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# THE COST OF THE NHS

In 1978 the cost of the National Health Service in the United Kingdom will rise, as Table 1 shows, to an estimated record level of £8,000 million. Even when adjusted for the falling value of the pound this means that the NHS costs three times as much as when it was first established. However, public spending in other sectors like education has risen to a similar degree and in the past decade the outlay in the NHS has remained constant at about 10 per cent of all public expenditure, less debt interest.

Constant price trends in NHS costs are shown in Figure 1. Adjusted in relation to the changes in the retail price index health service resources have risen by 39 per cent since 1970, as compared to a 13 per cent growth in Gross National Product. Yet since labour costs account for a very large proportion of NHS spending it may in some ways be more appropriate to adjust by the average earnings index in order to derive a measure of 'real growth'. Figure 1 indicates that if analysed in this manner NHS growth has been in the order of 28 per cent since 1970, this lower figure reflecting the high rate of wage inflation relative to consumer good cost increases.

Table 1 shows that in the overall period 1949 to 1978 health spending has increased from 3·9 per cent to 5·7 per cent of the GNP, a proportional growth of 46 per cent. But despite this impressive increase other richer nations raised their health care outlays more swiftly, a trend which has been associated with Britain's relatively slow economic growth. Western European and North American average spending on health services now appears to be well in excess of 7 per cent of GNP.

The latest year for which detailed figures are generally available is 1976. In current (1976) prices total UK outlay on the NHS was £6,309 million of which £127 million was paid for directly by patients in the form of prescription charges, dental treatment fees and the cost of spectacles. The remaining £6,182 million was provided through taxation in various forms (around 90 per cent) and national insurance contributions.

Table 2 breaks down NHS spending in the period 1951 to 1976. It shows that although in the latter year the hospital services apparently reduced the proportion of NHS resources that they consumed, during the period as a whole this figure climbed fairly steadily from a little over half to around two thirds. The recent drop was largely due to declines in capital investment and the transfer of some administrative costs to the 'other' category consequent upon NHS reorganisation in 1974.

Of the £3,972 million spent on hospital services in 1976 direct patient treatment costs (such as salaries and wages of medical, nursing and paramedical staff and expenditure on medical equipment and supplies) absorbed 55 per cent. Administration and general services (like laundry and catering) accounted for 37 per cent. The share devoted to capital development fell from 10 per cent in 1975 to 8 per cent in 1976

The financial expansion of the hospital services has been strongly related to increases in manpower, wages accounting for three quarters of the total budget of this sector. The numbers of all categories of personnel have expanded although the total of administrative and clerical staff has risen rather faster than average. However, Figure 2 shows that the greatest rate of 'real' growth in the hospital sector occurred in 1974/75, a period in which unit wage costs were also increasing relative to other factors in the NHS.

Rising hospital costs have been associated with a steadily expanding work load. Figure 3 illustrates relevant trends between 1967 and 1976. For instance, it shows that the flow through of inpatients (as measured by discharges and deaths) rose from 5·9 million to 6·5 million in that decade.

Primary health care services are comprised of the general medical, dental, ophthalmic and pharmaceutical services. They accounted for 20 per cent (£1,269 million) of total NHS cost in 1976. Of this £566 million was devoted to pharmaceutical services, that is about 8·9 per cent of UK NHS spending. As Table 2 shows the equivalent proportion in the mid 1960s was over 11 per cent. Thus despite the rise between 1975 and 1976 there was a proportional drop of around 20 per cent in NHS pharmaceutical spending in the last ten year period for which figures are available.

Figure 2 shows that as adjusted by the pharmaceutical wholesale price index 'real' spending on the pharmaceutical services (which include the labour costs of pharmacists as well as spending on medicines) rose by 70 per cent in the decade 1967 to 1976. This high figure is sometimes quoted in comparison with lower rates of 'real' growth for the other NHS services like those shown in the Figure. But these are adjusted by the average earnings index, which rose much faster than medicine prices. If pharmaceutical services costs are put on the same basis in order to allow a straight comparison the increase was under 5 per cent for the entire period.

**Table 1** *NHS expenditure as proportion of Gross National Product, United Kingdom*

| | *Gross National Product £m* | *Cost of NHS £m* | *% of GNP* | *NHS expenditure per head of pop £* | *NHS at 1949 prices £ million* |
|---|---|---|---|---|---|
| 1949 | 11,136 | 437 | 3·92 | 8·74 | 437 |
| 1950 | 11,695 | 477 | 4·08 | 9·54 | 462 |
| 1951 | 12,981 | 503 | 3·87 | 10·00 | 447 |
| 1952 | 14,042 | 526 | 3·74 | 10·44 | 428 |
| 1953 | 15,106 | 546 | 3·61 | 10·79 | 432 |
| 1954 | 15,980 | 564 | 3·53 | 11·10 | 437 |
| 1955 | 17,047 | 608 | 3·57 | 11·94 | 451 |
| 1956 | 18,499 | 664 | 3·59 | 12·97 | 470 |
| 1957 | 19,626 | 720 | 3·67 | 14·00 | 491 |
| 1958 | 20,499 | 764 | 3·73 | 14·77 | 505 |
| 1959 | 21,523 | 826 | 3·84 | 15·88 | 544 |
| 1960 | 22,880 | 902 | 3·94 | 17·21 | 588 |
| 1961 | 24,491 | 981 | 4·01 | 18·58 | 618 |
| 1962 | 25,632 | 1,025 | 4·00 | 19·23 | 619 |
| 1963 | 27,329 | 1,092 | 4·00 | 20·37 | 647 |
| 1964 | 29,648 | 1,190 | 4·01 | 22·08 | 683 |
| 1965 | 31,656 | 1,306 | 4·12 | 24·10 | 715 |
| 1966 | 33,470 | 1,432 | 4·28 | 26·28 | 755 |
| 1967 | 35,255 | 1,592 | 4·51 | 29·05 | 818 |
| 1968 | 37,723 | 1,739 | 4·61 | 31·62 | 853 |
| 1969 | 39,836 | 1,831 | 4·60 | 33·11 | 853 |
| 1970 | 43,924 | 2,083 | 4·74 | 37·60 | 912 |
| 1971 | 49,656 | 2,371 | 4·77 | 42·64 | 949 |
| 1972 | 55,492 | 2,734 | 4·93 | 49·00 | 1,022 |
| 1973 | 64,815 | 3,092 | 4·77 | 55·31 | 1,058 |
| 1974 | 74,958 | 3,922 | 5·23 | 70·16 | 1,157 |
| 1975 | 93,978 | 5,368 | 5·71 | 95·85 | 1,275 |
| 1976 | 110,259 | 6,309 | 5·72 | 112·81 | 1,285 |
| 1977 | 122,736 | 7,100* | 5·78* | 126·79* | 1,249* |
| 1978* | 138,600* | 8,000* | 5·71* | 141·25* | 1,271* |

*estimated

**Figure 1** *Cost of the National Health Service, United Kingdom*

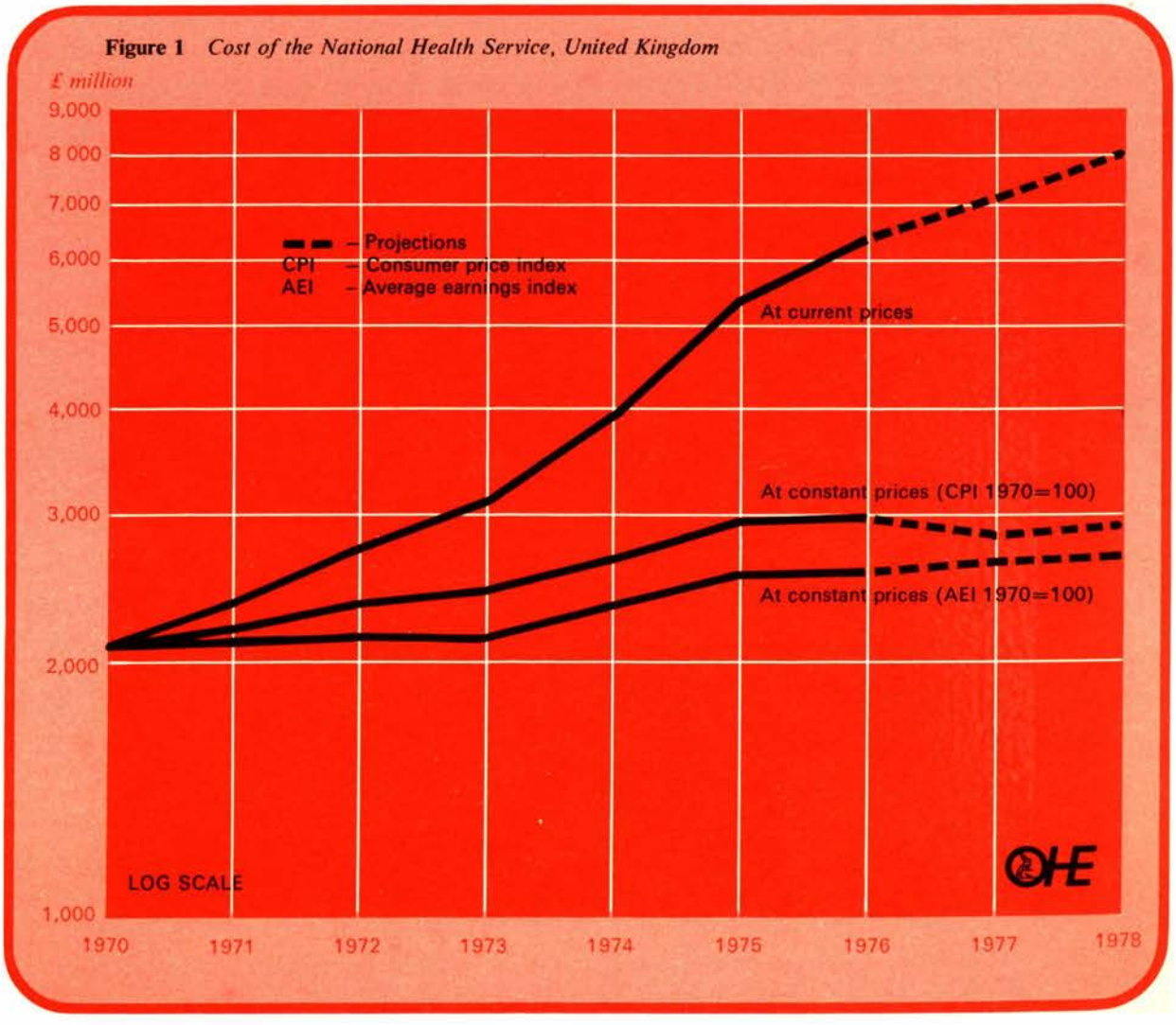


**Table 2** *Health Services as a proportion of total cost of NHS 1951 to 1976, United Kingdom*

| Year | Hospital Services | Pharmaceutical Services | General Medical Services | General Dental Services | General Opthalmic Services | Community Health Services§ | Other† | Total |
|---|---|---|---|---|---|---|---|---|
| 1951 | 55·7 | 9·7 | 9·5 | 7·8 | 2·8 | 8·5 | 6·0 | 100·0 |
| 1952 | 55·7 | 9·7 | 15·8 | 5·9 | 2·1 | 8·7 | 2·1 | 100·0 |
| 1953 | 55·5 | 9·5 | 10·8 | 5·5 | 2·2 | 8·8 | 7·7 | 100·0 |
| 1954 | 56·7 | 9·4 | 10·6 | 5·9 | 2·5 | 8·7 | 6·2 | 100·0 |
| 1955 | 57·2 | 9·5 | 10·2 | 6·3 | 2·5 | 8·9 | 5·4 | 100·0 |
| 1956 | 57·4 | 9·8 | 9·9 | 6·3 | 2·3 | 8·9 | 5·4 | 100·0 |
| 1957 | 56·8 | 9·7 | 9·7 | 6·4 | 2·2 | 8·8 | 6·4 | 100·0 |
| 1958 | 57·5 | 10·0 | 9·8 | 6·5 | 2·1 | 8·9 | 5·2 | 100·0 |
| 1959 | 57·1 | 10·2 | 9·2 | 6·5 | 2·1 | 9·1 | 5·8 | 100·0 |
| 1960 | 57·2 | 10·1 | 10·0 | 6·3 | 2·0 | 9·1 | 5·3 | 100·0 |
| 1961 | 57·0 | 9·8 | 9·6 | 6·2 | 1·8 | 9·3 | 6·3 | 100·0 |
| 1962 | 59·0 | 9·7 | 8·5 | 6·0 | 1·7 | 9·8 | 5·3 | 100·0 |
| 1963 | 60·1 | 10·1 | 8·3 | 5·7 | 1·6 | 10·0 | 4·2 | 100·0 |
| 1964 | 60·3 | 10·2 | 7·9 | 5·5 | 1·7 | 10·0 | 4·4 | 100·0 |
| 1965 | 60·4 | 11·1 | 7·8 | 5·1 | 1·6 | 10·3 | 3·7 | 100·0 |
| 1966 | 60·8 | 11·2 | 7·5 | 5·2 | 1·5 | 10·2 | 3·6 | 100·0 |
| 1967 | 59·9 | 10·6 | 7·9 | 5·0 | 1·5 | 10·4 | 4·7 | 100·0 |
| 1968 | 59·9 | 10·2 | 7·9 | 4·8 | 1·4 | 10·4 | 5·4 | 100·0 |
| 1969* | 63·1 | 10·4 | 8·0 | 4·9 | 1·5 | 7·8 | 4·3 | 100·0 |
| 1970 | 64·1 | 10·0 | 8·4 | 4·9 | 1·4 | 7·0 | 4·2 | 100·0 |
| 1971 | 65·3 | 9·8 | 8·1 | 4·9 | 1·3 | 7·0 | 3·6 | 100·0 |
| 1972 | 65·9 | 9·7 | 7·9 | 4·5 | 1·2 | 6·8 | 4·0 | 100·0 |
| 1973 | 66·2 | 9·4 | 7·4 | 4·4 | 1·1 | 6·9 | 4·6 | 100·0 |
| 1974‡ | 67·0 | 8·7 | 6·5 | 4·3 | 1·0 | 5·7 | 6·8 | 100·0 |
| 1975 | 65·8 | 8·4 | 6·1 | 4·0 | 1·3 | 6·1 | 8·3 | 100·0 |
| 1976 | 63·0 | 8·9 | 6·1 | 3·9 | 1·2 | 6·1 | 10·8 | 100·0 |

Notes:
§ Figures prior to 1974 refer to former Local Health Authority Services.
† Includes headquarters administration (RHAs, AHAs, Health Boards and Boards of Governors), central administration, ambulance services, mass radiography services, etc, and centrally financed items such as laboratory, vaccine and research and development costs, etc, not falling within the finance of any one service. Figures from 1974 are not strictly comparable with earlier years.
* Change in definition of NHS. Certain local health authority services transferred from NHS to Social Services.
‡ Reorganisation of NHS. Administration of certain NHS community health services transferred from local authorities to new AHAs. School health services formerly administered by the Department of Education and Science also transferred to the NHS.

One of the factors behind the increase in pharmaceutical costs in the period 1974 to 1976 was the introduction of new NHS family planning provisions in 1975 which included the prescribing of oral contraceptives by general practitioners. Others have, over the broader period, included a 16 per cent increase in the volume of prescriptions handled (see Figure 3) and the introduction of new medicines. Considerations like these underly the DHSS projection of a 5 per cent per annum increase in pharmaceutical costs to 1980.

The number of family doctors in the United Kingdom stood in 1976 at about 25,000 – 47 per cent above the 1951 level. Yet, as Table 2 and Figure 2 show, spending on general medical services has over the years declined both as a proportion of total NHS outlay and also slightly in 'real' terms. In 1953, for instance, general medical services accounted for nearly 11 per cent of NHS outlay as compared to 6 per cent in 1976. Total spending in the latter year was £384 million, £9 per head of the population for an average of between three and four GP consultations per year.

The cost of the general dental services was £246 million in 1976. This was 3·9 per cent of total NHS spending, as compared with an average of over 6 per cent in the 1950s. Despite higher charges Figure 3 shows that the demand for treatment as measured by the total number of courses (including emergencies) completed rose by 40 per cent between 1967 and 1976. By contrast the number of dentists rose by 15 per cent in the decade.

Ophthalmic services have similarly decreased their share of NHS resources from well over 2 per cent in the 1950s to 1·2 per cent in 1976 (Table 2). The rise in 1975 was due to increased remuneration for sight testing and dispensing coupled with arrears payments. About one third of the £72 million spent in 1976 went on sight tests, the number of which rose by 26 per cent in the decade (Figure 3). Contrary to this trend (and against a background of rising NHS charges) the number of spectacles supplied from the limited range of NHS designs available fell from 6·2 million pairs to 5·9 million. This drop was sufficient in 1976 to largely account for the proportional decline of NHS resources devoted to the ophthalmic services.

Community health services include most of those provided by local authorities up to 1974 such as health centres, clinics and domiciliary nursing. In 1976 they consumed 6·1 per cent of NHS UK funds as compared to 5·7 per cent in 1974. Of the £384 million taken up in 1976 capital outlay on, for example, health centres accounted for 7 per cent. Patient care services and general services absorbed 71 per cent and 22 per cent respectively.

The most notable rise in the share of the total NHS expenditure since the reorganisation in 1974 has been in 'other' services. This was largely due to the inclusion of certain new provisions such as the ambulances from the former Local Health Authorities and also partly to the rising costs of existing services. Of all the services which made up the total cost of £686 million in 1976, headquarters administration (Regional and Area Health Authorities, Health Boards and Boards of Governors) had the largest share of the expenditure, 35 per cent, followed by ambulance services which accounted for 17 per cent. The remaining 48 per cent was taken up by services such as blood transfusion services, mass radiography services, contractual hospitals and homes,

**Figure 2** *NHS Expenditure by services –*
*At 1970 constant prices (adjusted by average earnings index), United Kingdom*

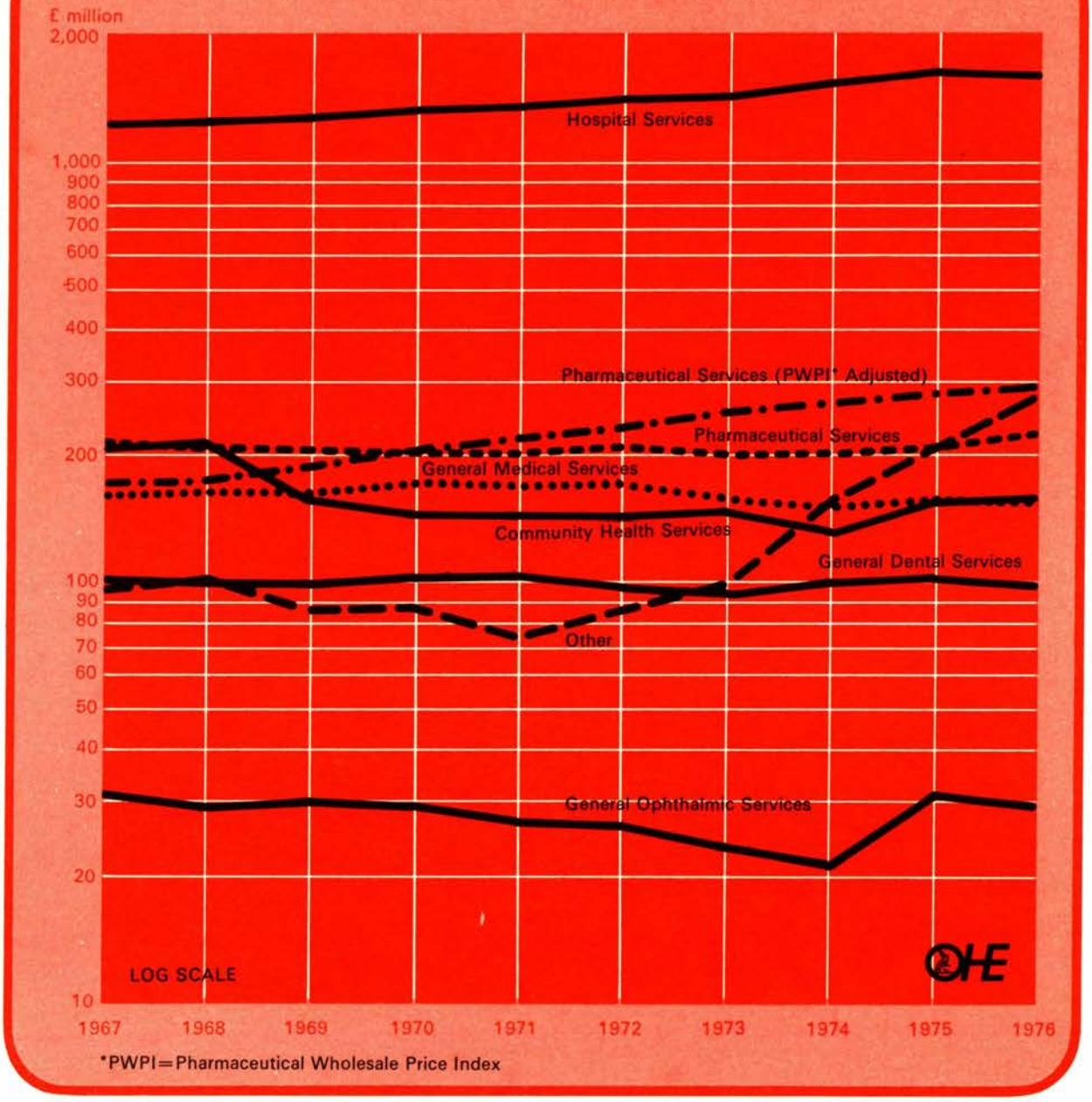


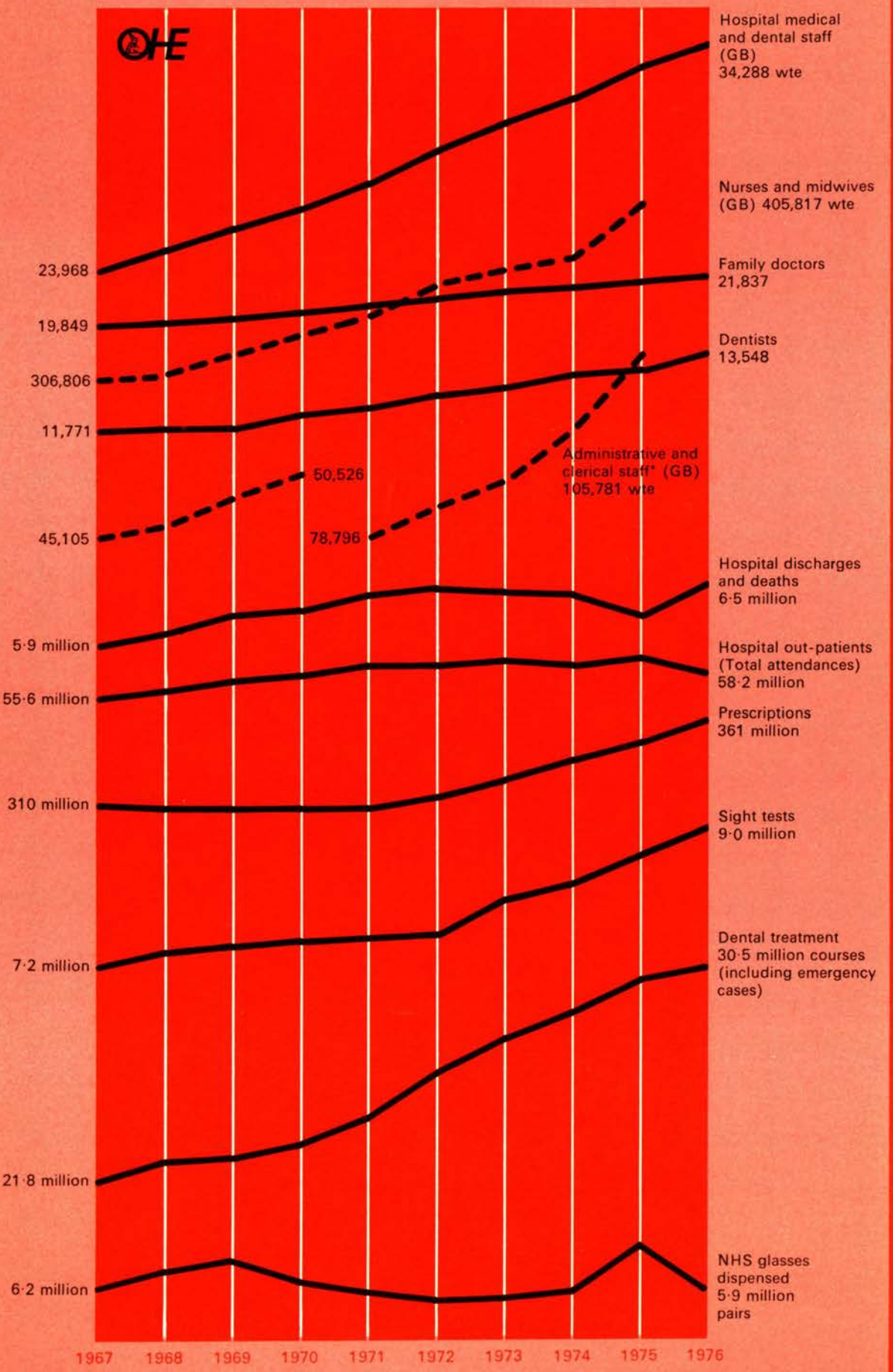

**Table 3** *Projected public expenditure by volume on NHS at 1977 prices, Great Britain 1977/78 to 1981/82* *£ million*

| | *1977/78* | *1978/79* | *1979/80* | *1980/81* | *1981/82* | *Percentage change 1981/82 over 1977/78* |
|---|---|---|---|---|---|---|
| **Current expenditure** | | | | | | |
| Hospital and Community Health Services | 4,389 | 4,461 | 4,520 | 4,564 | 4,644 | + 5·8 |
| Family Practitioners | 1,234 | 1,250 | 1,285 | 1,325 | 1,363 | +10·5 |
| Other Health Services | 118 | 120 | 123 | 124 | 125 | + 5·9 |
| Total Current Expenditure | 5,741 | 5,832 | 5,928 | 6,012 | 6,132 | + 6·8 |
| **Capital expenditure** | | | | | | |
| Hospital and Community Health Services | 359 | 389 | 388 | 399 | 399 | +11·1 |
| Other Health Services | 10 | 13 | 12 | 12 | 12 | +20·0 |
| Total Capital Expenditure | 370 | 402 | 401 | 412 | 411 | +11·1 |
| **Total Current and Capital Expenditure** | 6,111 | 6,234 | 6,328 | 6,424 | 6,543 | + 7·1 |

Notes:
1. The expenditure is shown net of various charges, such as those for prescriptions. Expenditure on central and miscellaneous services is also excluded.
2. Figures may not add up to totals because of rounding.

*Source:* Public expenditure to 1981/82 Vol II. Cmnd 7049 II. January 1978.

**Figure 3** *Index of the Growth of Selected Health Activities, United Kingdom 1967–1976*
*1967 = 100*




Notes: wte = whole-time equivalents

*Due to classification changes figures from 1971 onwards are not comparable with figures for earlier years

Community Health Councils and centrally-financed services such as central administration and miscellaneous items like grants, laboratory services, vaccines and research and development.

Table 3 shows Treasury projections of NHS expenditure in Great Britain, by sectors, as at January 1978. The figures are all at 1977 constant prices and show growth **by volume** rather than cost. They indicate that the overall spending on the health service will rise by 2 per cent in the present financial year but less for the two subsequent years until 1981/82 when expenditure is planned to increase to give a total of about 1·9 per cent growth over the 1980/81 figure.

Within the overall rise in the volume of resources available to the health services, planned capital allocations have been increased across the period covered by the projections. The level of investment outlined reveals that a substantial addition will be made to the net total of the capital programme. However, the projected allocation to this sector is still far lower than the investment level planned ten years ago. To an extent, this reflects the claim of the recent health policy to put 'people before buildings'. But there can be no doubt that in the long run, if medical care is to improve, more new buildings are necessary to replace many of the present ill sited or under-equipped old ones.

Current expenditure by volume on all services is projected to increase at an average of 1·7 per cent per year. This level of growth is considerably less than that enjoyed in past years. Within this, expenditure on hospital and community health services, now regulated by 'cash limits', will be limited (and is cut in relation to past projections) although even by 1981/82 these services will still be consuming well over three times the revenue resources available to the family practitioner services. Although there is no clear indication as to which of the services will be actually affected by the restraints DHSS guidelines indicate that community based services should be protected.

The cost of family practitioner services is funded centrally mainly because expenditure is influenced by consumer demand. The annual average growth in this sector is projected to rise faster than both hospital and community health services. It is forecast that, in the current financial year, the volume outlay on general medical and pharmaceutical services will rise by 2·4 per cent and 4·5 per cent respectively but that general dental and ophthalmic services will both drop by between 4 per cent and 5 per cent. With the exception of the latter, growth in all services is projected to increase proportionately less in 1978/79 with general dental services showing a continued negative growth. This indicates that any extension of these services will mainly come from financial charges paid by patients.


## Office of Health Economics

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