2004 onwards are not comparable to earlier years. Figures prior to 2004/05 are taken from the Annual Abstract of Statistics and relate to payments by patients for pharmaceutical services, these data were last published for 2003/04.

As such, comparable data is not available since 2003/04. Data shown relate to prescription charge revenue, including income received by pharmacists and dispensing doctors and income from the sale of pre-payment certificates.

Annual Abstract of Statistics (ONS).

3 UK government receipts include taxes and social security contributions.

Economic and Labour Market Review (ONS).

The Government's Expenditure Plans (DH).

The largest source of patient charge income currently comes from dental charges, with a marginally lower income from prescription charges and about half the amount from hospital charges, which include fees for additional services such as car parking.

Table 5 NHS patient charges, UK, 1950/51 - 2007/08

| | | | | | Tc | otal charges |
|----------------|-----------------|----------------------|---------------|------------------|--------------|-------------------------|
| Financial year | Hospital1 £m | Prescriptions2 £m | Dental3 £m | Ophthalmic £m | Cash (£m) | Index4 (1951/52=100) |
| 1950/51 | 4 | - | 1 | 2 | 7 | 40 |
| 1960/61 | 7 | 21 | 11 | 7 | 46 | 174 |
| 1970/71 | 11 | 19 | 19 | 12 | 61 | 155 |
| 1980/81 | 57 | 88 | 106 | 34 | 285 | 192 |
| 1990/91 | 510 | 247 | 441 | - | 1,198 | 440 |
| 2000/01 | 138 | 425 | 506 | - | 1,069 | 296 |
| 2001/02 | 155 | 478 | 565 | - | 1,198 | 324 |
| 2002/03 | 172 | 528 | 584 | - | 1,284 | 337 |
| 2003/04 | 194 | 596 | 581 | - | 1,371 | 349 |
| 2004/052,3 | 216 | 513 | 561 | - | 1,290 | 320 |
| 2005/06 | 238 | 522 | 512 | - | 1,271 | 309 |
| 2006/07 | 260 | 526 | 564 | - | 1,350 | 319 |
| 2007/08 | 282 | 531 | 616 | - | 1,429 | 328 |

Notes:

Figures relate to year ending 31st March.

Prescription charges were not introduced until 1952, then temporarily abolished in 1966 - 1968.

The Ophthalmic Services were part-privatised in 1985.

4 At constant prices, as adjusted by the Gross Domestic Product (GDP) deflator at market prices.

Sources:

Annual Abstract of Statistics (ONS).

Economic Data (HM Treasury).

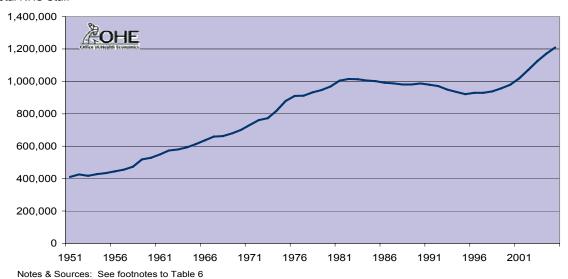
A contributing factor to the rise in NHS expenditure over the years has been the increase in the NHS workforce, which has trebled in size over the last 60 years from 410,000 to over 1.2 million (see Figure 5).

¹ From 1994 pay bed and similar income collected locally by NHS trusts no longer included under hospital charges.

² Figures prior to 2004/05 are taken from the Annual Abstract of Statistics and relate to payments by patients for pharmaceutical services. These data were last published for2003/04. Comparable data are not available since 2003/04. Data shown relate to prescription charge revenue, including income received by pharmacists and dispensing doctors and income from the sale of pre-payment certificates. 3 Data for 2004/05 onwards are not strictly comparable with earlier data, as reliable data for Personal Dental Services (PDS) in England and Wales are not available before 2004/05 and therefore data prior to 2004/05 is based on GDS patient charges alone. In 2005/06 there was a shortfall in patient charge income, in part attributable to PDS pilots income being based on the old GDS system of patient charges in England and Wales.

Figure 5 Total UK NHS workforce 1951 to 2005

Total NHS Staff



The number of nurses has increased by almost 170% from 1951 to 2005 (see Table 6 and Figure 6). However, as a proportion of the total NHS staff, nurses have fallen from 46% in 1951 to 41% in 2006. Medical and dental staff numbers have increased by over 690% between 1951 and 2006, and as a proportion of total NHS staff they have risen from 4% to 8% over the same period. (Further information on staffing in the Family Health Services will be presented in the final OHE article on the NHS at 60 years.)

Table 6 Number of staff employed in NHS hospitals and community services by category, UK, 1951 - 2006

| 30th | Sep | tem | ber |
|------|-----|-----|-----|
| | | | |

| Year | Medical and dental ¹ | Nursing and midwifery ² | Professional and technical ³ | Admin. and clerical ⁴ | Domestic ancillary ¹ | Total⁵ |
|------|------------------------------------|------------------------------------|---|----------------------------------|------------------------------------|-----------|
| 1951 | 15,102 | 188,580 | 14,110 | 29,021 | 163,666 | 410,479 |
| 1961 | 21,184 | 249,571 | 27,460 | 40,877 | 210,308 | 549,400 |
| 1971 | 29,944 | 361,980 | 43,089 | 60,050 | 235,642 | 730,705 |
| 1981 | 42,562 | 493,700 | 78,269 | 130,221 | 259,765 | 1,004,517 |
| 1991 | 57,187 | 500,300 | 106,580 | 172,964 | 142,600 | 979,631 |
| 2001 | 78,934 | 449,950 | 142,931 | 218,422 | 128,732 | 1,018,969 |
| 2005 | 100,357 | 506,215 | 177,117 | 280,692 | 144,406 | 1,208,787 |
| 2006 | 105,293 | 500,206 | 180,082 | 274,581 | 139,655 | 1,199,818 |

Notes:

All figures are based on aggregates of England, Wales, Scotland and Northern Ireland, and may be based on different definitions and timing of coverage. The totals include staff working in the personal social services in Northern Ireland.

Sources:

NHS Hospital, Public Health Medicine and Community Health Service Medical and Dental Workforce Census (IC).

NHS Hospital and Community Health Services non-medical staff in England (IC).

Health Statistics Wales (NAW).

Scottish Health Statistics (ISD).

Annual Abstract of Statistics (ONS).

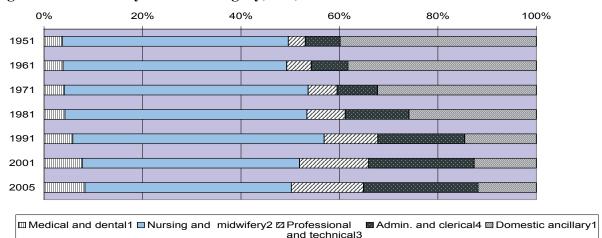
¹ All figures relate to full-time equivalents, medical and dental staff include Hospital and Community Health Services staff from 1990 onwards. 2 Full-time and part-time, including Community Health Services staff in England. The exclusion of nurses on Project 2000 training courses produced an apparent reduction in numbers since 1990.

³ Excluding works, maintenance, ancillary, ambulance and transport staff and part-time staff in Scotland.

⁴ Including general and senior managers.

⁵ These are totals of the columns shown. As some categories of employment are not shown, these totals are underestimates of the total NHS hospital workforce.

Figure 6 NHS staff by selected category, UK, 1951 – 2005



Notes & Sources: See footnotes to Table 6

Table 7 illustrates the changes in the number of employees employed in various public services in the UK, including the NHS, available back to 1961, from which time a substantial increase in the proportion of public sector staff working in the NHS is observed, from 10% then to 26% in 2008.

Table 7 UK public employees in selected sectors, 1961 - 2008

| Thousands | | | | | | | | |
|-----------------|--------------------|-------|-------------------|-----------|------------------|-------------------------|---------------------|------------------|
| - | Central government | | Local authorities | | Nationalised | Total public | NHS as a % total | |
| Year | HM Forces | NHS | Other | Education | HSS ¹ | industries ² | sector ³ | public sector |
| 1961 | 474 | 575 | 741 | 785 | 170 | 2,152 | 5,859 | 10% |
| 1970 | 372 | 741 | 818 | 1,241 | 265 | 1,879 | 6,515 | 11% |
| 1980 | 323 | 1,174 | 897 | 1,501 | 346 | 1,816 | 7,387 | 16% |
| 1990 | 303 | 1,221 | 776 | 1,431 | 417 | 675 | 6,052 | 20% |
| 2000 | 217 | 1,239 | 698 | 1,214 | 412 | 245 | 5,283 | 23% |
| 2007 | 197 | 1,512 | 796 | 1,404 | 383 | - | 5,785 | 26% |
| 2008 | 194 | 1,523 | 779 | 1,406 | 380 | - | 5,758 | 26% |
| Index (1961=100 |) | | | | | | | |
| 1961 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 1970 | 78 | 129 | 110 | 158 | 156 | 87 | 111 | 116 |
| 1980 | 68 | 204 | 121 | 191 | 204 | 84 | 126 | 162 |
| 1990 | 64 | 212 | 105 | 182 | 245 | 31 | 103 | 206 |
| 2000 | 46 | 215 | 94 | 155 | 242 | 11 | 90 | 239 |
| 2007 | 42 | 263 | 107 | 179 | 225 | - | 99 | 266 |
| 2008 | 41 | 265 | 105 | 179 | 224 | - | 98 | 270 |

Notes:

All figures are based on headcount. Prior to 2008 figures relate to June, Figures for 2008 relate to March.

Data from 1991 from Public Sector Employment (ONS).

Figures from 1999 onwards are seasonally adjusted.

1 HSS = Health and Social Services.

2 Including Post Office.

3 Central government, local authorities and nationalised industries.

- Not available.

Source:

Economic Trends (Annual Supplement) (ONS).