BRIEFING PAPER

4

HEALTH FINANCE

ASSESSING THE OPTIONS

KING'S FUND INSTITUTE

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LIST OF CONTENTS

Acknowledgements
Summary

	Page
Introduction	5
The Resources Context of the 1980s	6
How Much Public Expenditure?	9
Supplementary and Alternative Sources of Finance	12
Managing Budgets More Efficiently	17
New Ways of Rationing Services	21
Private Health Care Provision	22
Concluding Comment	25
References	26
Appendix: Members of the Working Group	28

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SUMMARY

In the current debate surrounding methods of health finance, there has been no shortage of proposals for reform. But there has been a serious shortage of careful analysis of these proposals. This is the main aim of this Briefing Paper. Through a systematic examination of policy choices, it seeks to inform and illuminate debate.

The principal findings of the Paper are set out below.

- The central short-term problem facing the NHS is in relation to the hospital and community health services. Despite more being spent on these services than ever before, and improvements in productivity, growth in demands resulting from increased numbers of elderly people, advances in medical technology and new service developments have made it increasingly difficult to maintain standards of service. Measuring the amount of additional finance which is required is notoriously difficult. Nonetheless, despite the considerable uncertainty surrounding these calculations, our best estimate is that by 1987/88 an extra £390 million would have been needed to re-establish the purchasing power expenditure level of 1981/82, bearing in mind the growth in demand that has taken place since then.

- Tight public expenditure constraints, coupled with a commitment by the government to review all available options, are focusing attention on supplementary and alternative sources of finance. These include: income generation from non-clinical activities; the sale of clinical support services to an expanding private sector; the possible introduction of new NHS charges; increased use of NHS pay beds; and the joint finance of projects through partnerships with the private sector. All of these strategies offer scope for raising additional sums of finance but careful consideration needs to be given to their advantages and disadvantages in the light of the underlying aims of the NHS.

- Arguments for more radical, insurance-based systems need careful scrutiny. The case for substituting private insurance for public finance is weak. By attracting more funds into health care, private insurance presently provides useful additions to publicly financed health expenditure. But experience from the UK and other countries suggests that it cannot on its own be expected to offer universal and comprehensive coverage. As such, its role is likely to remain as a supplement to mainstream public finance for certain groups of people and certain procedures. Social insurance is a more feasible substitute for general taxation. It could offer comprehensive coverage for the whole community. Moreover, as an earmarked tax, it could have many of the properties of an income tax, including universality and progressivity. It could also establish a closer link between tax payments and what is actually spent on health care than is possible in the case of general taxation. Traditionally the Treasury has been opposed to earmarked taxes because they reduce its flexibility over expenditure decisions. Whether health care should be treated as a special case is a matter for debate.

- No matter what the level or method of funding, there is a pressing need to ensure that maximum value for money is obtained from NHS budget allocations. Effective management is crucial. There is a need to build on current experiments involving doctors, nurses and other professional staff in the management of resources. These must extend to the evaluation of outcomes, including assessments of the effectiveness of clinical procedures.

- Incentives for improved performance are also important. Competition between health authorities — as envisaged within an internal market — could lead to increased efficiency. At the moment there is insufficient evidence to support the wholesale introduction of such a scheme. But there is a case for a limited experiment which would permit an assessment of its strengths and weaknesses.

- The supply of private health care has grown rapidly in the 1980s. Company financed insurance schemes are now a major part of this market. This trend can be expected to continue in the future as greater reliance is placed on the mixed economy of health. Partnership schemes between the NHS and the private sector can offer real benefits to both NHS and private patients. But care must be taken to ensure that they do not distort NHS objectives and priorities.

Many of these findings have resulted from investigations in areas where there is little or only partial empirical evidence. Moreover, the pace of change is rapid. As new and better information becomes available, some of these findings may be subject to revision. In no way do we consider them to be our last word on the subject. Rather we shall continue to monitor trends and options and comment on them as seems appropriate. In the meantime, we hope that our work, and that of others examining health finance options, will encourage the Government to be far more explicit about the principles which it believes should underpin health finance in the 1990s.

INTRODUCTION

The NHS is in a state of turmoil. Spiralling demands and tight funding have precipitated a more fundamental debate about methods of health care finance than has been seen at any previous stage in its history. Serious doubts are now being raised about the feasibility of continuing to provide a universal free-at-point-of-use, tax financed system.

It was an early appreciation of these circumstances that led to the formation of the King's Fund Institute Working Group on Health Finance in July 1987. The Group — comprising Institute staff, NHS managers, independent experts and private sector representatives — set out to investigate the precise nature of the funding problems facing the NHS and the policy choices facing the Service in the medium term future.

Over the last six months, the Institute — with the Group's help — has carried out extensive investigations and discussions. The results of these enquiries, and our analysis of the information obtained, are reported in the ensuing sections of this Briefing Paper. These deal with:

- The resources context within which the NHS has been operating in the 1980s;
- Choosing the appropriate level of public expenditure on health;
- Supplementary and alternative sources of finance for the NHS;
- Ways of obtaining more value for money from public spending;
- New approaches to rationing services;
- The changing role of private health care;

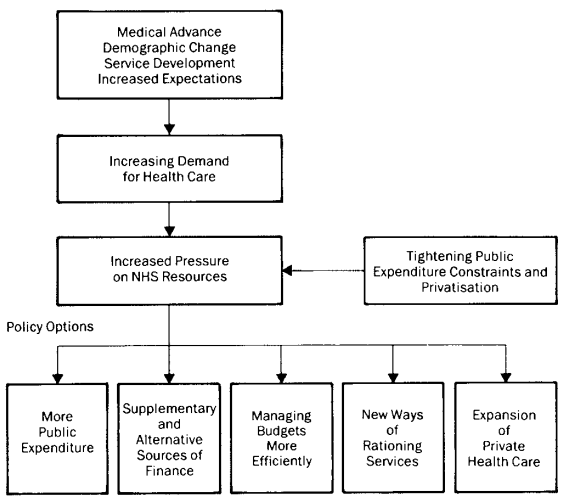
However, before we address these specific questions, it is important to emphasise three key features of the approach adopted in this paper.

First, the paper is concerned centrally with the NHS and the problems and choices it faces. In the tidal wave of debate about the future of health finance, there is a very real danger of understating the considerable achievements and potential of the NHS. We do not believe that it is sensible or desirable to neglect these, or to start a policy investigation from first principles on the assumption that the NHS does not exist. Rather, we have taken the health system as it exists today — one in which the NHS obviously dominates — and have sought to identify practical ways in which its performance may be improved.

Second, this paper does not seek to press a single point of view or particular policy direction. Our view is that the problems facing the NHS are too complex to be amenable to a single, global solution. It is far more likely that policy changes will be based on incremental change in a number of different areas. But it is our hope that *guided* incrementalism within a coherent strategy will prevail rather than the more familiar *disjointed* variety. With this in mind, the paper seeks to inform and illuminate the debate and to clarify a number of policy options. These options often incorporate political values as well as technical issues and it is not our intention to make political judgements. For the most part we have confined our role to one of making clear the advantages and disadvantages associated with different courses of action.

Third, the paper lays no claim to being exhaustive. Most of the financial problems facing the NHS impact most heavily on the hospital services. These account for approximately 70 per cent of total NHS expenditure and it is these services that we concentrate upon here. However, there are important developments in other sectors of the NHS — which will also have major implications for its financing needs and future shape — which are not dealt with in this paper. The recently completed review of community care and the White Paper on primary health care are two notable examples. Indeed, as far as primary health care is concerned, it has been argued that some of the problems of the hospital services derive directly from a conscious policy decision to redirect resources away from the acute sector to the family practitioner services. Other problems arise for unplanned reasons, e.g. when acute beds are occupied by elderly people because of the lack of appropriate community services. Clearly, these interdependencies should be borne in mind when considering the needs of the hospital sector.

FIGURE 1
HEALTH FINANCE: PROBLEMS AND POLICY OPTIONS



Note:
Based on a format suggested by Jones and Prowle (1987)

THE RESOURCES CONTEXT OF THE 1980s

A rate of increase in the demand for health care that is greater than the rate of growth in the supply of service is nothing new. Certainly the belief of the early architects of the NHS — that there was a finite stock of ill health that would gradually be eliminated as the Service was expanded — has long since been replaced by a view of continually growing demand facing limited supply. Indeed, as the 1979 Royal Commission on the National Health Service pointed out:

> *we had no difficulty in believing the proposition put to us by one medical witness that "we can easily spend the whole of the gross national product".*

But despite the persistence of this general state of excess demand, there do seem to be some special circumstances surrounding the experience of the 1980s. These relate to both the demand and supply of health care. On the demand side, two factors distinguish the period. First, there has been substantial growth in the size of the elderly population, especially in the numbers of very elderly people. Second, there have been rising expectations.

Increasing Numbers of Elderly People

Between 1981 and 1986 the number of people of 75 years of age and over grew by 400 thousand or 12 per cent. Over the five years up to 1991 the numbers in this age group are expected to increase by another 300 thousand, with 200 thousand of these in the 85 and over age group (see Table 1). Because the annual average hospital and community health service (HCHS) costs incurred by a person of 75 years of age and over are more than nine times those of a person of working age, the growth of this section of the population clearly constitutes a source of considerable extra demand. In recent years it has become a routine part of the public expenditure planning process for the DHSS to include an assessment of the increase in funding necessary to meet the extra demands on HCHS resulting from demographic change. In 1987, for the first time, tentative published estimates were extended to the family practitioner and personal social services (see Table 2).

TABLE 1 · INCREASING NUMBERS OF ELDERLY PEOPLE

	Millions		
	75-84	85+	Total 75+
1971	2.2	0.5	2.7
1976	2.3	0.5	2.8
1981	2.7	0.6	3.3
1986	3.0	0.7	3.7
1991*	3.1	0.9	4.0
1996*	3.1	1.1	4.2

**Projections*

Source: Social Trends (1987; 1988)

Apart from the inevitable uncertainty surrounding estimates of the extra costs incurred by an ageing population, it is important to note that these estimates are based on existing levels of service provision. At the moment health services for the elderly are rationed through waiting lists and other devices in the face of considerable excess demand. Over the years cumulative unmet demands have resulted in a substantial backlog of cases and unreasonably long waiting times. Moreover, much unmet demand does not become visible until service levels offer a realistic chance of treatment. Estimating the full costs of meeting this backlog is, of course, extremely difficult. But it does mean that estimates of the annual increases in expenditure necessitated by demographic change, given in Table 2, should be regarded as minimum estimates.

TABLE 2 · FUNDS NEEDED TO MEET DEMOGRAPHIC CHANGE
(Per cent increase per year)

	Hospital and Community Health Services	Family Practitioner Services	Personal Social Services
1979-80	1.2	0.4	n.a.
1980-81	1.1	0.4	n.a.
1981-82	0.4	0.1	n.a.
1982-83	0.4	0.0	n.a.
1983-84	0.5	0.1	1.0
1984-85	0.6	0.3	1.2
1985-86	1.3	0.6	1.2
1986-87	1.0	0.6	1.2
1987-88	1.0	0.4	1.2
1988-89	1.0	0.4	1.2
1989-90	1.0	0.4	1.1
1990-91	0.9	0.4	1.0
1991-92	0.7	0.4	1.0
1992-93	0.6	n.a.	n.a.
1993-94	0.3	n.a.	n.a.
1994-95	0.4	n.a.	n.a.

Sources:
(1) *House of Commons (1986),* Weekly Hansard, *No 1388 (23 June)*
(2) *House of Commons (1987),* Weekly Hansard, *No 1403 (20 January)*
(3) *House of Commons (1987),* Weekly Hansard, *No 1408 (23 February)*
(4) *House of Commons (1987),* Public Expenditure on the Social Services, *Social Services Committee, Session 1986-87.*

Rising Expectations

A second more speculative factor leading to excess demand is related to increasing expectations. It has been suggested that people's expectations of health care provision are increasing at an exponential rate and that this is producing a widening gap between expectations and NHS service levels (Thwaites, 1987). Certainly international studies suggest that in those countries where people are able to choose the amount that they spend on health care, the share of their income so spent increases as their income rises. This is consistent with the exponential expectations hypothesis. On the other hand, in considering

international evidence on health expenditure, it is important to distinguish between the *price* paid per unit of service and the *volume* of services received. Obviously, if increased expenditure is accounted for by higher prices, it does not correspond to higher levels of health care provision. And we do know that the NHS has been successful at containing input costs in comparison with systems based on private or social insurance. Physicians' earnings, for example, are only 2.4 times average earnings in the UK compared with multiples of 5 times in Germany and the USA (OECD, 1987). But it is questionable whether higher prices totally explain the larger proportion of GDP spent on health in most other OECD countries.

It is sometimes argued that, within the UK, a growing number of people are aware of the latest medical possibilities and the highest standards of care — through, for example, foreign travel, press and TV coverage, etc — and that they increasingly expect the latest technologies to be made available to them. Doctors, as the suppliers of health care, also play an important part in determining these expectations. Greater emphasis on screening is one possible result of this trend. Similarly, the recent growth of the private sector has been cited as evidence of rising expectations that are not being met by the NHS. Yet another argument is that more demanding standards are evidenced by the increased incidence of medical litigation.

Clearly the subject of expectations is a complex one. Our own judgement is that the case for an *acceleration* in the rate of growth of expectations is not proven. If there is a problem in connection with expectations, it centres more on the failure of supply to match steadily increasing demand. It is to this issue that we now turn.

Supply-side problems of the 1980s centre on three main issues: tightening public expenditure constraints; the privatisation programme; and the scope for greater efficiency in the use of NHS resources.

Public Expenditure Constraints

The macro economic environment within which the NHS funding position is determined has been subject to some abrupt changes since the mid 1970s when the prolonged postwar period of general economic growth came to an end. Substantial increases in oil prices in 1973/74 and then again in 1979/80 exerted severe contractionary pressure on the world economy. Inflation and escalating wage costs led the government to introduce a series of restrictive macro economic measures. A key component of this strategy was the desire to contain public expenditure. During the 1980s, this general policy stance tightened. The control of public expenditure has assumed even more central importance in the formulation of general economic policy. At the same time, the shift of emphasis from planning public expenditure in volume terms to planning in cash terms, and a system of rigidly enforced cash limits, offers far greater control over programme expenditure levels. Previously, if the actual rate of inflation exceeded the expected rate, so that cash expenditure tended to overshoot its target, cash shortfalls were made good in the following year. This is no longer the case. Thus since the mid 1970s — but especially during the 1980s — the NHS has operated within the context of extremely tight public expenditure constraints.

This tightening of public expenditure controls is amply demonstrated by falling rates of growth in spending on health care. In the decade prior to 1974 the annual rate of increase in spending on Health and Personal Social Services — after adjusting for general inflation — was around six per cent per year, whereas in the second half of the 1970s it grew at an average annual rate of less than three per cent (Judge, 1982). Hence it is clear that the tightening of constraints on funding predates the 1980s. But equally there has been no relaxation during the 1980s. However, as Table 3 shows, it has been current expenditure on the *hospital services* that has been particularly tightly constrained. Between 1980/81 and 1985/86 this grew at an average rate of less than one half per cent per year in real terms (ie cash expenditure adjusted by general price inflation), although in 1986/87 and 1987/88 real terms growth rates were considerably higher. Expenditure in purchasing power terms (ie cash expenditure adjusted by the NHS pay and price index) grew even more slowly and revived less in the last two years. Over the full seven-year period it grew at an average rate of just over one half per cent.

In addition to the constraint imposed by the national funding position, there are two other more local sources of funding difficulty that have affected a number of district health authorities in recent years. First, there are those difficulties associated with the redistribution of funds: as part of the Resource Allocation Working Party (RAWP) process of interregional redistribution; or as part of subregional allocations between districts; or as part of a redistribution from acute to community services. RAWP and other redistributive arrangements were planned originally as a levelling-up process. However, in a period when there has been only slow growth in HCHS purchasing power, redistribution has become a largely a zero-sum gain. Below target districts can only gain at the expense of cuts in the absolute funding levels of above target districts.

A second local problem has arisen because some districts — notably those in inner London — have suffered from the inability to recruit nursing and ancillary staff because of the uncompetitive level of NHS salaries in relation to local labour market conditions. The response to this difficulty has often been to appoint staff at higher levels on the incremental scale or to recruit agency staff at higher rates of pay. But given the existence of cash limits, neither of these strategies makes it possible to employ the full complement of staff at these higher rates of pay. Thus the widening of pay differentials between different parts of the country has posed an added problem for an organisation such as the NHS that is at present committed to national rates of pay.

For the short term future, the expenditure plans announced at the time of the 1988 Public Expenditure White Paper indicate a planned increase of £709m in current spending on HCHS in 1988/89. However, after adjusting for the additional £75 million for 1987/88 already announced on 16 December 1987, the increase becomes £634 million. General inflation at 4.5 per cent is expected to account for £515m of this. Of the remaining £119m, approximately £70m is due to be top sliced for the AIDS programme, action on waiting lists and the special problems of London districts. Clearly if NHS pay and prices rise more rapidly than 4.5 per cent, little — if any — growth in districts' purchasing power allocations can be expected.

TABLE 3 · HOSPITAL AND COMMUNITY HEALTH SERVICES — CURRENT EXPENDITURE
£ million and per cent increase per year, ENGLAND

(1) Year	(2) Cash £m	(3) Cash %	(4) GDP deflator %	(5) HCHS inflation %	(6) Real Resources %	(7) HCHS Purchasing Power %
1980-81	6995*	—	—			
1981-82	7717*	10.3	9.9	8.2	0.4	1.9
1982-83	8284	7.3	7.2	6.5	0.1	0.8
1983-84	8709	5.1	4.5	5.1	0.6	0
1984-85	9205	5.7	4.3	5.8	1.3	−0.1
1985-86	9699	5.4	6.0	5.2	−0.6	0.2
1986-87	10421	7.4	3.0	6.9	4.3	0.5
1987-88	11427+	9.7	4.2	8.25*	5.3	1.3

* King's Fund Institute Estimates
\+ Public Expenditure White Paper Allocation plus £75 million announced 16.12.87 less an estimated £30 million transfer to capital.

Sources: *H M Treasury (1988)* The Government's Expenditure Plans, 1988-89 to 1990-91, *Vol II, Cm 288, January, HMSO, London.*
House of Commons (1987), Public Expenditure on Social Services, *Social Services Committee, HMSO, London.*

Privatisation

The second supply-side factor which distinguishes the 1980s from earlier periods is the widespread privatisation programme. Since 1979 the government has embarked on a vigorous programme aimed at replacing systems of public ownership, provision and finance with private ones. Reasons cited in support of this strategy have emphasised the superior efficiency of the private sector; the greater freedom and autonomy it offers managers; the benefits of more widespread share ownership and, implicitly, the greater discipline of the market facing trades unions in the private sector.

To date, this programme has only had a major effect at the periphery of the NHS, i.e. through sub-contracting ancillary services. However, there is no shortage of more radical privatisation proposals from various think tanks and pressure groups such as the Institute of Economic Affairs, the Centre for Policy Studies and the Adam Smith Institute. Moreover, there are clear indications that Ministers are receptive to these ideas. Taken together these developments suggest that a system such as the NHS — which is still dominated by public finance and provision — is now subject to far greater scrutiny. At the very least it will need to indicate an ability to respond to the challenges that this new context poses for it.

Efficiency Savings

The third supply-side factor which has been particularly evident during the 1980s is the increased need for the HCHS to meet service development aims through savings generated from existing budgets. Since 1984/85 every district has been expected to include a cost improvement programme within its short-term plan. At the aggregate level, the additional sums that are expected to be generated from cash releasing cost improvement programmes have been quantified and added to basic cash allocations as part of the public expenditure planning process. In a period of only modest growth in purchasing power expenditure these additions have been a crucial source of finance for service development. In 1987/88 new cash releasing cost improvement programmes were expected to produce £152m or 1.3 per cent of the HCHS current expenditure budget. New *plus* recurrent savings from the previous three years amounted to nearly £600m.

However, these programmes have been the subject of some criticism. There are doubts about inconsistencies and inaccuracies in recording practices. Moreover, two reports from the National Audit Office (1986; 1987a) — although supportive of the aims of the cost improvement programme — highlighted the danger of service reductions dressed up as cost improvements and the onset of diminishing returns. The latter consideration is of special relevance for the future as many contracts for ancillary services put out to tender during the first round of subcontracting are now coming up for renegotiation. It is widely expected that the less competitive conditions which now prevail — sometimes as a consequence of the tendering process itself which has eliminated the in house tenderer — will result in new contracts being agreed at prices considerably above those reached in the first round of tendering. Given the reliance placed upon the savings resulting from these programmes over the last three years, any marked reduction in this source of "extra" funding is likely to put serious strains on the system. Avoidance of these problems will depend crucially on the success of extending efficiency savings to clinical areas in ways we discuss later in this Paper.

HOW MUCH PUBLIC EXPENDITURE?

When it was established in 1948, the NHS set out to provide a comprehensive range of health services, free at the point of use to all in need. Today this remains a fundamental feature of most people's conception of the NHS. At a time when public support for many of the original welfare state institutions appears to be wavering, successive opinion polls confirm the popularity of the NHS (Jowell *et al*, 1987). It continues to command wide and deeply rooted support. To the extent that there is dissatisfaction with the Service, it does not seem to centre on the *principle* of public finance and provision but rather its inability to live up to its ideals in terms of actual performance. In many people's eyes there is a clear reason for this shortfall: underfunding.

If there is concern about funding levels — and the principle of public finance still appears to be supported by the majority of people — any consideration of policy options for the future should start with an assessment of the adequacy of current levels of public funding. Ultimately, of course, this is a political issue. The level of funding is quite properly decided upon by government which is accountable to Parliament, which, in turn, is accountable to the electorate. Within the arena of political debate, Ministers have recently challenged the assumption that health care should necessarily be financed publicly. Attention has been focused on low levels of private expenditure in the UK as the reason for its poor performance in international terms.

It is not our intention to enter the political debate. Rather our aim has been to assemble evidence which we consider of relevance to those charged with the responsibility for answering the vexed question: "how much should we spend on health care?". Four main approaches to this question may be identified:

- The economist's view;
- The needs approach;
- The GDP approach;
- The international perspective.

Each of these is reviewed briefly below.

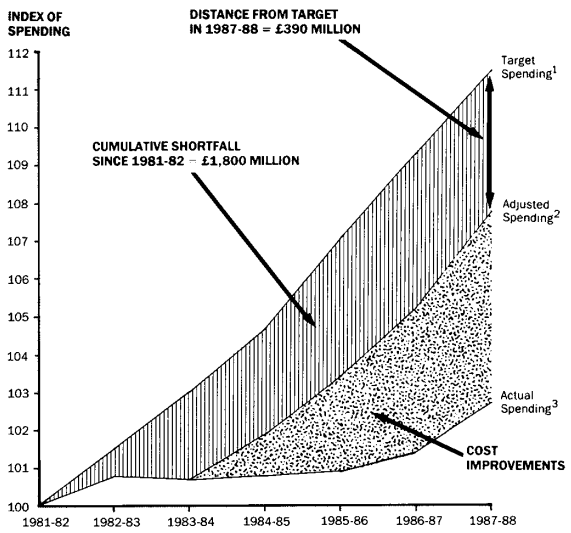
The Economist's View

The economist's view is basically that the question is at present unanswerable. Maynard (1987a) suggests that until we know the costs and (more importantly) the benefits arising from different categories of expenditure, it is impossible to say whether present levels of aggregate funding are too low, too high, or even at the optimal level. In the final analysis the logic of this argument is irrefutable. To enable rational resource allocation decisions to be made, far more information is needed about the relationship between health care inputs and health status outputs/outcomes. But this is a long term research task. Short run decisions about spending have to be made despite the considerable uncertainty surrounding the 'ideal' allocation of expenditure and, for this purpose, policy makers need as much relevant information as possible.

The Needs Approach

One way of approaching this task is to use the 'needs' approach. This method utilises the best available estimates of the growth in health care *needs* in order to determine the extra funds that the NHS will require to meet them each year. Growth of need derives from three main sources: demographic change, medical advance and nationally determined service priorities. There are considerable methodological problems associated with the way in which these estimates are produced (Harrison and Gretton, 1986), but the Department has itself accepted them as a quantified statement of what would be required to meet the additional demands being placed on the health service. In this sense they at least provide a benchmark for assessing public expenditure levels. And — although there is some dispute about the precise sums needed in earlier years (Robinson and Judge, 1987) — it is in these terms that current expenditure on the hospital and community health services (HCHS) has, since 1980/81, failed to meet the targets set for it. By 1987/88 the cumulative shortfall of HCHS purchasing power — even when supplemented by the recurrent savings from cash releasing cost improvement programmes — was approximately £1.8 billion (1987/88 prices). Within the single year, 1987/88, expenditure was over 3 per cent below its target level, bearing in mind the growth in demand since 1981/82: this represents just under £400 million (see Figure 2).

FIGURE 2 · HOSPITAL AND COMMUNITY HEALTH SERVICES. TRENDS IN SPENDING, TARGETS AND SHORTFALLS



NOTES

1. Increase over base spending necessary for demography, technology and service improvements: 1.3 to 2.3 per cent per year.
2. Actual spending plus cash releasing cost improvements at 1987-88 purchasing power prices.
3. Actual spending at 1987-88 purchasing power prices.

TABLE 4 · HEALTH EXPENDITURE PER PERSON IN 22 OECD COUNTRIES IN RELATION TO GDP AND PUBLIC EXPENDITURE REGRESSION EQUATIONS

Dependent Variables†	Independent Variables			Summary Statistics	
	Constant	GDP†	Public expenditure as a share of total expenditure	R^2	F-statistic
1. Total Expenditure on health care	–339.1	0.1	—	0.81	92.7**
t-statistic	(–2.99)**	(9.63)**	—		
2. Total Expenditure on health care	294.5	0.1	–7.25	0.86	67.56**
t-statistic	(1.11)	(9.39)**	(–2.89)**		
3. Public Expenditure on health care	–90.34	0.07	—	0.68	46.36**
t-statistic	(–0.82)	(6.81)**	—		
4. Private Expenditure on health care	–308.76	0.05	—	0.34	11.99**
t-statistic	(–2.01)*	(3.46)**	—		

** significant at 99.5% level
* significant at 95% level
† Per Capital Expenditure, $US at GDP purchasing power parity

Data Source: Schieber and Poullier (1987), 'Recent Trends in International Health Care Spending', Health Affairs, *6:3, 105-112.*

The GDP Approach

A third approach to the question of funding levels was outlined in a recent report from the Institute of Health Services Management (O'Higgins, 1987). In an attempt to depoliticise the issue, the report suggests that a minimum consensus should be sought that would provide a basis for planning the growth of health expenditure for at least the duration of the present Parliament. To achieve this aim, the report proposes moving away from the demand or needs approach to one in which the growth in health expenditure is based upon what the country can afford. Thus, the report proposes that health care spending should, as a minimum, rise in line with national income. In addition, it argues that this rate of growth will need to be augmented with separate provision for such factors as demographic change, major new service needs (eg AIDS) and any possible pay restructuring resulting from, for example, the need to attract more nurses into the NHS.

While it would be naive to suggest that the proposed formula could take the question of funding entirely outside of the political arena, it is nonetheless possible that the broad thrust of the approach does offer some potential for avoiding haphazard variations in levels of NHS funding. However, if such an approach is to receive serious attention, it requires far clearer specification. In some recent years it is quite possible that linking the growth in health spending to the rate of growth of GDP would have resulted in less health expenditure than was actually achieved. More thought needs to be given to the relative sizes of the automatic and discretionary elements which govern the necessary increases in expenditure, and the relationship between them.

For the future it has to be recognised that the NHS is a labour intensive service industry with more limited scope for productivity increases than industry generally. This means that if NHS service levels are to be maintained — and increases in health service wages and salaries are to be allowed to keep pace with those in the economy generally — the relative cost of the NHS will increase. This means that it will inevitably account for a rising share of national expenditure. Increases in productivity can ameliorate this trend but they are unlikely to be able to eliminate it completely.

International Comparisons

A final approach to funding levels involves drawing upon international evidence to see how expenditure on health care in the UK compares with other countries. Of course, there are many problems associated with international comparisons. In particular, collecting comparable data and expressing them in common monetary units involves many pitfalls. Moreover, the existence of differences in levels of expenditure can never establish that any one country should adopt expenditure practices found elsewhere. Nonetheless if one country is a noticeable "outlier" in expenditure terms this fact does merit investigation — in much the same way that, in a rather different context, performance indicators are meant to point out aspects of districts' performance that may warrant further scrutiny.

The latest data from the OECD (Schieber and Poullier, 1987) show that health care expenditure per head in the UK, at US$627, is substantially below countries such as Germany ($983), France ($1072) and, especially, the United States ($1776). However, it is well known that expenditure per head varies with the level of GDP. Consequently figure 3 shows the regression line obtained when expenditure per head is related to GDP per head in the 22 OECD countries. Significantly this shows that per capita expenditure in the UK is nearly 30 per cent below the level that would be expected in terms of the UK's GDP per head.

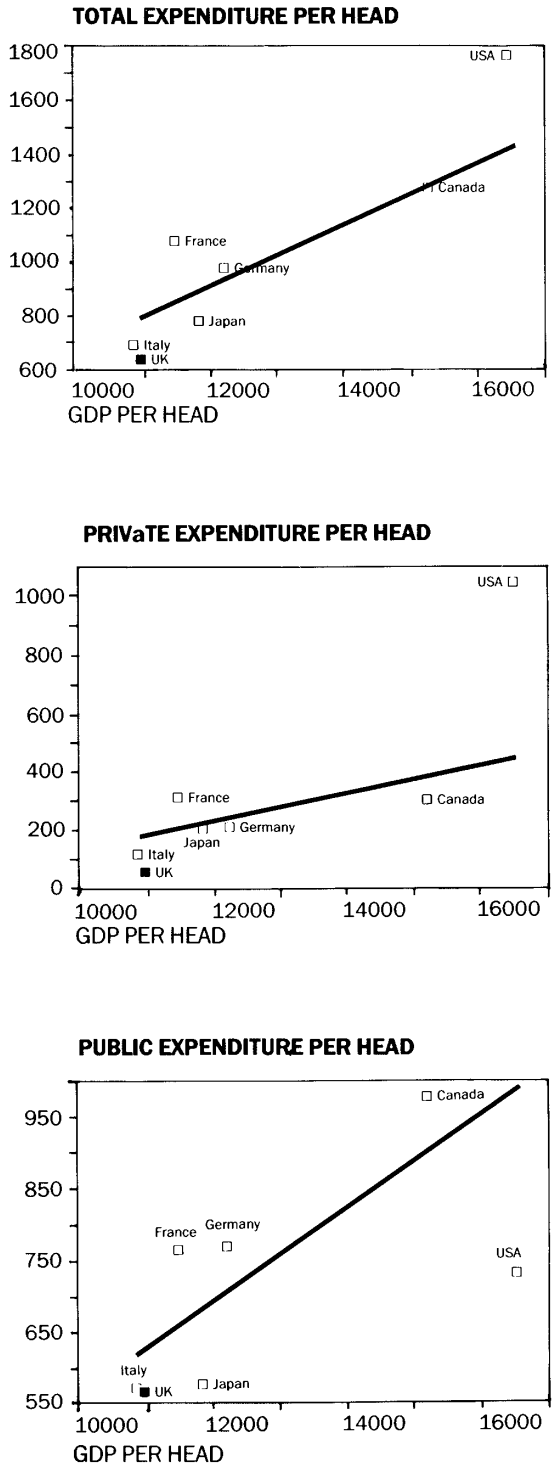
In seeking to understand the reasons for variations in expenditure levels, it is interesting to note the influence of public finance. Our equations suggest that, on the basis of cross country evidence, as the share of public spending in total expenditure increases, it exerts a negative effect on total expenditure. In average terms, a one per cent increase in the ratio of public to total health spending results in an almost equivalent percentage fall in total health expenditure per head. Other data suggest that the extent to which *national* governments control expenditure — as opposed to *local* governments — may also be a factor in depressing expenditure levels. Of course, it would be foolish to claim a causal link on the basis of such aggregate data. Many other factors are obviously at work. But as they stand the data do appear to be consistent with the claims currently being made by Ministers which attribute low total expenditure on health in the UK to overreliance on public expenditure and inadequate private expenditure. They are also consistent with a theory of political economy which states that individuals as consumers will tend to express preferences for higher levels of spending than they will vote for as taxpayers.

But anyone seeking to use these findings solely as support for more private expenditure should be wary. Our figures not only show that the UK spends less than expected in terms of private expenditure, but also that public expenditure is approximately 10 per cent below its expected level. Put another way: even if private funding of health care increases, international evidence still suggests that public expenditure is up to £2 billion below its expected level.

Conclusion

Most of the evidence we have been able to gather points to a shortfall in public spending on the hospital services. But establishing precisely the size of this shortfall is notoriously difficult. Probably the most conservative estimate is that — given the growth in resources necessary to meet the needs of increased numbers of elderly people, advances in medical technology and new service aims — expenditure would have needed to be just under £400 million higher in 1987/88 to re-establish the purchasing power spending levels of 1981/82. This judgement can be made independently of initiatives concerned with private expenditure which we discuss subsequently (see King's Fund Institute evidence to the House of Commons, Social Services Committee (House of Commons, 1988)).

FIGURE 3 · HEALTH EXPENDITURES — SELECTED OECD COUNTRIES 1985
Expenditure per head at $US purchasing power parity



Note: Based upon equations 1, 3 and 4 (see table 4)

SUPPLEMENTARY AND ALTERNATIVE SOURCES OF FINANCE

Ministers have made it clear that in future they expect to see an expansion of alternative sources of health finance as a supplement to general taxation. In the current debate surrounding the subject many suggestions have been put forward. This section of our paper describes some of these proposals and presents an assessment of their merits and demerits. It covers:

- income generation from non-clinical activities;
- income from the sale of clinical services;
- patient charges;
- private insurance schemes;
- social insurance schemes;
- health voucher schemes.

Income generation from non-clinical activities

The introduction of general management and the subsequent emphasis on cost improvements has already led to a more 'business minded' approach in many districts. One consequence of this entrepreneurial outlook has been the introduction of numerous income generation activities at the local level.

Many hospitals have developed commercial activities mainly in their concourse and waiting areas. These include: cafeteria services; newspaper and book shops; general food stores; florists; hairdressers; chemists; photography concessions in maternity hospitals; taxiphone lines; leasing advertising space; and installing video entertainment systems. In some districts more ambitious schemes are under consideration such as extending services outside the NHS (eg bidding for school catering contracts). To date the legal position concerning these activities has been an extremely grey area with some managers considering them *ultra vires*. However, the *Health and Medicines Bill* currently passing through Parliament is expected to clarify the position and open up possibilities for far greater activity in this area. Similarly, the establishment of a unit within the DHSS with special responsibility for income generation is aimed at boosting activity.

Schemes that brighten up public areas and provide convenient services for patients, visitors and staff seem to command widespread support. Moreover, there does not seem to be much objection to them being privatised if they operate more efficiently that way. The main reservations surrounding these schemes centre on two questions. Are they worthwhile given the levels of income they attract? And do they detract from management's main task of improving patient care by running mainstream health services?

On the first question it does seem to be the case that the sums which can be raised are rather small. A report by the Scottish Health Service Management Efficiency Group (1987) suggests that there is scope for raising just under £2 million per year in Scotland: this compares with a total HCHS revenue budget of £1,300 million. No published estimates are available for England, but an unpublished Rayner scrutiny commissioned by the DHSS indicated that there was rather more potential for income generation. It suggested that up to £135 million per year could be raised in the long term. But even this represents only just over one per cent of the current HCHS revenue budget. On the other hand, small savings from a variety of sources should not be dismissed too lightly in a period of very tight funding, especially if they also increase the attractiveness of the service to its staff and users. Furthermore, if the *Health and Medicines Bill* relaxes the present restrictions on income generation, this could lead to far larger sums being raised.

Ultimately, though, decisions about whether or not a particular district chooses to develop these activities should depend on a full assessment of not only the revenue gains — and benefits to patients/consumers — but also the costs in terms of management and other time. Some districts are seeking to reduce the demands on existing management through the appointment of income generation or marketing managers, often on performance related pay. However, although this should relieve managers from day to day responsibilities, they will still be required to be involved in strategic matters.

Income from the sale of clinical services

Income from the sale of clinical services offers the potential for raising far larger sums of money but it also raises far more complex issues of principle. The longest established source of income is, of course, through charges for pay beds. During the 1970s pay bed numbers were cut back dramatically: between 1975 and 1979 they fell by over 40 per cent. Since then the numbers have gradually risen again, although there were still only just under 3,000 beds in 1985 (in England) compared with over 4,000 beds in 1975. However, there are currently signs of increasing activity in this area. Since 1987 health authorities have been free to determine their own levels of charges subject to the recovery of costs. As a result, many districts are looking to this market as a source of extra revenue. At the moment though, there is some disagreement within the service about whether the NHS can compete successfully with the private sector. Some feel that the quality of pay bed accommodation and hotel services compares unfavourably with that in private hospitals and so it would be difficult to reverse the trend towards private hospital growth. (Between 1979 and 1985 the number of private hospital beds grew by 50 per cent compared with an increase of under 25 per cent in the number of pay beds.) Others point to the excellence of NHS hospitals and claim that if the NHS was free to compete on equal terms it would be highly competitive with the private sector.

Despite this uncertainty, a number of districts have plans for the expansion of their private facilities. Emphasis is often placed upon competition with private hospitals in terms of price rather than quality. In one region the districts have formed a cartel and are offering services up to 20 per cent below the rates charged by private hospitals. They are also negotiating with employers who offer private insurance as part of their conditions of service in order to try to capture this fast growing section of the market. In another district,

a private firm has been employed to market the services of a new private wing in the district general hospital.

In contrast to competition with private health care providers, NHS hospitals can also generate income through collaboration or partnerships with the private sector. The sale of support services to private hospitals — such as pharmaceuticals, pathology and x-ray services, surgical aids, etc — is an established source of income in many districts. More recently there have been a number of examples of the joint planning and financing of facilities.

In one district a new day surgery unit is planned. By entering into a partnership with a private company an enlarged scheme with additional facilities will be financed. In addition, the district has agreed a formula for revenue payments by the private company — for an initial fixed term of five years — in return for part use of the facilities by its patients. These payments will enable the unit to operate for eleven sessions per week, with the private company using two of the sessions, compared with only five sessions per week in total without the private sector involvement. Hence the district gains a contribution towards capital expenditure and three extra sessions per week.

Elsewhere another authority is investigating the possibility of a private insurance company financing a private wing in each of its two district general hospitals. These will be managed by the private company with the attached NHS hospital providing support services. Once again it was felt that the district could compete successfully with a local BUPA hospital in terms of price.

Yet another district is examining the possibility of a joint project with a private company in order to provide finance for its capital development programme. The scheme would involve the sale of land adjacent to its proposed DGH to the private company. The company would use the land to build its own private hospital and would be able to buy support services from the nearby DGH. In return for this favourable site, the district will seek a substantial capital sum as a contribution towards its planned DGH. This deal is similar to many already undertaken by Local Authorities in their dealings with private property developers. In this context, the private sector contribution to public infrastructure costs is referred to as "planning gain". Such arrangements have not to date been widely used by the NHS. However, they may well be an aspect of property management that merits closer attention as part of the programme of NHS land sales that is taking place on such a wide basis at the moment.

A slightly different source of income from the sale of clinical services occurs when districts sell specific services to the private sector, often using underutilised NHS capacity. The provision of breast screening, infertility clinics, pregnancy testing and physiotherapy services are examples of this type of arrangement. They are usually organised so that items of capital equipment are used more intensively, ie for more hours per day than they would be if confined to NHS work. Sometimes an expensive item of equipment — such as a nuclear magnetic resonance scanner or a lithotripter — is financed jointly with the private sector organisation and used on a shared basis. Also, of course, the NHS has a long history of financing items of capital equipment through charitable appeals and donations.

Because it is such a major source of confused thinking it is worth taking a little time to clarify the concept of "spare capacity" as it arises in this context. It is sometimes claimed that it is impossible to talk about spare capacity when there is already considerable excess NHS demand for many of the services provided through these arrangements. However, this is to misunderstand the sense in which the term is being used. The capacity is spare in the sense that there are no public sector funds available to finance its operation at the times when it is used for private arrangements. This does not mean that there are not NHS patients who could also benefit from the facility if the funds were made available, but that public expenditure and manpower constraints prevent them from doing so. In this situation the private patient is not displacing the NHS patient. On the other hand, when capacity is spare in the sense used above, but can only be used in conjunction with other capacity which is being used fully, there can be a conflict of interests between NHS and private patients.

Finally, on the subject of income generation, it is noticeable how the current climate of expenditure constraints, and uncertain legal controls on the ways in which money can be raised, has given rise to a number of schemes that seek to use and/or circumvent existing restrictions. These range from collaborative deals with housing associations — which seek to tap non-NHS funds to help finance care in the community programmes — to plans for setting up independent trading companies which would sell clinical services and route the profits back to the NHS through endowment funds. To the extent that these manoeuvres divert time and resources in order to circumvent existing legal restrictions, they are wasteful and run the danger of distorting patterns of service provision. The greater freedom to generate income expected to be offered through the *Health and Medicines Bill* should obviate the need for this diversionary activity.

Given the *ad hoc* way in which much of this clinical income generating activity has evolved, there is a clear need for a systematic assessment of its consequences for the NHS. A starting point is to assess such schemes in terms of their *efficiency* and *equity*.

Efficiency is essentially a management responsibility. At its most basic level it involves an evaluation of the revenue to be raised and the cost incurred through proposed income generation activities. Revenue assessments should consider the size and nature of market demand both now and in the future. Cost analysis is more problematic. Cost information within the NHS is still in a highly underdeveloped state. Attempts to improve it, following the recommendations of the Körner Steering Group, are progressing slowly and at an uneven pace. Yet accurate costings of activity — and of financial targets in terms of which performance can be assessed — are essential prerequisites for the efficient operation of income generating activity (see Grant Thornton, 1986). It may well be, though, that the development of income generation strategies provides its own impetus for collection of the relevant data. This contrasts with much current NHS data collection where the use to be made of the data is unclear to those responsible for their collection — with predictable consequences for the quality and speed of production of data bases.

Equity considerations raise far more fundamental problems. For some people the introduction of overt

commercial activities into the NHS is an anathema. For many years, health care in Britain — as embodied in the NHS — has been insulated from market processes. Income and ability to pay have not been considered appropriate for rationing health care. Equality of access has been a paramount principle. Hence the system has been largely free at the point of use and rationed through centrally determined budgets, clinical judgement and waiting lists. Selling clinical services clearly violates this principle. It enables those with ability and willingness to pay to obtain, at a minimum, quicker treatment for many non-urgent procedures. To those who have a non-negotiable attachment to the principle of equality of access, income generation through clinical activity is always likely to be unacceptable.

Other people, however, view the current choices facing the NHS more in terms of a trade-off. The provision of a service on a fee for service basis should provide revenue in excess of its cost. This extra revenue should be available to cross-subsidise, and therefore expand, NHS services. If this strategy is adopted, an improvement in the minimum standard is being achieved at the cost of some increase in inequality. If the choices facing the NHS are viewed in this way, it is crucial to know how much net income is made available to NHS patients and the nature and extent of increased inequality incurred through income generation in specific instances. Of course even accurate knowledge of these facts cannot resolve the question. For a given level of extra NHS income, some people may be prepared to countenance only a strictly limited relaxation of equality of access at the margin. Others may be willing to accept a far greater incursion of inequality for the same sum of money. The point on the trade-off anyone chooses will ultimately depend on value positions. However, while the careful collection of empirical data cannot resolve the problem, it can at least inform choices and take them beyond appeal to mere slogans.

Already there are many examples of the need for more precise information in this area. For example, one criticism levelled at the sale of clinical services is that it distorts planning priorities. It is claimed that parts of the service which are high profile and offer income generating possibilities will be expanded to the detriment of more mundane, but possibly more essential, services. It is also claimed that support staff are similarly diverted to these activities. A further argument is that the location of some services, such as breast screening or kidney dialysis units, has been affected by the need to respond to the demands of paying patients or cash donors. And on a wider scale it is pointed out that those districts located in wealthy areas would obviously benefit from the expansion of this activity far more than those in less prosperous areas. This would further increase the inequality in service provision between different parts of the country. While all of these issues represent legitimate concerns, at the moment evidence on them is highly impressionistic and/or polemical. Rational policy decisions would be assisted greatly by a cool and systematic collection of the relevant evidence.

A similar conclusion applies to another criticism levelled at income generation. Some people have questioned whether it actually constitutes a *net* addition to income. According to this view, success in income generation will simply result in the government reducing core expenditure by an off setting amount. Indeed, it is claimed that those who vigorously pursue income generation schemes are simply playing into the hands of a government that wishes to substitute private finance for public finance. Methodologically, it will always be difficult to establish whether or not this claim is correct, for to do so would require knowledge of what public expenditure levels *would* have been in the absence of successful income generation. At the moment, the best that can be done is to try to identify previous cases that might shed some light on the question. As we have seen there is now a growing catalogue of income generation schemes from which relevant information could be gleaned. But, to date, this evidence has not — to our knowledge — been exploited. Thus the substitution hypothesis remains unproven.

Patient charges

In this section our aim is not to argue for or against charges but to identify some of the relevant considerations surrounding this policy option, including the sums of revenue that would be raised under different assumptions.

In 1986/87 charges for NHS services yielded nearly £480 million or 3 per cent of total expenditure. The main sources of this income were pay beds, drug prescriptions and dental charges. At present, income from pay beds yields approximately £60 million per year. The expectation that these will be promoted more vigorously has been discussed already. Additional income could be expected from increased charges, more beds and higher bed occupancy rates. There is, however, insufficient information to put a precise figure on this sum at the moment.

The potential for increased income from drug prescriptions centres on two possibilities: higher prescription charges and/or fewer exemptions. Prescription charges have already risen steeply from 20p per item in 1979 to their present level of £2.40 per item. However, with approximately 80 per cent of people exempt from charges, and demand from non-exempt groups being largely unresponsive to price increases, there is clearly scope for raising additional revenue without having a major impact on use. Our estimates suggest that each 10p increase in the cost per item would generate approximately £7 million. Changing the conditions of exemption could potentially raise far larger sums but is likely to be considerably more controversial. In this connection, one proposal that has been floated would involve the abolition of the general old age exemption. It has been estimated that this could result in 6.5 million people of retirement age becoming eligible for charging. This group currently accounts for an estimated 110 million prescriptions per year. Assuming a 30 per cent fall in demand following the introduction of charges, the total revenue effect of charges and reduced costs resulting from fewer prescriptions has been estimated at approximately £330 million (Birch, 1988).

The White Paper on Primary Health Care (HMSO, 1987) has already proposed the introduction of charges for dental checkups and a full proportional system of charging for subsequent work. These are due to be implemented in 1988. By 1990/91 they are expected to generate about £85 million per year.

All of the above examples represent increases or modifications to existing patient charges. More radically, there have been some calls for the introduction of 'hotel' charges to contribute towards

the non-clinical costs of hospital in-patient stays.

The 1979 Royal Commission on the National Health Service undertook some illustrative calculations for 1975/76 which suggested that a £20 per week hotel charge, with 60 per cent exemptions and a resultant 10 per cent fall in the length of stay, would yield £143 million or 3.5 per cent of total service cost in Great Britain. This did not include additional administrative costs. In fact, the Commission recommended against any further charges and argued for the gradual phasing out of existing ones. However, their interest in the subject was restricted to the effect that charges would have on the way in which the NHS operates — in which light they saw them as an unnecessary rationing device — rather than as a source of additional finance.

If the Royal Commission's assumptions, ie 60 per cent exemptions and a 10 per cent reduction in the length of stay (without any compensating increase in activity resulting from this reduction), are applied to 1985 in-patient numbers in England, a rough, but more up to date, indication of the potential revenue yield from hotel charges can be obtained. This suggests that a nominal charge of £10 per day would yield up to £150 million. However it may be necessary to assume a higher rate of exemptions than applied in the mid 1970s. Moreover, administrative costs would have to be set against this revenue. They could account for up to half of the revenue gained, although — because these costs would not vary with the level of the charge — the precise proportion would depend on the size of the charge.

Private Insurance Schemes

Ministers are currently pointing to low levels of private spending on health as an explanation of low levels of total health expenditure in the UK compared with most OECD countries. And certainly at $60 per head per annum private expenditure is considerably below the OECD average level of over $200 (US dollars at purchasing power parity in 1985 (Schieber and Poullier, 1987)).

Although approximately 30 per cent of private in-patients pay for care directly, any major increase in private spending will probably depend on the growth of private health insurance. The ways in which the NHS would be able to compete for some of these funds — through, for example, pay beds — have been discussed already. But the more general consequences of the expansion of private insurance, and its implications for the NHS, are closely linked to the growth of private supply. For this reason, discussion of these issues is postponed until the final section of this paper which deals with private health care.

Social Insurance Schemes

The lack of comprehensiveness of private health insurance schemes is well known. Their failure to cover the elderly, high risk groups and the chronically sick have, in most countries, led to the growth of social insurance schemes. These usually involve risk pooling across the entire population and contributions on an ability-to-pay basis. In this sense they are equivalent to an earmarked or hypothecated tax.

Advocates favouring the introduction of such a scheme in the UK point out that it would establish a closer link between individuals' payments and what is spent on health care. This could make it easier to raise finance to fund the higher service levels which current opinion polls indicate many people want. On the other hand, it would also make people more directly aware of the costs of the health system, and so it might act to reduce demands for expenditure below the levels currently indicated by 'costless' opinion polls.

The argument for establishing a closer link between payments and levels of health expenditure is a sound one. It offers more potential for bringing service levels closer into line with what people collectively want and are willing to pay for. But the case should not be overstated. It is true that earmarked taxes establish a closer link between payments and benefits than is possible through funding from general taxation. However, they are still a long way from incorporating the "he who benefits pays" principle which is the main basis for believing that people would be willing to finance more generous levels of health expenditure by this means.

Another argument sometimes cited in support of social insurance is that revenues from this source would be more buoyant than general tax revenues. However, this is doubtful. With both systems, revenues grow with increases in taxable income; although — as an earmarked tax — the revenues from social insurance would be guaranteed for health spending and would not have to vie with other claims on public spending.

Yet another issue surrounding proposals for social insurance concerns the scope for opting or contracting out. Should those people who choose private insurance receive full, or part, exemption from social insurance payments? The main difficulty with opting out is that it would almost certainly be affluent and/or low risk groups who make few demands on health services that would opt out as they would be able to purchase private insurance more cheaply and/or easily. However, private insurance rarely offers comprehensive coverage and so some members of this group would be likely to seek the services of the NHS when not covered by private arrangements. But, more importantly, the opting out of low risk/high contribution groups would mean that high risk groups would face impossibly high premiums if they were expected to cover costs. To illustrate, the current average HCHS cost incurred by a person in the 16-64 years age group is approximately £100 per year. In contrast the average cost per person of someone over the age of 75 years is nearly £1,000. Moreover, these differences are only the beginning; there are many other determinants of relative utilisation other than age. Clearly present NHS financing arrangements involve complex cross-subsidy arrangements. To do likewise, a social insurance scheme would need a similarly large tax base incorporating higher income and low risk groups. For this reason, opting out would only be possible on the basis of nominal exemptions.

Finally, it has to be recognised that earmarked taxes have not traditionally been favoured by the Treasury because they reduce the government's flexibility over spending decisions. Whether the current debate over the state of health funding has been sufficient to establish the NHS as a special case remains to be seen.

Health Voucher Schemes

Health voucher schemes are sometimes seen as a means of attracting additional finance into health care. In fact they are more a method of deploying given

public spending allocations in a way that gives greater power to consumers. In essence such a scheme would involve allocating a voucher of a fixed nominal value to every individual with which they could buy health services of their choosing. In this way, it is argued, consumer choice would be enhanced; at least minimum standards of treatment would be guaranteed to all; and competition for business between suppliers would act as a spur to greater efficiency. On the supply side, standards of care would be regulated through managed health care systems — such as US style health maintenance organisations — in which peer group audit and utilisation reviews are important cost-containing methods (Goldsmith and Willetts, 1988). Additional finance would be forthcoming to the extent that people wished to top up their voucher with private expenditure.

But all of these expectations are highly theoretical. An NHS voucher scheme has been introduced for glasses but this is a relatively straightforward market. Elsewhere vouchers have been widely discussed in connection with education but limited demonstration schemes and feasibility studies have revealed serious difficulties with them. This does not augur well for the considerably more complex health sector. In particular there is the major problem posed by extreme variations in demand for health care. The average per capita tax payment of approximately £375 has been cited as a basis for nominal value of the voucher. Although this would be sufficient for low risk groups to purchase private health insurance, it would obviously not cover adequately actuarially-based premium payments required from high risk groups. To some extent advocates of the voucher have recognised this problem and suggested 'community rating' among various population groups, eg the young, the elderly, etc, so that voucher values compensate poor risks (Goldsmith, 1988). But even this refinement is unlikely to be able to take account of the substantial variations in demand within specific community rated groups. In short, vouchers are suited to those markets where there is relatively equal and homogenous demand from all consumers. This does not apply in health care with the result that all the well known problems of adverse selection would be likely to emerge.

Conclusion

Concerns about the feasibility of continuing to provide satisfactory levels of funding for the NHS through general taxation have led to many proposals for alternative and supplementary sources of finance. Revenue-raising activities that are presently being undertaken include: income generation from non-clinical activities; the sale of clinical support services to the private sector; the limited use of charges to NHS patients, as in the case of drug prescriptions and pay beds; and the joint finance of capital and revenue projects through partnerships with the private sector. The expansion and extension of all of these activities offers scope for raising substantial additional sums of finance, but careful consideration needs to be given to their impact on the underlying aims of efficiency and equity upon which the NHS is based.

The case for more fundamental change through the introduction of insurance based arrangements — as a substitute for general taxation — requires careful scrutiny. Private insurance is best viewed as a supplement to core public finance for certain groups of people, at certain stages of their lives, for certain procedures. Social insurance is a more feasible substitute for general taxation. As an earmarked tax, it could have many of the properties of an income tax, including universality and progressivity, while establishing a closer link between tax payments and what is actually spent on health care than is possible in the case of general taxation.

MANAGING BUDGETS MORE EFFICIENTLY

The management of the NHS has experienced some important changes since the implementation of the Griffiths Report in 1984. Management at the centre has been brought into sharper focus through the establishment of the Management Board within the DHSS; the appointment of general managers at regional, district and unit levels has resulted in clearer responsibility for decision making within health authorities; and the introduction of individual performance review for general managers, together with performance related pay and short-term contracts, has created stronger incentives for them to achieve agreed objectives. There has also been a renewed emphasis on efficiency savings through cost improvement programmes. These have involved the continuation of existing initiatives such as the Rayner scrutinies, performance indicators and competitive tendering together with new initiatives, in particular, management budgeting and its successor the resource management initiative.

As we noted earlier, cost improvement programmes have been a crucial source of development finance in recent years. However, there is uncertainty about the continuing scope for greater efficiency. An argument often heard is that health authority budgets have been squeezed to the limit and there is no fat left to cut. According to this analysis, continuing constraints on NHS spending will involve real service reductions. A counter view is that the scope for efficiency savings in administrative and support services may well be subject to diminishing returns, but that there is still considerable scope for greater efficiency in medical and nursing services. This view was a key element in evidence given by ministers and civil servants to the Social Services Committee (House of Commons, 1986). The director of health authority finance at that time told the Committee

> *in the longer term it is absolutely essential that general managers get engaged with the key professional staff, with the doctors, and the nurses, and other professional staff in the whole enterprise of using resources in the best possible way for patients, and in the long term that sort of joint working to make the best use of resources for patients is probably more important as an aspect of cost improvement* (House of Commons, 1986, p.137).

This view was echoed by the Minister of Health who argued:

> *within the area of clinical budgeting there may well be very considerable savings and cost improvements that can be made so that resources can be much better deployed* (p.153).

Similar views have been expressed recently with the government suggesting that restrictive practices, particularly among doctors, are an obstacle to the efficient use of the funds made available to the NHS.

Underlying this debate is an issue of fundamental importance: who controls the use of resources in the NHS? The Griffiths Report was in no doubt about this issue, arguing that it was doctors' decisions that dictate the use of resources. While this point is now widely acknowledged, the more important consideration is that doctors do not usually have *responsibility* for budgets in the NHS, nor are they always provided with *information* about the resource consequences of their decisions. There is a gap between clinicians whose decisions on whom and how to treat largely determines the use of resources, and managers who have overall responsibility for controlling budgets and keeping within cash limits.

The Resource Management Initiative

The traditional reluctance of many clinicians to participate in decisions about resource use derives from a very real ethical dilemma. The doctor is charged with doing the best for the individual patient and this imperative can sometimes conflict with the need to order priorities among patients for budgetary reasons. Nonetheless, in a world of scare resources, priorities have to be established. As such, there is a need to involve doctors more effectively in the management of resources, especially in the acute hospital service. It is here that the bulk of NHS spending takes place and where the harshest effects of recent expenditure constraints have been felt. In the light of Griffiths, the main mechanism for involving doctors in management has been the *resource management initiative*. The initiative has been seen by the NHS Management Board as a key element in improving the management of resources and a good deal of effort and finance has been put into the experiments now taking place at six experimental acute hospital sites. The experience gained from these experiments will play a major part in any future government policies aimed at achieving greater efficiency in the use of budget allocations.

The current resource management initiative has evolved following the lessons of two earlier experiments. First, in the 1970s and early 1980s approaches based on *clinical budgeting* were developed. These achieved significant improvements in efficiency including reductions in unnecessary x-ray and pathology tests, in length of stay, in ward stocks used by nurses and food wastage (Wickings *et al*, 1983). The second phase began, following the Griffiths Report, with the experiments in *management budgeting*. Demonstration projects were initiated in four health authorities. A report published by the DHSS in January 1985 noted that despite progress having been made on the projects some fundamental problems had not been overcome. In particular, medical staff were not always committed to the projects and this had delayed implementation. These problems continued in the second generation of demonstration projects and it became clear that it would take longer than anticipated to develop a management budgeting system that could be applied throughout the NHS. Subsequently, a Management Board review concluded that management budgeting had failed to achieve its principal objectives and it was therefore superseded in November 1986 by the *resource management initiative*.

The change in terminology from management budgeting to resource management is significant. It reflects a recognition that more efficient use of

resources cannot be achieved by introducing a budgeting system in isolation. It is crucial to the success of resource management to enlist the active involvement of doctors and nurses by providing information perceived by medical and nursing managers to be relevant to their work. To achieve this, six experimental hospital sites were chosen on the basis that doctors and nurses were already closely involved in management.

Resource management experiments incorporate the following aims:

- to provide information about the use of resources enabling clinicians, managers and others to identify the costs involved in providing services
- to establish more explicitly the resources provided for particular services (eg orthopaedics) and the uses to which these resources will be put
- to place responsibility for the control of these resources on those who determine their use
- to provide a framework within which clinicians and others have discretion within agreed budgets to use resources and redeploy savings as long as overall budgets are not exceeded
- to enable comparisons to be made of the efficiency and effectiveness with which resources are used
- to provide a means of translating district priorities into action.

A number of lessons have been learnt from experience so far. First, as mentioned above, it is clear that the support and confidence of clinicians and other staff, notably nurses, is needed if resource management is to succeed. This was pointed out by Wickings at the beginning of the management budgeting experiments and the force of his warning was borne out in practice (Wickings, 1983). Second, investment in appropriate systems for collecting and processing accurate information is an integral part of resource management, and indeed this has figured prominently in the work undertaken so far. Third, agreed rules of the game need to be established to govern, for example, how savings will be deployed and how increases in activity above agreed levels will be handled. Experience in some districts where management budgeting was seen as a way of saving money rather than achieving higher levels of efficiency reinforces the importance of this point (Devlin, 1985 and 1986). It would seem that only where real incentives exist are clinicians likely to be willing to put in the time and effort required to get resource management off the ground. Fourth, and crucially, the timetable of change is longer than envisaged. The expectation is that a decision will be taken in 1988 with a view to implementing resource management in all acute hospitals by 1992, yet even this timetable may now be optimistic.

Assuming that the resource management initiative overcomes the problems of management budgeting (and this is a large assumption), a number of areas of clinical work where improvements in efficiency are possible may be identified.

First, there may well be scope for making better use of nursing services. Nursing salaries make up 30 per cent of hospital current expenditure and even minor improvements in efficiency, for example through changes in shift arrangements and in skill mix, are likely to bring important savings. This has already been identified as an area for attention by the National Audit Office and local action seems certain to follow.

Second, it is also probable that the initiative will serve to focus more attention on areas where it has long been recognised that savings are possible, such as reductions in the use of diagnostic tests and pharmaceutical expenditures. Improvements in efficiency have already occurred in these areas but there may well be scope for further action.

Third, there is likely to be a renewed interest in comparing the efficiency with which resources are used. Performance indicators have enabled this to be done in the past and have revealed the existence of wide variations between health authorities in the number of patients treated and the efficiency with which these patients are treated as measured by length of stay and unit costs. However, performance indicators are crude tools of analysis and only permit comparisons to be made on a specialty basis. The more sophisticated information becoming available through the resource management initiative will overcome some of these problems by adjusting for case mix and by making use of diagnostic related groups. This should enable more realistic comparisons to be made between doctors and hospitals, and lead to a clearer analysis of the reasons for variations and areas of inefficiency.

As these issues are tackled, it will be particularly important to consider not just the efficiency of resource use but also its effectiveness. This means including information on the outcome of treatments alongside data on activity levels, costs, and length of stay. If this is not done, it will be impossible to evaluate whether real improvements in efficiency are being achieved or whether increased activity is at the expense of increased readmissions and complication rates. It will also be important to ensure that money is not saved simply through health authorities shifting the burden of expenditure onto other agencies through earlier discharges. Existing organisational and financial arrangements give rise to a variety of perverse incentives of this kind, and careful monitoring is needed to ensure that public expenditure as a whole is used efficiently.

As these comments suggest, the quality of care provided is just as important as the quantity of care. The recent report of the Confidential Enquiry into Perioperative Deaths (Buck *et al*, 1988) has highlighted this. This Enquiry and other data, suggest that there is room to release resources in the NHS by cutting down on unnecessary or ineffective treatments. As the DHSS itself pointed out in 1976, it may be possible to combine a high quality of care with efficient use of resources by using certain operations more selectively. The reduction in the number of tonsillectomies performed over the years is just one example of changing trends in clinical practice. A key factor here, both in explaining changes in clinical practice and in accounting for variations in admission rates between health authorities, is the uncertainty which exists in the medical profession concerning indications for treatment and the outcomes associated with treatment. This uncertainty gives clinicians wide discretion in determining whom to treat and how, and makes it possible to justify quite different treatment patterns. This suggests a need for the greater use of *protocols* to guide clinical practice in order to reduce the questionable elements which lie behind variations in admission rates. This argument applies as much to GPs, whose practice in terms of, for example, hospital

referral rates and drug prescribing habits are also highly variable, as to hospital doctors. Indeed, in the long term, tackling the major differences which exist between GPs in referrals to hospitals may be a key element in reducing the pressure on hospital services as well as seeking improvements in efficiency in hospitals themselves.

A related issue is the scope for concentrating scarce resources on those treatments which are known to be cost effective. In this context, the development of the concept of quality adjusted life years (QALYs) is of considerable importance as a tool for comparing the benefits offered by different treatment regimes. If information on costs is added to data on quality of life and survival it is possible at a crude level to construct a league table showing the costs per QALY of treatments. This in turn can help those responsible for making investment decisions. While much research work remains to be done, QALYs offer real potential to policy makers faced with the dilemma of how to achieve the best return on the resources available for health services. However, further work is necessary to improve and extend the basis on which QALYs are measured. Moreover, QALYs may have a limited application in deciding priorities *between* care groups and health care sectors.

It is a curious paradox that pursuing greater efficiency may sometimes contribute towards funding problems because improvements in clinical performance often result in an increase in total expenditure. As many health authorities have found, treating more patients by cutting lengths of stay may result in lower unit costs but the overall effect of more activity is an increase in total costs. This is because increased variable costs result from the greater use of drugs, supplies and equipment. It is also well established that changes in treatment methods, such as day surgery, result in more patients being treated and higher total expenditure. These are problems which any attempt to increase the productivity of hospital doctors will have to address. While a good deal of attention has been focussed on the problem of 'lazy' doctors, a much greater challenge is often presented by the consultant who works too hard. A possible solution to this problem might be to develop an *internal market* in the NHS. Through this arrangement there would be scope to reward efficient health authorities and clinicians.

An Internal Market

The proposal for an internal market within the NHS is based on a rather different 'model' for achieving greater efficiency, although it is not necessarily inconsistent with the resource management initiative. Instead of starting from the micro level, in an attempt to devise better management systems, an internal market concentrates on the macro, organisational environment within which health authorities operate. At this level it emphasises the importance of incentives for efficiency and, in particular, the role of *competition*.

The basic idea underlying an internal market arrangment is that there should be a separation of a district's present responsibilities for both financing and providing health care services for its resident population. Districts would continue to finance services but they could choose to buy some services from other districts if it was advantageous for them to do so. Of course, there are already substantial cross-boundary flows of patients and this is tantamount to districts buying and selling services from each other. But the system does not work well. Payments only cover in-patient — not out-patient and day case — flows; they are based on average specialty costs whereas cross boundary flows usually involve a high proportion of difficult and, therefore, more costly cases; payments are made through adjustments to RAWP targets rather than actual allocations; and they are only made after a two year time lag. In the face of these difficulties some districts are devising direct methods of charging for patient inflows. But the system is fragmented, partial and non-standardised. An internal market would seek to organise this 'trade' on a systematic basis. It would have the following features.

- Each district would receive a needs based, per capita allocation. It would be paid for services to outsiders at negotiated prices. It would also control patient referrals to providers outside the district and would pay for them at negotiated prices.
- Each DHA would have a balance sheet and an income statement. This would record all income and expenditure and would provide the basis for ensuring prompt and adequate payment and receipts. Under some variants of the internal market arrangement, DHAs would also have the freedom to raise funds on the capital market.
- Consultants contracts would be held at the district level. Family practitioners would also have contracts with DHAs.
- With DHAs buying and selling services from each other most of the trade would be internal to the NHS — hence an internal market — although trade with private health care providers could also be entered into.

Through trade, competition between districts would emerge and this — it is argued — would be the spur to greater efficiency. Recently, this proposal has received widespread attention — much of it favourable — but it has usually remained at a fairly superficial level. Like much of the political case for a market system, it has been assumed that competition is a 'good thing' without examining how exactly efficiency would be enhanced in particular circumstances. On close inspection it becomes clear that increased efficiency might be expected to arise from at least two sources:

- Reductions in slack or spare capacity.
- Lower costs from economies of scale.

The case for expecting each of these benefits to materialise is sketched out briefly below. (For a fuller discussion see Robinson (1988)).

Ensuring that optimal use is made of operating theatres, beds and staff time is a complex management task. There is little doubt that individual districts vary in the extent to which they achieve efficient levels of capacity utilisation. As a result there are degrees of slack or unused capacity (Yates, 1987; National Audit Office, 1987b). According to advocates of internal markets, competition is a way of reducing these. Just as firms compete for customers in a market system, so hospitals would compete for patients, and their revenue would depend upon their success in doing so. In this way, it is argued, competition would be a spur to greater efficiency.

However, as we have already argued previously, the main scope for future efficiency savings lies in clinical areas. As such, the link between competition and the activities of hospital doctors is crucial. At the moment, it is far from clear how exactly competition between

districts would spur consultants to work more efficiently. Holding their contracts at the district level is merely a prerequisite for integrating them within a more tightly managed organisation; this does not, in itself, provide an incentive structure for improved performance. Short term contracts and performance related pay have been proposed. But these are major changes in conditions of employment which are likely to encounter stiff opposition from the professions. Clinician involvement through resource management type initiatives offers a less threatening route, but this is still in its infancy.

Economies of scale might arise through the specialisation on certain services within a smaller number of districts, instead of the comprehensive provision of all local acute services in every district. These could result from technological economies associated with the shared use of expensive items of capital equipment and/or departments, such as pathology laboratories; or from the superior performance of larger teams of clinicians who are able to share ideas and information about best practice, support each other and develop relevant expertise.

If more specialisation were to take place through an internal market, two potential sources of cost reduction would be available to a district choosing to purchase services rather than provide them itself. First, there would be the opportunity to buy certain services at the lower average costs achieved through specialisation. Second, there may be occasions where the provider district has spare capacity and is willing to supply a service at marginal cost which will be below average cost. In fact, the rigid cash limits facing many districts at the moment are already leading them to engage in the sale of services by using capacity for which they do not have funds to use to the full.

Both of the above expectations of greater efficiency are, of course, highly speculative. There are some serious reservations about the practicality of introducing internal markets and about some of the consequences that might flow from them. Indeed, the NHS Management Board has recently dismissed the proposal as impractical. Among the obstacles it identified were the absence of accurate information on treatment costs and the incompatibility of the proposal with the GP's freedom of referral.

Obviously the lack of reliable cost information is a serious impediment to trade. Districts can hardly be expected to buy and sell services from each other without knowing the costs of the services involved. But this problem is not insuperable. Körner data is already leading to improvements in management information systems. Moreover, the growth of trade may itself act as a stimulus for the development of appropriate cost data.

The GP's freedom of referral is potentially a far larger impediment to an internal market. If districts are to buy services from each other they will have to be able to control where their patients are treated. This would only be possible if they had control over GP referrals. This would constitute a major change of practice and how it would be achieved remains to be specified. As in the case of hospital doctors, holding GPs' contracts at the district level — even if this could be achieved — would only be a first step.

Yet another reservation about an internal market concerns the fear that increased efficency may be achieved at the cost of more unequal access. If there is no longer a comprehensive range of local services available, some patients will have to travel longer distances for treatment. This may penalise low income and less mobile individuals and their families eg women and children, people with disabilities, frail elderly people, those without access to cars, etc. There would also be a greater problem of continuity of care after hospital discharge. Careful thought would need to be given to the finance and provision of transport and other support services to overcome these problems.

At the moment it is impossible to assess the relative strengths of the expectations about gains and losses because they are simply *a priori* expectations. This has led us to support calls for experimenting with an internal market — possibly within a single region — in order to collect the empirical information that would be necessary for a full evaluation to take place.

Conclusion

The need to seek maximum value-for-money from health expenditure will remain a major priority whatever the level or means of financing adopted. Already major advances have been made in improving efficiency in the management of resources. These must be built upon. The resource management initiative currently taking place at six experimental sites, by involving doctors, nurses and other professional staff in the management of resources, provides a possible model for more effective management. Accurate management information systems are crucial if it is to succeed. Moreover, information systems should extend to the evaluation of outcomes including the effectiveness of clinical procedures.

Incentives for better performance are a vital prerequisite for improvements in efficiency. Competition between health districts — as contained in proposals for an internal market — is one way in which incentive structures could be sharpened. However, at the moment, there are many uncertainties surrounding exactly how efficiency would be increased through competition within an internal market, and the effects it might have upon access to health care among different groups of people. This suggests that — as in the case of the resource management initiative — there is a case for experimenting with an internal market in order to gather information on its operation and to develop the concept.

NEW WAYS OF RATIONING SERVICES

All of the policy options discussed so far have involved obtaining additional funds for the NHS or securing more services from a given level of funding. These are all supply side responses. An alternative approach to the problem of perpetual excess demand is to take a renewed look at precisely what it is possible to offer within a universal, free-at-the-point-of-use health service. This could involve specifying the scope of NHS services more narrowly than at present. In short, it would distinguish between "legitimate" and "illegitimate" demand. Two recent pieces of work have provided a basis for thinking along these lines.

Thwaites (1987) suggests that the scope of the NHS should be defined in terms of three dimensions of case characteristics: medical condition, non-medical assessment and cost of care. As a professional mathematician and RHA Chairman, he offers a conceptual framework which seeks to combine the "scores" that different individuals with demands for health care record on each of these dimensions. This offers a way of establishing priorities and thinking about what should be within the scope of the NHS and what should be outside. His own illustrative examples suggest two cases that should be within the scope of the NHS — an average man with developing arthritis and a young wife expecting a first baby — and three cases that fall outside of its scope by differing amounts: a man with an unwanted tattoo, an unlikely survivor of heroic surgery and a woman requiring in-vitro fertilisation.

Of course it could be argued that such a ranking procedure, although implicit, is already in operation within the NHS. Someone requiring a simple tattoo removal is likely to be assigned such a low priority that their position on the waiting list may mean that they never reach the head of the queue. However, the merit of Thwaites' approach is that it seeks to make explicit the criteria which are relevant in making these assessments. This would seem to be particularly necessary if decisions are being contemplated that would redefine more tightly the boundary between those cases within the scope of the NHS and those outside of it.

The main reservation surrounding this approach concerns the danger of introducing spurious precision. The combination of Thwaites' three dimensions in individual cases will always ultimately depend on clinical decisions. And as long as there is clinical freedom the search for an objective consensus will always be problematic. Differences in individual judgements will continue to be emphasised by many clinicians and efforts to specify in precise terms what is at present implicit and impressionistic may well spark off a backlash (witness the QALY debate). For this reason the Thwaites approach is probably best viewed as a framework within which criteria for rationing may be more usefully debated.

A closely related way of looking at this problem is suggested by Maxwell (1987). He points out that health care is not a simple, homogeneous service. Rather it covers a spectrum ranging from life-saving acute interventions to minor, life-quality enhancing procedures. It is almost certain that, as a society we attach differing levels of importance to the values of efficiency, equity, freedom of choice — upon which the NHS is based — according to the point on the spectrum at which a particular service is located. The use of these value criteria in the context of different health care treatments also provides a way of thinking about possible limitations of the scope of the NHS.

But, once again, moving from the general to the particular would inevitably involve intense debate and consensus would be difficult to achieve.

The case for a more rigid delineation of NHS services already commands support from a number of NHS managers. It has been suggested that it would be far better for managers to spend their time analysing the legitimacy of current demand than seeking to find alternative sources of finance for all the demand that presents itself. This would involve careful scrutiny of waiting lists, referral rates and levels of satisfaction. Ultimately it might need to take account of evidence produced through QALY calculations. One specific issue raised in this context concerns the relative costs and benefits of some of the screening programmes that are currently being accorded high priority in service developments. Given the extremely low probability of obtaining a positive diagnosis at the frequency of screening intervals presently being recommended — and the substantial costs associated with extending the service throughout the population — doubts are sometimes expressed about the legitimacy of funding these programmes through the NHS.

Conclusion

At the moment it does not seem likely that major changes involving eligibility for NHS services will be made; nor that this will be a source of large cost savings. Efforts aimed at achieving more rational use of resources are probably best directed at establishing and disseminating clear medical protocols. These aim to identify patients likely to benefit from specific treatments. Consensus conferences provide a mechanism for taking account of a wide range of opinions — both medical and non medical — in designing protocols, and working parties established by professional associations provide another. In this context, the issues raised by Thwaites and others can be considered alongside other judgements without appearing to replace them.

PRIVATE HEALTH CARE PROVISION

When it reported less than ten years ago the Royal Commission on the NHS felt able to conlclude that:

> *it is clear that the private sector is too small to make a significant impact on the NHS, except locally and temporarily.*

Such a statement no longer reflects the position of the private health care sector.

The Growth of the Private Sector

In 1979, when the Royal Commission reported, under five per cent of the population was covered by private health insurance provided by the three principal provident associations, and the benefits paid out represented less than one per cent of NHS expenditure (Office of Health Economics, 1987). But, even then, this general picture was misleading because it masked the importance of the private sector in particular geographical areas and specialities. For example, Nicholl *et al* (1984) of the Medical Care Research Unit, University of Sheffield, showed that in 1981 the combined private sector in England and Wales accounted for 13.2 per cent of total case load in domestic, inpatient elective surgery. Within this surgical category, the private sector performed over 20 per cent of haemorrhoidectomies, hysterectomies, total hip replacements and procedures for ligation and stripping of varicose veins.

However, it is the rate of growth of private finance and provision during the 1980s that has changed the picture quite dramatically. The most rapid growth in provision has occurred in nursing and residential care homes for elderly people. In this case, much of the expansion has been fuelled by the availability of public finance through the social security system (Audit Commission, 1986; National Audit Office, 1987c). As far as the acute sector is concerned, preliminary indications from data being analysed by the Sheffield Medical Care Research Unit also suggest that there was a marked increase in activity between 1981 and 1986 (Williams, 1987). Private acute care is financed mainly (about 70 per cent) through private health insurance. Since 1979 the percentage of the population covered by some form of private health insurance has doubled: from under five per cent to ten per cent. About one-half of private insurance is paid for by companies who offer it to their employees as part of their conditions of service. Company financed insurance has grown rapidly in recent years and is expected to continue to do so in the future. Overall, Laing (1987) estimates that by 1986 expenditure on private in-patient and out-patient services (including nursing homes) accounted for just over 9 per cent of total expenditure on hospital based services in the UK. This is the changed context within which the private sector must now be examined.

The remainder of this section concentrates on the private acute sector. This comprises both for-profit hospitals and clinics and not-for-profit charitable institutions such as Nuffield hospitals. In recent years growth has been more pronounced in the for-profit than the not-for-profit sector. Clearly the marked growth in private health insurance and activity within this sector indicates that it is meeting an expanding source of consumer demand. Moreover, the government clearly favours the expansion of private expenditure on health, and partnerships between the public and private sectors. There is, therefore, support for an expanding independent health care sector in the UK. Such development offers both opportunities and disadvantages. Some of the more important of these are considered below.

Costs and Benefits

In common with other systems of market allocation, the private finance and supply of health care offers a direct link between what people are willing to pay for and the service they receive. Subject to reservations about the amount of information possessed by consumers of health care (i.e. lack of expertise on medical matters), this can be expected to produce a system that is responsive to consumer preferences. Certainly consumers of private non-urgent, acute care generally have access to services with shorter waiting times than NHS patients and, often, enjoy higher standards of hotel services. But it is still only a small minority of the population who have access to these services. Even with the continued expansion of the private sector in the future this is almost certain to remain the case. It will act as a supplement to mainstream NHS services for certain groups of people and procedures. This being so, it is important to examine some of the consequences of private sector expansion for the NHS. Chubb *et al* (1982) identify four potential sources of concern. These are:

- the possible emergence of a two tier system of health care
- the effect on planning priorities
- an increase in health care costs without a corresponding improvement in health status
- the diversion of doctors and nurses away from the NHS.

How valid are these fears?

Two Tier System. The welfare state, it is claimed, is built on the basic values of equality, community and the rights of citizenship. The NHS is probably *the* most important embodiment of these values. But clearly this is just one position on a wide spectrum of views. At the other extreme there are those who believe that questions of equality are best dealt with through the tax and benefit system, and that health care should be sold freely in the market as any other commodity. An intermediate position is that equality of access is an important and legitimate objective of the health system, *per se*, but that certain forms of private health care are acceptable in the interests of better service levels and patient choice. The task, then, is to devise a mixed system of health care that is neither socially unjust nor divisive. In this connection two issues that are often overlooked become relevant.

First, concern about a two tier system centres on the inequality such an arrangement might breed in terms of access (Mooney, 1982). But under a mixed economy of health there is no reason in principle why equality should necessarily be pursued through public *provision*. It may be more efficient to pursue it through a combination of public finance and private provision (Laing and Hunter, 1982). If confined to the role of a paymaster, the NHS would undertake the regulation of the private health sector and ensure the maintenance of standards. Health authorities already possess

extensive powers of inspection and registration through which to manage a mixed health economy even if there remains scope for modifying and strengthening present arrangements (Chubb *et al*, 1982; Day and Klein, 1985).

Second, for most people their ability to rely on private finance will follow a clear inter-temporal pattern. Demand for health care will be greatest at the beginning and at the end of their lives when they will almost certainly require some public finance (West, 1984). It is during their working age that private finance is likely to be used most frequently. Many people are therefore likely to be users of both public and private systems over their lifetime. There will not be two distinct populations served by two distinct systems. Indeed, as Klein (1987) has noted, people already commute between the two sectors. They do not exit from the NHS in favour of the private sector but use both depending on the circumstances. Increasingly, there has been a blurring of the dividing line between the public and private sectors.

Planning Priorities. The possible distortion of planning priorities has been discussed already in connection with NHS income generation activities. In that context, distortion may result if NHS services are redirected in response to income earning possibilities rather than planning priorities. But the situation concerning private hospital provision is rather different. In one sense it complements NHS provision by offering services where the NHS is unable to do so. As mentioned above, private provision has grown most rapidly in the area of cold elective surgery where NHS waiting lists are typically at their longest. On the other hand there are those who argue that the existence of private medicine can exacerbate waiting list problems. According to this view consultants have an incentive to maintain lengthy lists as these encourage patients to opt for private treatment. While there may be some substance in this claim, it cannot be the main reason for the NHS's weaknesses in this area of surgery. This is more to do with its priorities at a time of tight funding.

A more serious distortion of planning priorities may occur from private sector activity stimulating or inflating demand. It is well known that the demand for health care is supplier-induced. For the most part, doctors define what the patient needs and so the normal assumption of consumer sovereignty breaks down. If the supplier has a pecuniary interest in providing a service there are incentives for overprovision. Some of the current expansion of private screening services may fall into this category. Such imbalances have implications for both quality control and regulatory arrangements.

Clearly, the nature of the private sector and its operation, especially in the long term care residential sector, where the turnover in nursing and residential home ownership is high, and stability and consistency of provision can be uncertain, has implications for planning in the NHS. How and to what extent should the NHS take account of it in its own planning?

Some commentators argue that the RAWP formula (and its counterparts in Wales, Scotland and Northern Ireland) should take account of the levels of private provision in particular regions and districts especially as private provision remains overwhelmingly concentrated in the Thames Regions and certain other large cities (Laing, 1987; Griffith *et al*, 1985). The main problem with this suggestion is that very few people within a district would have access to private care and so inequality within the NHS would possibly increase. Nonetheless, there is a clear case for some kind planning system which seeks to take account of the private sector.

Increased Costs Without Improved Health Status. Critics of private health care point out that a growth in this sector could increase expenditure on care without any demonstrable improvement in health status. While more resources might go into health care through such means, it is not clear what proportion of this additional investment would go into direct patient care as distinct from increased administrative costs and increased incomes for service providers.

Against this view, others argue that this may have been a failing of private health care systems in the past, but that managed systems — such as US style health maintenance organisations — have successfully developed ways of containing costs and regulating quality (Green, 1986; Goldsmith and Willetts, 1988). Overall, whatever the merits of these competing claims, the dangers of cost inflation and unregulated growth are not likely to become a serious issue in the UK as long as the private sector remains small in relation to the NHS.

More generally, all health care systems display a greater concern with what goes into health services than with what comes out (Maynard, 1987b). Output continues to be measured in terms of activities. Knowledge of the impact of provision upon health status remains partial although a substantial body of evidence suggests that public health measures, nutrition, housing and so on may have a greater impact on health than the provision of more and more health services.

Diversion of Doctors and Nurses: The extent to which private provision either supplements NHS provision or substitutes for it (with different priorities and patients) depends crucially on the question of labour supply. To be specific, is the time of doctors diverted away from NHS work? Or is the time they devote to private health care a net addition to what the NHS would otherwise receive? Similarly has the opportunity for better pay and conditions of service led nurses to leave the NHS for the private sector?

In many ways alleged labour diversion among doctors is the more complex to disentangle. Since 1980, full-time NHS consultants have been permitted to earn up to 10 per cent of their gross income from private practice. Consultants on maximum part-time contracts are able to engage in private practice without restriction on their earnings by giving up payment for one NHS session per week. Prior to 1980 outside earnings were only available to consultants working for the NHS if they gave up payment for two sessions per week. Clearly the post 1980 arrangements have increased the scope for private earnings.

On *a priori* grounds there must be a strong expectation that the opportunity to engage in private work reduces both the time and commitment available for NHS work. However, this could well be a misleading, short-term view. It has been argued that without the possibility of outside earnings many consultants would leave the NHS altogether. But the number in a position to do this would seem to be rather limited. A more important but complicated question is: how does the long run supply of doctors adjust to the existence of private work? The issue arises because opportunities offered for private earnings are an

indirect way of keeping down public sector costs. The public sector does not have to bear the full costs of doctors' earnings. Expenditure saved in this way should, in principle, be available to employ more doctors to replace the time of those engaged in private work. This raises the wider question of medical school policies and the long run supply of doctors. Clearly this is a complex issue involving a number of behavioural responses at different levels. At present there is insufficient empirical information to measure the size of these effects either in the short term or the long term.

As far as NHS nursing staff are concerned there are currently severe problems of recruitment and retention in many districts. However, data from a recent study on the movement of nursing staff between the public and private sectors (Thomas *et al*, 1988) suggest that this is more to do with overall shortages in the supply of nurses at prevailing wage rates than diversion between sectors. The study carried out in 1985 indicated that the NHS suffered a net loss of just under 1,000 nurses to the private sector in that year. Given that the NHS has a qualified nursing workforce of over 250,000 and that 30,000 leave the service for a variety of reasons each year, the relative scale of movement to the private sector is small. However, there may be points of particular pressure within this overall picture. For example, the same study indicated that private hospitals are currently recruiting approximately 200 theatre nurses per year, many with special theatre nursing qualifications, whereas in 1985 only 385 nurses in total obtained this specialist qualification.

Once again, though, the long term consequences of these movements depend upon the extent to which public sector funds released by departing nurses are used to train and employ new entrants. Leaving aside the more general question of shortages in the overall supply of suitably qualified applicants to nursing — a question that will ultimately have to be resolved by the NHS offering sufficiently attractive pay and conditions of service — there have been calls for the private sector to bear some of the training costs currently incurred by the public sector. In some senses this is a clear case of special pleading. Most people in this country have their education and training paid for by the public sector but there is no expectation that they should not work in the private sector. Moreover, the Sheffield study shows that nurses leaving established NHS posts have, on average, already given the NHS five years service.

Private Health Insurance

Recent statements from Ministers suggest that the encouragement of private expenditure on health is going to be a policy priority in the future. This will lead to greater emphasis being placed on private health insurance. How should this be viewed?

International evidence shows that where private insurance is the main form of health finance it has a number of failings. Adverse selection means that high risk groups find it difficult to obtain cover at affordable premiums. Most policies exclude cover for catastrophic and long term, chronic illness. Insufficient control over treatment levels and prices has sometimes led to serious cost inflation. Low income households can rarely afford adequate cover. To meet these failings, in all advanced countries, governments have invariably assumed major responsibilities for finance. Even in the United States, over 40 per cent of total health expenditure is publicly financed (OECD, 1987).

However, proposals for an extension of private health insurance in the UK do not usually envisage it as a replacement for public finance. Rather it is seen as a source of supplementary or top-up finance. In this connection, there is a case for examining existing private insurance arrangements to see whether there is scope for offering more varied packages that would reach a larger section of the population. These might involve the further development of limited cover insurance schemes that enable people to choose between the public and private sectors for, say, specified elective procedures. At the moment, as Laing (1987) points out, the high marginal cost of private medical care has placed a limit on its growth. Unless a person earns less than £8,500 a year, there are no tax concessions available for private insurance. In some cases it might be cost effective for the government to extend tax subsidies on private health insurance if it encouraged individuals to finance the remainder from their private incomes. However, these subsidies would need to be offered on a selective or targeted basis. There would be little point in offering subsidies to those people already subscribing to private insurance schemes.

Conclusion

There is scope for the private sector to contribute towards the improvement of the health care system alongside the NHS. Problems associated with the distortion of NHS planning priorities, cost inflation and possible adverse effects on NHS labour supply are likely to be manageable as long as the private sector remains a relatively small-scale supplement to the NHS. And despite its recent growth, it is likely to continue in a supplementary role: offering certain procedures, for certain people, at certain stages in their lives.

Even as a supplement, though, private top-ups provide access to health care on the basis of ability and willingness to pay. The NHS provides access on the basis of need as defined by clinicians. Multiple and conflicting objectives pose difficult choices. Is some sacrifice in equality of access acceptable in return for more health care and individual choice? As we stated at the outset of this report, attitudes to such matters ultimately involve value judgements. Our aim has not been to impose these judgements. Rather we have sought to clarify the nature of the trade-offs in the hope that this will lead to a more fruitful debate.

CONCLUDING COMMENT

No health care system anywhere is perfect or can meet all demands placed upon it, although some arrangements may be more successful than others. The NHS is no exception. The challenge confronting policy-makers is to seek ways of reducing imperfections. Taking the existing NHS as the starting point, our report has reviewed a range of proposals designed to do this.

Ultimately, a political choice has to be made in selecting the option, or options, most likely to secure the desired ends. Our purpose has not been to impose these judgements. Rather we have sought to clarify the nature of the trade-offs in the hope that this will lead to a more informed debate.

One thing that has become particularly apparent during our investigations is that no proposals for change can be evaluated without some reference to underlying assumptions and principles. If the Government aspires to reform health care finance and provision in the UK, rational debate following the publication of proposals would be greatly aided if they were to be accompanied by a coherent statement of goals and objectives.

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APPENDIX

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