Health And Health Services In Britain, 1948-88:

a background paper for a King's Fund Conference to celebrate the 40th anniversary of the National Health Service

5th July 1988

King's Fund Institute
London

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CONTENTS

1. INTRODUCTION

The National Health Service opened its doors for business on 5 July 1948. For much of the period since then it has been regarded as the central pillar of the British welfare state. Its very existence is widely perceived as its most singular achievement. Of course, the NHS has developed in distinct phases (see box 1) but as it approaches its fortieth anniversary its future looks more uncertain than at any time throughout its history.

Against this background the King's Fund has decided to mark the occasion of the fortieth anniversary not so much by celebrating past achievements - although it is important not to lose sight of these - but by addressing some of the issues which are critical to the establishment of an effective agenda for health in the 1990s and beyond. The Prime Minister's review of the NHS and the public debate which it has generated have to be the starting point, but they will almost certainly prove to be too narrowly focussed. Some of the key questions which need to be addressed include:

Why is the NHS being reviewed?
What are the distinctive features of that review?
What is missing from the review process?

There is a real danger that some of the issues which are critical to the delivery of health care and the promotion of health in the 1990s and beyond are in danger of being neglected at the present time. Indeed it could be argued that some of them have never been given adequate attention. It is, for example, not unusual to hear the complaint that the NHS has always been a sickness rather than a health service.

The purpose of this paper is to sketch out some of the background to those issues which will be discussed in more detail at the conference on 5 July 1988.

* The Current Health Debate
* Enduring Resource Issues
* Human Resources and Relationships
* Health Promotion

BOX 1 THE DEVELOPMENT OF THE NHS

*	**The Early Years**: laying the organisational foundations for the new service; developing hospitals specialist services across the country; undertaking the immediate tasks of reconstruction and re-equipment; working out the identity, style and management processes of the NHS in its many parts.	**Up to about 1960**
*	**The Years of Strategic Planning and Expansion**: including the Hospital Plan of 1960, and its implementation; the new GP contract of 1965; the reassessment of policy and standards in the neglected fields of mental illness and mental physical handicap in the late 1960s; the search for a more equitable basis than incremental funding for regional budget allocations.	**From 1960 up to about 1974**
*	**The Years of Consolidation, Doubts and Reassessment**: from the oil crisis of the mid 1970s and the 1974 reorganisation of the NHS through to the Royal Commission report of 1979 and the election of the first Thatcher government; a period that included some loss of confidence in the welfare state, some considerable staff unrest in the NHS, and attempts to find managerial solutions to the problems.	**From 1974 to 1979**
*	**The Period of Mrs Thatcher's Administration**: emphasising the pursuit of efficiency in the NHS, with attempts at the same time to encourage private sector expansion and to increase the contracting out of ancillary services; and the indication at the end of 1987 of a possible change of direction as a result of the current government review.	**1979 to the present**

Source: Maxwell, 1988

But first it is important to remind ourselves of some of the most distinctive achievements and features of the British health services. One of the most important of these is the manner in which the NHS came into being. Charles Webster's recently published official history of the early years of the National Health Service is a timely reminder of the fact that "once the NHS was established as a national institution there was a tendency to read back consensus into earlier history". In fact, the NHS was the product of considerable compromise which resulted in less secure foundations for the new service than would have been desirable. This basic fact has often been obscured. Over the years "a spurious consensus grew up around the system as a whole, thereby granting permanence to many features that had been regarded as temporary expedients".

There are therefore many distinctive features associated with the foundation of the NHS which remain part of the contemporary legacy. Four of these stand out as being particularly worthy of note:

* a universal and comprehensive service
* equality of access
* administrative fragmentation
* cost containment

Britain was the first major western nation to provide universal and comprehensive health services financed from general taxation. This in itself helped to remove the tainted poor law image of pre-war public health services and may well have contributed to the very considerable public satisfaction which has been a characteristic feature of the NHS since its birth.

In recent years it has been commonplace to note the prevalence of inequalities in both health status and the utilization of health services. These important truths, however, should not be allowed to undermine the central importance - both in principle and in practice - of equality of access to health care. For all kinds of reasons a vigorous attempt to deal with geographical inequalities in the distribution of services failed to materialise until the RAWP initiative in 1976 and a real assault on class, gender and racial inequalities is still awaited. But these failures should be seen in historical context. By the standards of the 1940s and earlier the NHS represented a major advance in terms of unrestricted entitlement of access for ordinary citizens.

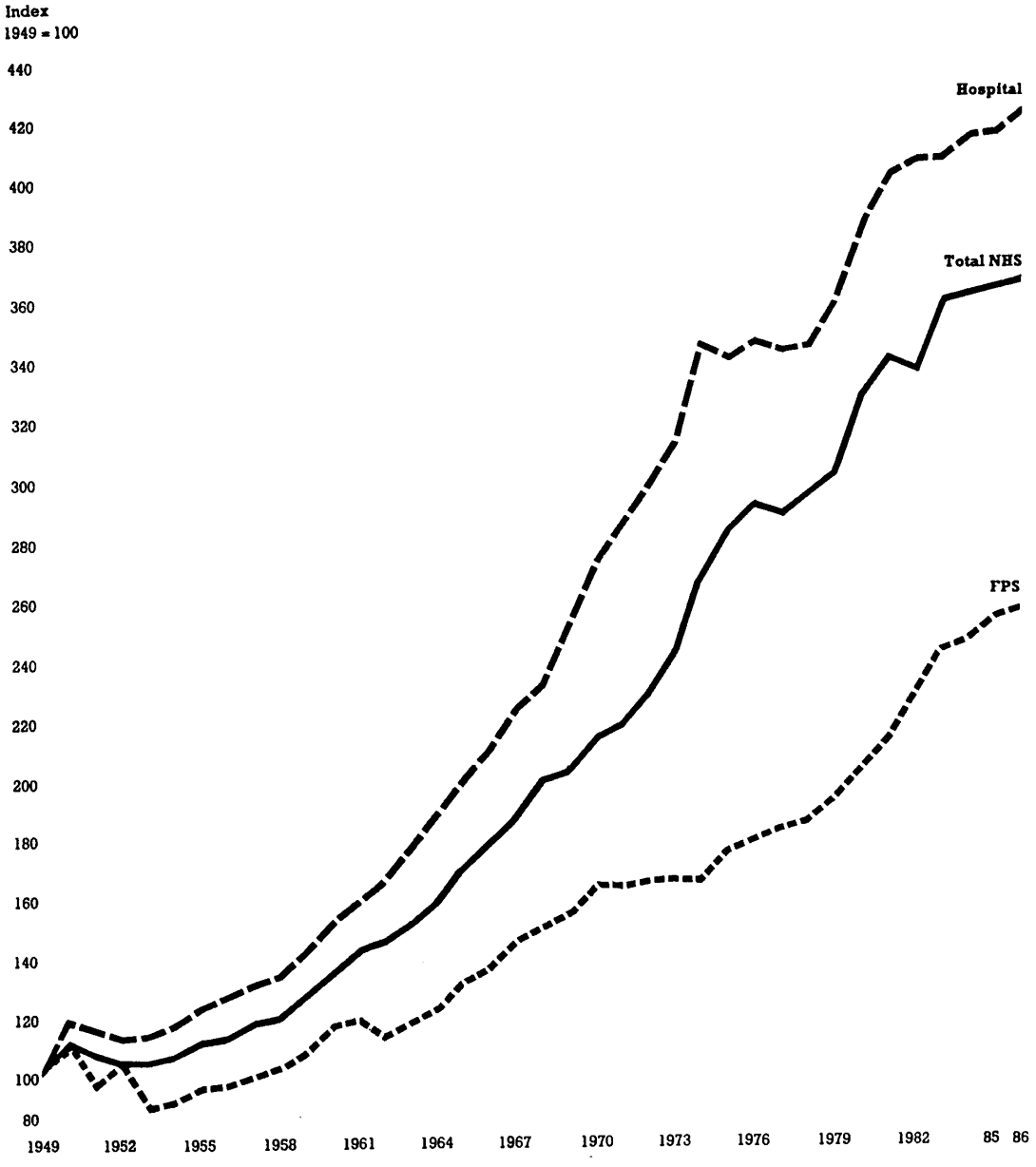
Although the National Health Service achieved only limited equalisation of services, it provided the less well-off with a variety of forms of care to which previously they had only limited access. All members of the family were now treated with respect to the services of a general practitioner. The most important innovation related to freedom of access to specialist and consultant services, which were gradually built up from the modest framework available in 1948 (Webster, 1988, pp.397-8).

One of the most significant aspects of the 1948 reform was the nationalisation of the hospital sector which made a degree of integration and national planning possible in later years. Arguably, however, this achievement was dwarfed by the more general administrative fragmentation into three entirely separate and distinct structures, each with some hundreds of local administrative components. This was a product of the historic compromise between the Attlee Government and the various vested interests which broke the logjam of protracted negotiations and made the national health service a reality. Nevertheless, the poor strategic coordination of primary and secondary care and health and social services has been a constant source of frustration. The 1974 reorganisation of the NHS sought to address these issues under the theme of integration, but the 1982 and 1985 reforms subsequently reversed a number of the changes.

Perhaps the feature of the new national health service which is now seen most clearly in retrospect has been its ability to contain costs. The spectre of socialised medicine with costs escalating out of control which so alarmed early critics of the NHS meant that the architects and developers of the new service were particularly conscious of the need for economy. As a result it has been estimated that the cost of the new NHS was no more than the patchwork of services which it replaced. Subsequently, even though expenditure increased in response to changing patterns of disease, demand and opportunity, claims that the NHS represents some kind of socialist extravagance have been largely conspicuous by their absence.

In fact, NHS resources have more than quadrupled in real terms during the last forty years. Figure 1 illustrates the real growth of spending on the NHS and its principal components between 1949 and 1986. Expenditure has increased in

FIGURE 1 : REAL GROWTH OF SPENDING ON THE NHS, 1949-86



Notes
All figures include charges paid by patients.
*As adjusted by the GDP deflator.

Source: OHE, 1987

cash terms from £433 million in 1949 to an estimated £23.5 billion in 1988. Whatever measuring rod is used, resources for the NHS have increased and continue to grow. But the pressures to spend more appear to increase inexorably faster. In part this reflects Enoch Powell's famous retort that the appetite of the NHS grows with feeding. But the pressures of demography, technology and expectations are both real and legitimate. Whatever the reasons, however, it has been the repeated failures to establish a stable equilibrium between the demand for and the supply of resources which are at the heart of what have been represented as "funding crises" throughout the history of the NHS.

What this means in practice at the present time is that mounting criticism of the funding of hospital services in particular has prompted the government to undertake a more fundamental review of the financing and delivery of health care in Britain than many commentators and critics feel comfortable with. The widespread discomfort at the thought of a radical review of the NHS is only partly explained by the secretive nature of the review process. There has also been a good deal of unease about the explosion of publications during 1988 each prescribing this or that solution to deal with inter alia underfunding, inefficiency, professional monopolies and a lack of consumer choice in health care.

One of the objectives of the King's Fund conference is to examine the characteristics of the current debate about health policy and a summary of the views of different protagonists is outlined in the next section of the paper. But before reviewing options for the future it is worth noting the Government's own rationale for the current review of health care financing and delivery mechanisms. It should be noted, however, that this may understate broader economic and political objectives of the "rolling back the frontiers of the state" kind.

In a series of recent speeches, the Secretary of State for Social Services, John Moore, has emphasised that the health care challenges of the late twentieth century cannot be resolved simply by channelling more resources into the NHS. John Moore has attempted to shift the focus of the debate away from an emphasis on the level of public spending on health towards identifying what kind of a health care system is required to meet the uncertain challenges and opportunities of the next century. He believes it is essential that the NHS

should be flexible and adaptable, should direct its resources with greater effect, should be more responsive to consumer expectations and should encourage greater personal responsibility. But devising a strategy to guide future health policy is not a simple matter. Wherever one turns there are dilemmas and conflicts of interest. How does one balance public provision for all with encouragement for greater personal investment in health care? How much scope should there be for creating local solutions to local needs in the context of a national framework for policy? How can individual choices be respected without reducing the overall social efficiency of the health care system? How can the interests and preferences of taxpayers/financers be reconciled with those of providers/suppliers?

In resolving these and other dilemmas, the Secretary of State suggests there is no "single bullet" solution. Evolution rather than revolution is the key. Certain key principles which are closely associated with what is distinctive about the British national health service should be retained as central pillars of health policy. First, there should be no link between access to "decent health care" and ability to pay. Second, public health services should remain comprehensive in coverage. Bearing these basic objectives mind there seem to be are three principal aims associated with the present review of health care:

* to widen choices and encourage greater plurality of provision;
* to make the distinction between public and private health care an anachronism;
* and, to improve the efficiency, effectiveness and quality of health care delivery.

Against this background, the twin aims of the King's Fund conference are: first, to evaluate the pros and cons of the current debate; and, second, to identify and discuss areas which have been relatively neglected in the current review but which are critical to the development of future health policy. More generally, in considering options for the future, it is essential to take a hard look at the history of the NHS to identify both its achievements and contradictions. The challenge is to find ways of reducing some of the historic tensions without abandoning basic values at a time of rapid change in a turbulent environment.

The next section of this paper reviews the salient features of the debate so far this year about new ways of financing and delivering health care in Britain. Section 3 examines in more detail some of the most enduring issues about the use and distribution of resources. Section 4 reviews some of the trends relevant to a consideration of human resources and relationships. Finally, section 5 examines some key aspects of the nation's health profile since the creation of the NHS.

2. THE HEALTH DEBATE

During the first half of 1988 the number of publications proposing ways of strengthening and/or reforming the NHS has seemed at times almost like a tidal wave. The extent and variety of the proposals now on offer make some attempt to summarise the key features of the debate a useful preliminary to informed discussion of the issues. This brief review will examine the two key sets of proposals - for increasing finance and reforming delivery - before commenting on the emerging shape of the debate as a whole.

Extra Finance

There is widespread support for the notion that expenditure in health care should be increased. The three principal ways of doing this - not mutually exclusive - are to modify the existing health care financing system in various ways, to switch to some form of social insurance or earmarked taxation and to encourage much greater private expenditure.

(a) Adding to Existing Finance

The principal means of adding to existing public spending on health care is to increase public expenditure allocations, to develop income generation schemes, to provide "top-ups" to basic NHS provision and to extend the use of user charges.

First, many commentators - including the Association of Community Health Councils (1988), the BMA (1988), NAHA (1988) and IHSM (1988) - argue that the government should provide adequate funding out of tax revenue to enable the NHS to meet demand. It is claimed that the problems confronting the NHS can be most effectively tackled through increased public expenditure and administrative reform.

Second, an unpublished Rayner scrutiny commissioned by the DHSS suggested 75 different ways of generating additional income. As a result, the DHSS has already established an income generation unit to disseminate ideas between health authorities. A number of commentators imply that the scope for more income generation and cost improvement in clinical activities is far from exhausted.

Third, topping-up NHS provision is an additional way of both increasing consumer choice and income for the NHS. NAHA, IHSM and Willetts and Goldsmith (1988) have suggested that a much more intensive use of pay and amenity beds could help achieve these aims. One particular attraction is that if health authorities charge for amenity facilities at a price greater than marginal cost they will be able to cross subsidise the care for patients in other parts of the health service system.

Finally, it would be possible to extend the use of user charges in the NHS. Leon Brittan (1988) makes the point that, as well as raising income, nominal charges could be used to reduce 'unnecessary' demand. Others in the debate, however, such as Goldsmith and Willetts, Letwin and Redwood (1988), and Butler and Pirie (1988) feel that the greater use of direct user charges contradicts a basic principle of the NHS, namely equal access on the basis of need rather than ability to pay.

To some extent, of course, new user charges are already high on the agenda because legislation is presently going through parliament which will extend charges to eyesight tests and dental examinations to help pay for some of the primary health care reforms outlined in Promoting Better Health.

(b) Switching to Social Insurance

The main advocates of social insurance argue that the present health care financing system acts as a barrier to individuals purchasing the amount of health care they actually want. It is claimed that individuals would be willing to pay more for health care if they could see a direct relationship between what they spend and receive; if taxes were more visible. The crucial point made by proponents of social insurance is that a more visible form of earmarked taxation would enable citizens to signal their preferences more clearly and allow government's to respond more easily to them. An implicit

assumption is that citizens would demand higher levels of taxation to invest in improved health services.

(c) *Encouraging Private Investment*

A number of ideas have been advanced as to how individuals can be encouraged to spend more on health care. These include opting out of social insurance, tax relief on private insurance payments or generally creating a market more conducive to private expenditure on health care.

Leon Brittan argues a system of social insurance will enable individuals to easily opt out of some of their national health contribution and entitlement provided that they register with an authorised private sector provider for a distinct increment of health care provision. Similarly, Redwood (1888) advocates the creation of rebates for individuals who contract all or part of their risk out to private insurance. The rebate could vary with age and the amount of cover that the individual wished to keep in the NHS. To illustrate the degree of change which might be possible, Redwood suggests that a 3 or 4 per cent rebate could lead to 20 million people contracting out and the proportion of private financing of health care would rise from less than 1 per cent to 2.5 per cent of GDP.

Another option is to give tax relief to employers' or employees' private health insurance contributions. The most obvious objection to this proposal comes from within the Treasury because of the dead weight loss of tax relief to the 9 per cent of citizens who already have private insurance. Some commentators on the radical right argue that such a loss would be a price well worth paying to encourage the growth of the private market. Butler and Pirie believe that if the Treasury is unhappy about this loss then the cost of the tax relief should be taken from the NHS budget on the grounds that the movement of people to the private sector will reduce the demand on NHS facilities. But Willetts and Goldsmith believe there are several disadvantages with the proposals for increasing tax relief. The most obvious is that the cost to the Treasury may be greater than the saving for the NHS.

Reforming the Delivery System

Much of the discussion about changing the delivery of health care in Britain has centred around making health care providers more efficient and accountable. One approach is to increase consumer choice by giving purchasing

power to individuals or to their agents. Other proposals advocate greater competition among providers which will then result in a more cost effective service. This approach almost certainly requires the introduction of better resource management - including clinical budgeting, audit, protocols and utilisation reviews - if hospitals are going to compete effectively. An alternative means of increasing accountability would be to strengthen existing arrangements for management and participation with the NHS.

(a) *Financial Power for Consumers*

One radical reform which has received much attention involves empowering consumers by allocating them their share of health expenditure in the form of vouchers or credit notes.

Three main sets of voucher proposals have been advanced. Whitney (1988) recommends a move to a full voucher system covering all health care needs, but excluding certain high-need groups. Letwin and Redwood propose the use of vouchers or credit notes for secondary care only. Green (1988) proposes the use of vouchers for those who wish to opt out of the public health system.

The details vary considerably between the different schemes, but in one variant individuals receiving a voucher would be required to register themselves with an authorised primary care provider who would then look after all their needs. This provider could be a GP or a group practice who would purchase all care on behalf of their patients. It is hoped by their advocates that the advent of vouchers would provide an incentive for development of American style health maintenance organisations (HMO) in Britain. In most cases the individual would be free to top up the voucher provision. This would lead to HMOs and insurance companies offering a range of options in terms of price and associated services which would generate additional funds for health care.

(b) *Provider Competition*

The key feature of most proposals for introducing competition among providers of health care is that responsibility for financing health care should be separated from its provision. For example, DHAs would act as the purchasers of secondary care for their population based on referrals from GPs. The advantages of internal/provider markets are thought to be that competition would be a spur to eliminate inefficiency. Efficiency gains may also result

from economies of scale through greater specialisation. Technological economies could be obtained from the shared use of expensive items of capital or departments, or from the superior performance of large teams of physicians.

Many commentators believe that provider competition would work most effectively with a new kind of health care management agency - such as US-style Health Maintenance Organisations - which would assess the health care needs of participating consumers and purchase appropriate services on their behalf.

(c) *Greater Public Accountability*

A number of proposals have been made for strengthening accountability mechanisms within the existing NHS.

Several commentators argue that the present arrangements of having the Management Board inside the DHSS is unworkable. Thus they argue the Management Board should be moved outside the DHSS, freed from political and civil service influence, and made responsible for the development and implementation of policy and monitoring the performance of the NHS.

NAHA believes that in order for better coordinated planning and greater accountability to be introduced into the existing NHS the responsibility for primary and secondary care needs to be merged. They believe that FPCs should be abolished and contracts established between GPs and district health authorities.

Finally, there is a general feeling that health care provision should be more responsive to the needs of the local community it serves. One way of achieving this objective would be to strengthen the powers of existing community health councils. An alternative approach would be to establish a clearer contractual relationship between citizens and the NHS. For example, DHAs could be required to make explicit their contractual obligations to the local population. The contract would state the treatment and length of wait individuals would expect for a given condition. The contract would be widely publicised and individuals may be given the right to purchase their own care and bill the health authority if the contract was broken. NAHA acknowledges, however, that this would be costly to the Exchequer and expensive to administer.

Commentary

The current debate about the future of the NHS ranges across the political spectrum, and embraces issues which are as old as the NHS itself. It is not surprising, therefore, that a number of strands command a wide measure of agreement. First, it is widely acknowledged that the demand for health care is increasing and that more resources are required to meet legitimate expectations. Second, there is a growing recognition that health services and their management structures need to be much more responsive to the wishes and preferences of consumers. Finally, almost every contributor to the debate acknowledges that incentives to improve efficiency, accountability and quality control need to be strengthened whatever form of health care delivery system is agreed upon.

Despite the large measure of agreement in the analysis of future health care needs, many important differences have emerged as to the best means of achieving the objectives of a modern health care system. First, there is considerable division about whether extra finance should be obtained largely via the citizen as a taxpayer or via the individual as a consumer. Second, there is dispute about whether responsiveness to consumers can best be achieved by enabling people either to vote with their pockets or to have more voice within an essentially public system. Finally, there is much disagreement about whether incentives within the health care system can best be brought about either by administrative reform, or by limited competition in relatively constrained provider markets, or by moving towards a much more highly developed pluralistic health care market.

One of the principal features of the debate is that rhetoric is more apparent than evidence. Many of the proposals which have received most attention have been expressed at a level of generality without reference to specific details which would make their evaluation that much easier. Nevertheless, there are a number of concerns which can be identified and which need to be addressed before decisions about the future shape of health care are determined.

First, it seems to be the case that a more pluralistic health care system almost certainly involves dead weight costs at least in the short term. For example, at least some of the money which would have to be invested in tax reliefs, start-up costs, the development of spare capacity might better be

deployed into immediate improved patient care. Advocates of radical reform need to persuade others that the long term benefits of a much more developed mixed economy of health care would outweigh the inevitable short term costs. Second, there is a serious concern that a more pluralistic health care system would reduce the important even if intangible sense of social cohesion if it resulted in the effective residualisation of the National Health Service in a manner analogous to developments in public sector housing. Finally, some concern has to be expressed at the narrowness of the present debate with its focus on the finance and delivery of health services. Insufficient attention is being paid to measuring health outcomes and to improving the health status of the population by developing a more sophisticated healthy public policy.

3. ENDURING RESOURCE ISSUES

Whatever the outcome of the Prime Minister's review of health care, certain enduring issues about the allocation and use of resources will continue to demand close attention. First, some form of resource allocation between local health agencies will mean that RAWP remains a live issue in the future (1988). Second, in thinking about the most effective use of health care resources it is clear that much more attention needs to be given to the consequences of incentives for both providers and consumers. For the purposes of this brief review we will focus on some of the financial and non-financial incentives for providers. As far as consumers are concerned, brief reference will be made to patient charges.

Regional Resource Allocation

In 1948 the NHS inherited a highly uneven pattern of services, the quality of which varied widely from locality to locality. Although the service was able significantly to improve standards during the first twenty years or so of its existence, differences in funding levels between the English Regions remained considerable. This was because extra resources were allocated largely in relation to existing local commitments.

This 'territorial injustice' received a good deal of attention in the late 1960s and in 1970 the 'Crossman formula' was introduced, which gave much stronger emphasis to the size and structure of the populations being served by

Regions. Then following the 1974 reoganisation a working party (known as RAWP) was set up to look further at resource allocation.

Briefly, RAWP calculates 'target' shares of NHS resources for each Region, based on their populations weighted for age, sex and mortality/morbidity differences. Adjustments for bed utilisation rates were built in to the scheme in the late 1970s, whilst a special London cost weighting factor was adopted in 1980/81. Teaching costs are also allowed for, although some authorities still argue that the system tends to penalise London, with its unusually high concentration of teaching hospitals.

In the ten years or so since RAWP was first implemented, the differential between the richest and poorest regions has been reduced from twenty-six to eleven per cent. However, there is still a high level of debate as to the desirability or otherwise of this process.

First, the reliance on measures such as standardised mortality ratios as proxy indicators of sickness in the community has been questioned. For example, it has been argued that varying levels of ill-health between or within Regions are not necessarily caused by macro-level differences in NHS provision.

Second, some commentators have suggested that in times of relatively static NHS resource levels the disruption and distress caused to RAWP resource losing localities has outweighed the advantages accruing to the resource gaining localities. This point applies to both national and Regional RAWP schemes, although it is the latter which have been seen as affecting some Districts particularly adversely.

Third, RAWP does not take account of the availability of family practitioner and personal social services. This failing could have led to some unwarranted NHS resource shifts away from certain poorer inner city areas in particular. More integrated approaches may be needed in the future.

Fourth, given the increased mobility of the population it is possible that more attention should be paid to exploiting resource concentrations more effectively, rather than redeploying them. One failure of the London teaching hospitals, it could be said, was they did not sufficiently research and advocate this possibility in the mid-1970s.

Finally, it should be noted that the other parts of the UK have also embarked on scheme similar to RAWP. Scotland has SHARE and Northern Ireland PARR, for example. But these two countries both enjoy levels of NHS funding twenty per cent or so above the England and Wales mean figure. The justice of this situation has never been really established, a fact made all the more disturbing by the observation that, if anything, the divergence is increasing rather than decreasing.

Notwithstanding an appreciation of these criticisms, the most recent review of RAWP by the NHS Management Board (DHSS, 1986) concluded that the formula remained the best way of achieving regional equity in the NHS. It is recognised, however, that further refinements may be necessary, and the Board has called for more research into measures of morbidity and social deprivation, the costs of teaching districts and the inclusion of the cost of out-patient and accidents into cross boundary flows.

Incentives for Providers

It is important to recognise that a series of incentives and disincentives are implied by any method of financing, organising and delivering health care (Drummond, 1988). In the past, when changes in the organisation of the NHS have been discussed, attention has been focussed on organisational structures, roles and relationships, and professional and managerial accountability. Whilst these issues are no doubt important, the underlying incentives for professionals implied by different forms of organisation of the NHS have been relatively underexplored.

For example, it is not inconceivable that the prevailing financial or non-financial incentives encourage professionals to act in a way that is against their better judgement. Clinical procedures undertaken primarily for medico-legal reasons might be a case in point.

(a) Financial Incentives

A wide range of financial initiatives have been used to influence the behaviour of health care professionals payment mechanisms, prospective reimbursement schemes and budgetary reform. In most countries health care professionals are paid by salary, capitation fee, fee-for-item of service, or some combination of these methods. It is important to consider, therefore, to

what extent payment is linked to the more effective and efficient use of health care resources?

In the USA prospective reimbursement schemes have been used both in the primary and secondary care sectors to bring about more effectiveness and efficiency in health care provision. They impact both on the behaviour of clinicians and managers and have obvious relevance to the NHS, given the discussions about health maintenance units and the extension of the 'internal market' in health care.

Under clincial budgeting, a budget is agreed for a clinical practitioner, or clinical team, on the basis of a plan for the year's clinical activity. Periodic feedback is given on the use of resources and incentives may be given for making resource savings.

The other type of budgetary reform which has been suggested as a way of changing incentives is client group budgeting. The interest in this stems from the problems arising when the responsibility for caring for individuals is fragmented, involving a range of statutory and non-statutory agencies. Proponents of client group budgeting argue that, given this situation, the most logical course of action would be to set up an agency holding the budget for (say) care of the elderly and to let it buy in the services it considers appropriate for the care of the individuals concerned, from whatever source.

(b) Non-Financial Incentives

Most reviews of financial initiatives quickly raise issues concerning the quality of care. They need to be supplemented, therefore, by non-financial incentives. Two examples are considered here: the feedback of information on professional practice and the development of clinical guidelines or protocols.

Many financial initiatives have an information component. For example, clinical budgeting involves the feedback of information on resource consumption and costs to clinical teams. Prospective reimbursement schemes involve the publication of the agreed reimbursement rates, which then act as an impetus for individual institutions to examine their own costs. But what is known about the effectiveness of information feedback alone?

Table 1 NHS Patient Charges and Percentage of Average Treatment Cost Met by the Charge, 1979-86

Date	Prescribed Drugs			Dental Treatment		
	Charge (£)			Charge[1] (£)		
	Actual	Real[2]	%	Actual	Real[2]	%
1979	0.20	0.20	9.5	5.0	5.0	53.8
1979(May)	0.45	0.42	18.7	7.00	6.60	62.5
1980(June)	0.70	0.58	33.0	8.00	6.62	58.4
1981	1.20	0.74	35.3	9.00	6.65	57.3
1982	1.30	0.88	34.2	13.00	8.78	76.0
1983	1.40	0.91	34.1	13.50	8.77	74.6
1984	1.60	0.99	36.4	14.50	8.95	74.4
1985	2.00	1.18	41.7	17.00[3]	9.99[3]	84.2[3]
1986	2.20	1.27	43.1	17.00[3]	9.59[3]	78.2[3]

1. Maximum charge for routine course of dental care
2. In May 1979 prices
3. Underestimates owing to additional charge of 40 per cent of cost of treatment in excess of £17.00

Broadly speaking clinical guidelines fall into two categories. There are those that deal with procedures; for example, should preoperative x-rays be given routinely? Others deal with the system for providing health care; for example, what would be the most appropriate method of organising a screening and treatment programme for hypertension? The consensus conference approach, embraces both types of guideline.

User Charges

Patient charges were first introduced into the NHS in 1951. In response to demand far outstripping expectations, charges were imposed on the supply of spectacles and dentures. These charges were extended to prescribed drugs and dental care in 1952 and have remained to date, with the exception of the period 1965-8 during which the prescription charge was abolished.

Until 1979, increases in the levels of charges were infrequent and generally in the form of "catch-ups" with inflation. Since 1979, the present Government has imposed regular and frequent increases in the levels of charges over and above the rate of inflation. For those patients subject to charges, both the absolute and proportionate contribution to the cost of care has increased considerably. In particular, the real value of the prescription charge has increased over 550 per cent since 1979 while the real value of the maximum charge for dental treatment has more than doubled (see Table 1).

For the future, options for raising additional revenue from patient charges appear to be restricted to those services for which charges are already made. Charges on other services, such as hospital inpatient stays and outpatient visits, would be costly to collect. Furthermore the majority of users of these services are likely to be exempt from charges.

The Government has already proposed the extension of charges in primary care to cover eyesight tests and dental examinations. However the empirical evidence analysed by Birch suggests that the revenue generated by those charges may be less than expected. The remaining options facing the Government would appear to be threefold. First, the current policy of regular and frequent increases in the real value of charges could be continued. Second, it would be possible to remove or restrict existing exemptions from charges which would increase the 'revenue base' of the charge, and be in line with current Government policy of targetting benefits to the poor. The third

option would be to change the basis of charges from the deductible or fixed charge to a fixed rate co-payment subject to an overall deductible to protect those patients in the upper tail of the distribution of service costs. A co-payment would relate patients' contributions to service costs directly.

4. HUMAN RESOURCES AND RELATIONSHIPS

Health care is all about people and their relationships to each other: the patient and the professional; the professional and the manager; the individual and the family; the individual and the state. The central feature of these relationships concerns dependence, interdependence and independence. However, these relationships are changing. Many of the fundamental assumptions about the nature of responsibilities, rights and freedoms are being questioned. A variety of forces are operating. The future will be shaped not only by the relative strength of these forces but also the power of individuals, organisations and government to use them for their own purposes. The King's Fund Conference will examine some of these changing relationships. In this background paper, however, we examine some of the forces which are changing the context in which health care is provided.

The people needing care

Medical advances have led to many people living with conditions from which they would have died in earlier periods. But it is the rising tide of frail elderly people which is most evident.

Government projections indicate an increase in population to 60 million by 2025 (compared to 56.6 million in 1985) with 19 per cent of people being over 65 (compared to 15 per cent in 1985), an increasing proportion of them being over 75 and a projected doubling of the over 85s from 0.7 million in 1986 to 1.4 million in 2025.

Elderly people are the major users of health care, not only because of chronic conditions but even in acute care their treatment may take longer and be more complex than for younger people. Even if the new generations of elderly people are fitter and healthier than those in the past, there will still be many questions about how health care can be geared to meet their more complex

needs, how care is to be paid for and equally important who are the people who are to provide care.

The Care Givers

Traditionally caring, whether formal or informal, has been seen as the responsibility of women. In the formal sector eighteen year old women have been the mainstay of recruitment into general nursing and the paramedical professions, with a great deal of health care being provided by student nurses and auxiliaries. Women are the expected informal carers: of children, of parents and of neighbours and friends.

All this, of course, is changing. There are fewer eighteen year olds than ever before and we know from current births that this trend will continue well into the 1990s. The cohort is expected to be 35 per cent smaller in 1995 than it was in 1982. Also there are increasing opportunities for young women, many, including medicine itself, with higher status and pay than nursing and the other caring professions. Meanwhile more women are now in paid employment with increasingly shorter breaks being taken for child raising. This trend offers opportunities as well as threats: there are many more women who are available to be paid carers if only the status and organisational arrangements for such work can be changed. On the other hand many fewer may be willing to be informal carers. We appear to be heading for a clash between expectations and firmly held beliefs about whose job it is to care, along with a government intent on moving more responsibility into the informal sector. A partial alternative may be to develop imaginative ways of tapping the potential of other groups [for example the "young" elderly and unemployed people] who do have the time to care.

The Nature of Work

In thinking about the future, it would be a great mistake to assume that work will go on in much the same way; it is not simply a question of finding the people to do it and making minor adjustments to structures to facilitate the changes. The nature of work is changing as Gershuny (1983) and Handy (1985) have indicated.

Health care at present is heavily dependent on 'hands-on' care. However, Gershuny's observations of society suggest that this may not always be so. As society gets richer people's horizons expand and new wants and tastes develop.

In the "post-industrial" society more people are found to be employed in the service sector compared to agriculture and manufacturing. However, Gershuny's investigations show that those employed in the service sector are not so much employed in providing direct services themselves as in proving goods through which the consumer can meet their own needs. "Needs once satisfied by domestic servants, train tickets, theatre seats, are later met by domestic machinery, motor cars, video recorders". In other words, goods make it possible for many services to become "self services". But as Gershuny points out this trend is not taking place uniformly across all sectors, with education and health still being relatively unaffected. Distance and interactive learning (again very much self-service provision) are recognisable changes in education. But will self-service develop in health care - is it possible or desirable? Some of the technological developments described below suggest that there are areas where self-service is emerging.

Handy's analysis concerns the changing relationship between employment and work - no longer should people expect full-time employment throughout their 'working' life. In addition to work done in the informal [mainly household] and black economies, work in the formal sector is likely to change to include at least three categories of workers:

* the organisation people - the 25/45 year olds devoting their lives to their careers within organisations and who are well rewarded by those organisations;

* the part-timers - who are brought in to carry out particular sorts of work, often women and often low paid;

* the consultants - those people organisations use to meet particular needs while keeping their employed workforce to a minimum. This group is not homogenous, it may include the self-employed who are seeking a greater proportion of leisure time, as well as those who have been made redundant or taken early retirement.

These different sort of workers can now be spotted in health care, for example, in the use of financial and management consultants, contracting out, early retirement and the use of agency nurses. Some women may have used the agency route to increase their earnings and to have greater personal choice

over their work. People who have experienced such flexibility may, however, be less willing to conform to rigid work schedules in future. In any event, these different sorts of workers are likely to pose managers with some interesting problems/opportunities in future in managing the workforce in health care.

Technology in Health Care

Medical technology, since the middle of this century, has changed the shape of health care. At present while technology is increasing the possibilities in health care there is a sense that this is "more of the same" rather than bringing radical change, that is: improved diagnostic techniques, more heroic treatment and a general tendency for shorter lengths of stay and increased day case work. However, more fundamental change may be on its way . Information technology and biotechnology provide examples of the potential. Information technology may allow more control to be in the hands of the health care user. Medical information may be available to people through their home computers and interactive computer diagnosis by the user is a possible scenario. Such developments could significantly alter the power relationship between the patient and professional.

Biotechnology, particularly biosensors, could add to this trend. If diagnostic kits for a variety of conditions could be purchased over the counter then again the patient is much less dependent on the professional. This is not unlikely, pregnancy testing kits are already available, blood glucose, HIV and even kits to detect genetic disorders may be around the corner.

Again, such technologies offer the patient much greater control over their own health care - perhaps a move towards the self-service economy. Similarly, aids for disabled people [including the possibility of robots] may lead to individuals having greater control over their own living, by purchasing their own aids.

The question, of course, with new technologies, is who controls them? Will they really be available to users or will they remain in the hands of professionals? Will there be a radical shift in the relationships between professionals and users, and just how far can health care move from one person providing care for another?

Power and politics

The trends described so far are common across the developed world. However they are, of course, being played out in different ways depending on the culture and politics of particular society. In Britain the historic upper and lower class distinctions are becoming less important than the employed/unemployed split, and the so-called North-South divide - equally important in terms of patterns of health and ill-health as it is in employment and wealth issues. Another factor is the diverse black and ethnic minority populations with their differing values and expectations. The disadvantaged, whether unemployed, black, or both, have little opportunity to influence the overall shape of health care, except that in some future scenarios these underprivileged groups may be the recipients of second class public sector care. Their lack of impact is of course, due to their lack of power and those with particular concern for the disadvantaged have long talked about empowerment. Empowerment through knowledge, money and a changed relationship with the established institutions including professionals.

Recently empowerment has become the buzz word of both the left and right in politics. The Thatcher government has made individual responsibility a core value of its administration but by design or default is now recognising that can only be achieved through empowerment. There are also clear signs of moves to control the power and monopolies of the professions. Arguments which correspond, but for quite different reasons, to what the left have been arguing for a much longer period.

Superficially at least, Britain would seem to have gone through a major shift in values during the Thatcher administrations. Whether they will prove lasting remains to be seen, as does the question of whether existing social institutions will allow individuals to become truly empowered and whether and how the disadvantaged can be protected in a more thrusting, individually assertive society.

This brief discussion of some key trends in the demand for and supply of health care provides a context in which some important human relationships are changing. The conference will focus on three of them:

* the individual and the State;
* users and professionals; and
* professionals and managers.

5. PROMOTING HEALTH

The principal focus of the current health debate is about financing and delivery mechanisms. Issues relating to health itself as distinct from health care have been relatively neglected. But if avoidable illness and mortality are to be reduced and the health status of the nation further improved then policies for disease prevention and health promotion need to be strengthened. British health status indicators have improved since 1948, largely as a consequence of greater prosperity, but there is no room for complacency. There is considerable scope for increasing our understanding of observed patterns of morbidity and mortality and seeking to develop new forms of intervention which ameliorate the worst aspects of the nation's health profile. One of the aims of the King's Fund Conference is to introduce some discussion of how this might be attempted.

As background to the discussion, however, it is important to take note of certain key trends. These include:

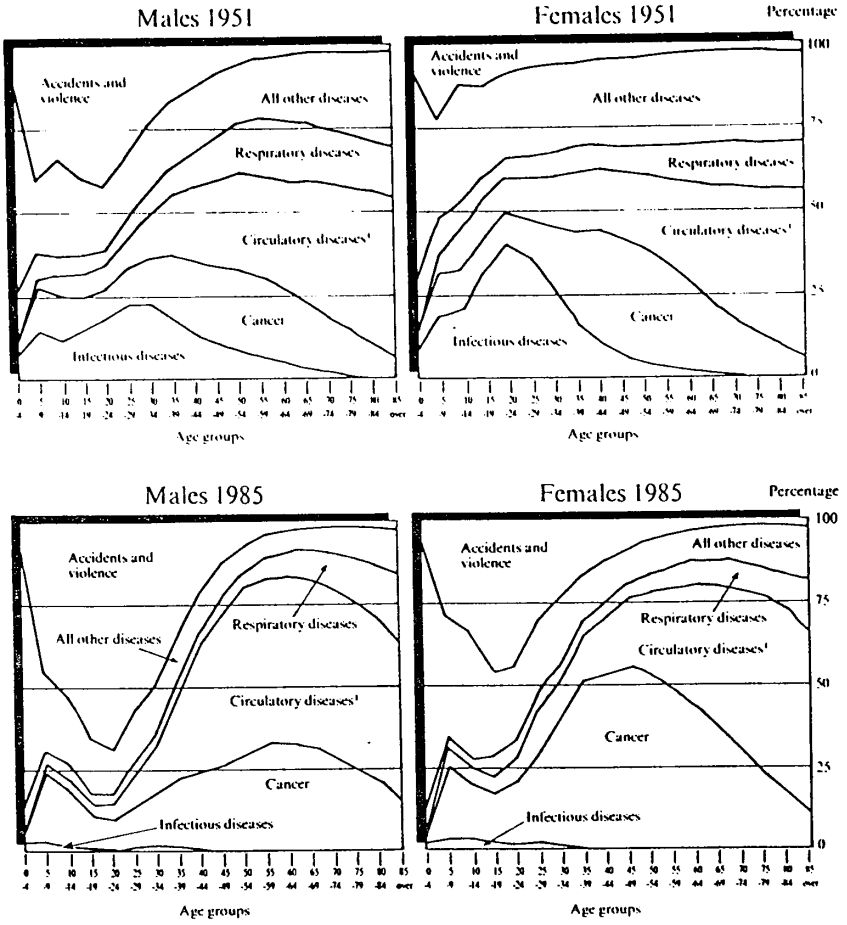
* Changing patterns of disease and perceptions of health
* British health status indicators in a comparative perspective
* Gender and class inequalities in morbidity and mortality

Changing Patterns of Disease

During the lifetime of the NHS, there have been significant improvements in the health of the population. These improvements have been brought about by a variety of factors. Higher incomes and better living standards have been important, and advances in medical care and health services have also made a contribution.

Figure 2 shows selected causes of death for men and women in different age groups in 1951 and 1985. Infectious diseases have declined in importance while heart attacks, strokes and cancers have become more significant.

FIGURE 2 : SELECTED CAUSES OF DEATH: BY SEX AND AGE, 1951 AND 1985



¹Includes heart attacks and strokes.

Source: Office of Population Censuses and Surveys, General Register Office (Scotland): General Register Office (Northern Ireland)

However, infectious diseases become more virulent and prevalent from time to time as in the case of whooping cough and meningitis. New diseases also emerge, the most significant being AIDS. Accidents are an important cause of death at all ages but are particularly prevalent among younger age groups.

The improvements in health which have taken place during the last forty years have been most impressive in the first years of life. The expectation of life among people of working age and in retirement has increased much less. Although people are living longer, they do not always enjoy good health in the extra years of life gained. Many of the major causes of death today are responsible not only for premature mortality but also they result in restricted mobility, pain and suffering.

(a) Risks and the Demand for Health Care

There are a number of factors associated with changing patterns of ill-health which affect the demand for health care and which are worth noting. Some of these risks (Carr-Hill, 1988) include:

* Birth and Neo-natal risks
* Development problems and prospects
* Accidents at home and on the street
* Work-related accidents
* Lifestyles and behaviour
* Perceptions and tolerance of ill-health

The number of children born with congenital birth defects has fallen substantially in the last 30 years due to the impact of ante-natal screening. The trend may well continue but Swedish evidence suggests that there is a minimum rate of malformation that cannot be lowered.

Data on physique are often used as a sensitive indicator of health potential. Most countries in the northern hemisphere including Britain had a substantial increase this century, but it is worrying that domestically this increase has levelled out and heights have stayed the same since 1972. Carr-Hill suggests that the potential for health will not improve substantially over the next 50 years.

Accidents are the major cause of death amongst young people, even though absolute numbers are falling. It is less clear what is happening to non-fatal accidents. Reported accidents at home are rising and may be due to changes in the monitoring system or tolerance; they do however lead to increased demand on the NHS. The number of accidents involving cyclists has decreased but those involving cars and motorbikes have increased.

The number of fatalities at work has fallen, but trends in non-fatal accidents are difficult to assess. The changing pattern of employment and unemployment is likely to lead to an increase in accidents at work and therefore pressure on the health service.

The impact of changes in lifestyle on health services is not clear. Smoking has decreased but is worryingly high amongst adolescents. Drinking and heavy drinking is on the increase and this will affect future middle aged health and demand for care.

Spending on food has increased and evidence suggests that more people are overweight now than a generation ago. Also evidence shows the composition of our diet is worsening. Participation in exercise-related activities is increasing, but the health implications of this trend are unclear.

Finally, people are much more aware of being ill. For example, the General Household Survey shows a 50 per cent increase in self-reporting of long-standing illness in the adult population in the last decade or so.

(b) The Paradox of Health

The changing perception and intolerance of ill-health is particularly significant. In an interesting paper in the New England Journal of Medicine, Barsky argues that substantial improvements in health status have not been accompanied by improvements in subjective feelings of well-being. There are now higher rates of disability, symptoms and dissatisfaction with health reported.

Clinicians are more able to predict, detect, diagnose and treat a vast amount of disease. There have also been advances in preventative medicine and self-care. Yet, at the same time, surveys in America have shown that the proportion of people satisfied with their health and physical condition has

TABLE 2 : Trends in Life Expectancy, England and Wales, 1948-84

	At Birth		Age 1		Age 15		Age 45		Age 65	
Year	M	W	M	W	M	W	M	W	M	W
1948	66.4	71.2	68.0	72.3	54.9	59.1	27.4	31.5	12.8	15.3
1984	71.6	77.6	71.4	77.3	57.7	63.5	29.1	34.4	13.3	17.4
% Change	7.8	9.0	5.0	6.9	5.1	7.4	6.2	9.2	3.9	13.7

M = Men W = Women

Source: OHE, 1987

TABLE 3 : Comparative Changes in Health Status*

Indicator	England and Wales		OECD Average		Japan	
	M	W	M	W	M	W
Infant Mortality						
- 1950s	32.7	25.1	49.4	40.4	65.8	57.6
- 1980s	12.2	9.4	11.6	9.4	6.6	5.6
- ratio	.373	.374	.235	.233	.100	.097
Life Expectancy at Birth						
- 1950s	66.5	71.3	64.8	69.0	57.5	60.8
- 1980s	71.3	77.3	71.0	77.7	75.8	80.7
- ratio	1.072	1.084	1.096	1.126	1.301	1.327

M = Men W = Women

Source: OECD, 1987

TABLE 4 : Mortality of men by occupational class (1930s - 1970s) (standardised mortality ratios)

Class	1930-32	1949-53[a]	1959-63 unadjust	1959-63 adjst[b]	1970-72 unadjust	1970-72 adjst[b]	1979-83 Unadjust
1. Professional	90	86	76	75	77	75	66
2. Managerial	94	92	81	-	81	-	74
3. Skilled Manual & Non-manual	97	101	100	-	104	-	98
4. Partly skilled	102	104	103	-	114	-	114
5. Unskilled	111	118	143	127	137	121	159

Sources: Registrar General's Decennial Supplement and Occupational Mortality Tables.

Notes:

a) Corrected figures as published in Registrar General's Decennial Supplement, England and Wales, 1961; Occupational Mortality Tables, London, HMSO, 1971, p.22
b) Occupations in 1959-63 and 1970-72 have been reclassified according to the 1950 classification.

fallen from 61 per cent in the 1970s to 55 per cent in the mid-1980s. There seems to be a progressive fall in the threshold and tolerance for mild disorders and isolated symptoms, and an increased readiness to adopt the 'sick' role, seek medical care and acknowledge to others we feel ill. The standard of judging satisfaction with health has increased.

Health Status Indicators

By reference to conventional health status indicators the health of the British population has improved since 1948. Table 2 indicates that life expectancy has improved at all ages, although women have done better than men, markedly so after the age of 65. Similar progress can be demonstrated with infant and perinatal mortality statistics - two of the most common indicators of relative health performance.

But Britain has done less well than most other developed western nations. Table 3 compares infant mortality and life expectancy statistics for England and Wales since the 1950s with the average performance in OECD countries - which include Greece, Portugal and Turkey as well as Germany, Sweden and the USA - and the Japanese experience. In each case, the improvement in England and Wales is smaller than the OECD average and the comparison with Japan gives food for thought, particularly given its relatively low level of health spending.

In the light of these data it is particularly important to identify why some countries perform better than others. There is certainly no clear relationship between levels of health expenditure and health status indicators. The likelihood is that health care interventions need to be evaluated very closely before their successful transfer to other countries can be assumed. One area where the international evidence and experience is now relatively rich is that of variations in perinatal mortality (Oakley, 1988), and the prospects for policy development in Britain will be discussed at the conference.

Health Inequalities

When the Black Report was published in 1980 it highlighted the fact that despite 30 years experience of the NHS many class and gender inequalities had not decreased and in some cases had actually worsened. Table 4 illustrates the occupational class distribution of SMRs since the 1930s and reveals the

striking fact that the relative risk of premature mortality of men in class V compared with class I increased from 1.4 to 2.4 after the creation of the NHS. There are, of course, a host of caveats which need to accompany such statistics, not least because of the substantial changes in the occupational distribution of the workforce since the second world war. But there can be no doubt that an unambiguous "health divide" between manual and non-manual classes remains. Further evidence of continuing differences between classes in infant mortality is shown in Table 5. The absolute differences between classes I and V has narrowed substantially in the past 50 years but the ratio difference has remained broadly the same. Moreover, in some parts of the country there is evidence that for the principal risk factor associated with infant mortality - low birth weight - the class differences have increased. Table 6 shows that in Aberdeen the risk of low birth weight children in class IV and V relative to class I and II has increased from 1.5 to 1.7.

Some more of the most important facts relevant to a discussion of inequalities are set out below.

* Mortality rates of males are higher at every age than females and in recent years this difference has become greater
* Women aged 15-64 showed deteriorating SMRs for classes IV and V for both married and single women
* Over less than a decade, average maternal mortality has fallen by more than one-third, but rates for classes II, IV and V have remained approximately the same.
* Deaths per 1000 live births in England and Wales have fallen in all classes. Deaths in classes IV and V compared to I and II have increased between 1959-63 and 1970-72
* There appears to be evidence that as rates of child deaths from a specific cause reach very low levels, class gradients do disappear. The differentials between children 1 to 4 are very small, between 5 and 9 no difference, but 10 to 14 years old show an increase in differentials.

Inequalities in mortality rates, however, are only part of the story. It is increasingly argued that morbidity is one of the most important indicators of health status and inequality, especially as people now live longer and suffer more degenerative disease (Blaxter, 1988). Morbidity data from the General Household Survey indicate that large inequalities between groups exist. These

TABLE 5 : Trends in Infant Mortality by Occupational Class

	Infant deaths per 1000 legitimate live births				
Social Class	1930-32	1949-53	1970-72	1978-79	1984
I	32	19	12	10	6.5
V	80	42	31	18	13

Source: Townsend and Davidson 1982, Table 10, p.71; OPCS, 1984, DS No 6.

TABLE 6 : Numbers of Low Birth Weight* Children per Thousand First Born In Aberdeen 1950s, 1960s, 1970s

Social Class of Father	1951-60 %LBW	1961-70 %LBW	1971-80 %LBW
Professional, Employers and Managers I + II	59	70	54
Other Non-Manual III NM	55	73	69
Skilled Manual III M	56	55	69
Semi-Skilled and Unskilled manual IV + V	89	89	93
All	64	76	74
Total N	10608	9604	7307

* Low birth weight is conventionally agreed to be under 2,500g (approx 4.5lb)

Source: Car-Hill (1988)

differences are greatest for limiting long-standing illness. Class differences for acute illness are only apparent after the age of 45. Blaxter concludes that health deteriorates more rapidly in older people who are socially disadvantaged.

There can be no doubt that there are significant differences in the health status and experience of different sections of the population. But these differences are not always uni-directional and their significance and the policy implications of dealing with them are not always apparent. One of the aims of the Conference will be to tease out some of the complex issues associated with inequalities in health as the basis for considering what new policy initiatives might be worth developing.

More generally, it has been clear for some time that improvements in health status cannot be achieved by medical intervention alone. The "social patterning" of illness and death by income, gender and occupation; the links between lifestyle and health and the relationship of all these to the broader social and economic environment bear witness to the importance of a wide-ranging "Healthy Public Policy" approach. The "Health for All" strategy of WHO is perhaps the best known atttempt to draw together the diverse strands of a healthy public policy. A number of countries are now seeking to reflect this framework in their policies for promoting health; avoiding disability and reducing premature mortality.

REFERENCES

ACHCEW (1988), Financing the NHS: The Consumer View, ACHCEW, London.

A.J. Barsky (1988), "The paradox of health", New England Journal of Medicine, 318, 18 February, 414.

Gwyn Bevan (1988), "Financing the Organisation and Delivery of Services", mimeo.

Stephen Birch (1988), "Patient responses to health care charges: implications for NHS performance", mimeo.

Mildren Blaxter and Judith Nickson (1988), "The health and lifestyle survey", mimeo.

L. Brittan (1988), A New Deal for Health Care, Conservative Political Centre, London.

British Medical Association (BMA) (1988), "Evidence to the government internal review of the National Health Service", British Medical Journal, 296, 14 May, 1411-18.

E. Butler and M. Pirie (1988), Health Management Units, Adam Smith Institute, London.

Michael Drummond (1988), "Incentives for Health Care Professionals", mimeo.

Roy Car-Hill (1988), "The inequalities in health debate: lessons for health policy", mimeo.

Department of Health and Social Security (DHSS) (1986), Review of the Resource Allocation working Party Formula, DHSS, London.

J. Gershuny (1983), Social Innovation and the Division of Labour, Oxford University Press, Oxford.

D. Green (1988), Everyone a private patient: An analysis of the structural flaws in the NHS and how they could be remedied, Institute of Economic Affairs, Hobart Paperback 27, London.

C. Handy (1985), The Future of Work, Blackwell, Oxford.

IHSM (1988b), Alternative Delivery and Funding of Health Service, Working Party on Alternative Delivery and Funding of Health Service, Final Report, IHSM.

Oliver Letwin and John Redwood (1988), Britain's Biggest Enterprise: ideas for radical reform of the NHS, Centre for Policy Studies, London.

Robert Maxwell (1988), "Life begins at 40? The NHS in 1988", Health Service Management, June, 10-13.

NAHA (1988), The Nations Health - a Way Forward. NAHA's evidence to the Prime Minister's Review of the NHS 1988, NAHA, Birmingham.

Ann Oakley (1988), "Perinatal mortality: problems of social and health care policy", mimeo.

Office of Health Economics (OHE) (1987), Compendium of Health Statistics, OHE.

Organisation for Economic Cooperation and Development (OECD) (1987), Financing and Delivering Health Care: a comparative analysis of OECD countries, Social Policy Studies No. 4, OECD, Paris.

J. Redwood (1988), In Sickness and in Health: Managing Change in the NHS, Centre for Policy Studies, London.

Charles Webster (1988), The Health Services Since the War: Vol. 1, Problems of Health Care, The National Health Service before 1957, HMSO, London.

R. Whitney (1988), National Health Service ... a Modern Solution, Shepheard-Walwyn, London.

D. Willett and M. Goldsmith (1988), A Mixed Economy in Health Care; more spending and same taxes, Health Review No. 2, Centre for Policy Studies, London.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