HEALTH RESEARCH IN ENGLAND

a topic for debate

Based on the proceedings of a symposium chaired by Professor Sir John Butterfield at the Royal College of Obstetricians and Gynaecologists on the 11 September 1980

Written by David Taylor
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Written by David Taylor with an appendix by Professor Alan Williams
The Office of Health Economics was founded in 1962 by the Association of the British Pharmaceutical Industry. Its terms of reference are:

To undertake research on the economic aspects of medical care.
To investigate other health and social problems.
To collect data from other countries.
To publish results, data and conclusions relevant to the above.

The Office of Health Economics welcomes financial support and discussions on research problems with any persons or bodies interested in its work.
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This paper is derived from the proceedings of an Office of Health Economics Study Day, held at the Royal College of Obstetricians and Gynaecology on 11 September 1980. OHE is grateful to all those taking part. Particular thanks are due to Professor Sir John Butterfield who acted as Chairman for the day and to Professor Arthur Buller, Sir Alexander Merrison, Professor Sir John Brotherston, Professor Alan Williams, Professor Margaret Stacey, Steven Cang and Robert Maxwell, all of whom addressed the meeting. Because of OHE's particular interest in health economics research Professor William's paper is included as an appendix to this publication.

During the preparation of this paper effort has been made to confirm the accuracy of the information it presents about the evolution of health-related research in England. However, in dealing with interactions influenced by the personal relationships between key individuals and in some areas, rightly or wrongly, coming under the rules relating to Civil Service confidentiality complete certainty as to the course of events is impossible to achieve. Also difficult, and in certain cases ultimately subjective, judgements have had to be made in, for instance, attempting to balance the criticisms made of academic research on the one hand (which may sometimes imply questioning at a personal level) and comments relating to large, relatively impersonal bodies like the MRC and the DHSS on the other.
Introduction

In the period following the Second World War spending on health services increased significantly in all developed countries. In Britain, with its tax funded NHS, real term outlay rose more than threefold between 1949 and 1980. The proportion of the gross national product devoted to health care moved up in the same time from under 4 per cent to over 5-5 per cent.

In other parts of Western Europe and North America growth in health costs has been more spectacular. From a base level in the late 1940s and early 1950s below Britain’s outlay, average spending in the richer nations now approaches 8 per cent of gross national product. The reasons for this difference probably relate primarily to the more favourable rates of economic growth enjoyed by countries such as France, Germany, Holland and Canada.

However, since the oil price rises commencing in the mid-1970s and the consequently decreased expansion of the global economy governments throughout the developed world have begun to show a desire to limit increases in health spending. This tendency is observable whatever system for funding health care is predominately employed and whatever the political ideology publicly espoused by the government in power. It is, for example, as apparent in the United States, with its emphasis on insurance systems and in some instances market competition between service providers, as it is in Sweden’s NHS-like health service.

There is thus a long-term likelihood that the growth resources available to health care agencies will be increasingly restricted. In such circumstances the conflicting demands for funds between existing service alternatives and those that will emerge as a result of future innovation will become progressively fiercer. Indeed, some commentators (especially in poorer countries like Britain) may argue that since even today it is impossible to meet all health care requests investment in biomedical research or in evaluating the outputs of existing therapeutic intervention is an unaffordable luxury, the money involved being better spent where it is needed ‘in the field’.

This view is suspect for several reasons. One is that the identification of ‘need’ and its efficient fulfillment in the health sphere is in itself a difficult task. All too often those attempting it have in the past relied solely on the intuition of service providers rather than on disciplined analysis of consumer experience and the full range of organisational options. Scarcity of economic resources is an argument for, not against, the development of health (and social) services research (HSR) designed to help ensure that health funds are used to maximum effect. Similarly biomedical and allied clinical research can lead to discoveries which open up fundamental new routes for the combat of disease, so leading to increased health service productivity.

In the light of such considerations and recently announced changes in the economic relationship between the Medical Research Council and the Department of Health and Social Security this paper describes and comments upon the development of biomedical and health services research in England. Particular attention is given to the latter topic because the future of HSR is currently under debate. Despite the fact that in the 1960s British workers were widely regarded as being in the vanguard of this field there are today fears that institutional arrangements introduced in the 1970s failed to provide a secure basis for an active and fruitful research community. And there are also conflicts of opinion as to what alternative structures might prove most desirable. This study outlines the choices confronting policy makers and the differing implications they may carry for the ultimate ‘customers’ of all health services research, the people whose well-being may today or in the future depend on the availability of appropriate health and social care.

1 A fuller definition of HSR is provided later. Throughout this paper health services research (HSR) should be taken to include research into social support directly relevant to health services provision. ‘Health research’ is used to refer to the broad range of research on health as a topic, from biomedical through clinical to HSR.
2 Scotland has its own, independently evolving arrangements for HSR.
The historical background

The oldest current recipient of British government funds for scientific research outside a university setting is the Royal Society. It was founded in the 1660s, although it was not until some two centuries later, in 1849, that state-raised resources became available to it.

The records relating to the establishment and distribution of the original grant to the Royal Society in the period up to the First World War cast an interesting light on modern debates on research topics. For example, some politicians claimed (probably out of a desire to restrict government spending) to be worried about a lack of 'accountability' of those using such public funds to the community's elected representatives. Whilst those conducting research feared that the competition to gain or retain state contributed resources would oblige them to display excessive intellectual conformity and/or lead to a situation in which academic rank and respectability rather than the pursuit of individual excellence would dominate the goals of the Society. Those who failed to obtain grants for their work also argued with some justification that the group in control of fund allocation was excessively inclined to direct money to its London-based 'favourite sons' (Macleod 1971).

Official support for health-related research also dates from the mid-nineteenth century. One notable example relates to the establishment of William Farr as the first Registrar General in 1839. A second stems from the work of Sir John Simon at the General Board of Health (1848–58), at the Privy Council (1858–71) and then at the Local Government Board, the forerunner of the Ministry of Health. However, it was not until the twentieth century that, following the 1911 National Insurance Act, the Medical Research Committee (1913-20) was created. As immediate antecedent of the Medical Research Council the formation of the committee was the single most significant step in the formation of the structures supporting the modern British medical research community, albeit that it was an innovation which appears to have been to a degree fortuitous. The clause of the 1911 Act which allowed the funding of the Committee referred primarily to tuberculosis, in respect to which disease a Royal Commission established in 1901 but active throughout the decade prior to the National Insurance Act had called for (and pioneered) an active research approach3 (Landsborough Thompson 1973).

After the First World War the Ministry of Health Act (1919) provided the basis for the formation of both the Medical Research Council (MRC) in close to its current form and the then new Ministry of Health. A central facet of the relationship between the two

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3 It is of interest in the context of this paper that the Departmental Committee on Tuberculosis appointed by the Treasury in 1912 opined not only that research money should be spent on clinical, bacteriological, pathological and allied investigations but also that 'a statistical and sociological department' be set up backed by library and publishing facilities.
was the Haldane/Addison principle that scientific research should be free of immediate Ministerial direction, a provision at the start ensured by the fact that the MRC operated under the aegis of a committee of the Privy Council. In 1965 this arrangement was changed in that responsibility for the funding of the MRC was placed in the hands of the Secretary of State for Education and Science. But the MRC (which serves the entire UK) has never been controlled by the Ministry/Department of Health; the two bodies retaining distinct roles defined in a mutually acceptable ‘concordat’. Figure 1 shows the first version of this agreement, privately drawn up in 1924 between Sir Walter Fletcher (the father of Professor Charles Fletcher) and Sir George Newman. It was put on public record in 1928.

To many commentators the achievements of the MRC appear to justify fully the independence it was initially given and has subsequently retained. This confidence is reflected in the fact that it in part served as a model for the formation of other research management agencies, the Agricultural Research Council (ARC) in 1931 and the Science Research Council (SRC), Natural Environmental Research Council (NERC) and the Social Science Research Council (SSRC), all of which came into being in the mid 1960s. Yet it must also be admitted that the image of the MRC is also in some eyes tarnished by negative characteristics. Critics might argue that in addition to quite outstanding achievements in fields like, say, the discovery of and subsequent research on interferon and its activities in molecular biology, the Council has also fostered a somewhat isolated spirit within its workers. This may to a degree have impaired the development of close relations between the MRC and other agencies in the community, whether commercially or social services orientated.

The needs of the NHS

During the first few decades of the existence of the MRC and the Ministry of Health (the responsibilities of which were mainly confined to the public health field) the need for formal cooperation between the two was limited. Even following the formation of the NHSSoon after which the Chief Medical Officers for the Ministries in England and Scotland were appointed ‘assessors’ to the MRC) there seemed no need to change fundamentally the relationship established by the 1924 concordat. In the period when the key priority was the control of infectious disease, collaboration between the MRC and the Ministry was relatively straightforward. Perhaps the most significant innovation of the 1950s was the establishment of an MRC Clinical Research Board, following a joint MRC/Ministry of Health/Scottish Home and Health Department Report produced in 1953.

By the start of the 1960s the situation had begun to change. More complex problems relating to issues like population screening, organ transplantation and the provision of care and social support for disabled client groups emerged. As a result some individuals at the Ministry became aware of research needs which lay outside the MRC’s established scope of activity (Cohen 1980a). In response, from 1962 onwards, the Ministry began to build up its own research capacity with, for example, the formation of the MHOHSS backed research units (of which there are currently some 38). The period between 1962 and the early 1970s was marked by a relatively free and flexible expansion of health services research inspired by individuals such as John Cornish, Max Wilson and Dick Cohen as well as the then Chief Medical Officer of the DHSS, Sir George Godber. To some commentators (not least those in receipt of funds) this period appears, in retrospect, to have been a ‘golden age’ of health services research in this country.

However, it has been pointed out that this progress took place against a background of growing concern about the organisation of scientific research in Britain (Whitehead 1978). This started with a review of the role of the Research Councils initiated in the late 1950s when Lord Zuckerman was scientific advisor to the Prime Minister. It was followed by the Trend Report which led through the Science and Technology Act to the dissolution of the Department of Scientific and Industrial Research (1916–65) and the establishment of the SRC and the NERC in 1965.

With regard to the MRC there was continued political concern throughout the 1960s that it allegedly tended to ignore some of the practical health care problems of the nation in fields like mental illness and handicap, preferring to devote its funds to ‘fundamental’ rather than ‘applied’ research. But it was the ARC which came under the most direct attack. The suggestion of the unpublished 1970 Osmond Report that the ARC should come under the control of the Ministry of Agriculture was seen as an assault on the entire Research Council system. The latter was defended the following year in the Dainton Report, which was published as a part of a Green Paper. The other half was the Rothschild Report, which was in fact the Heath administration ‘Think Tank’s’ analysis of the arguments put forward in both the Osmond and Dainton Papers.

Developments in the 1970s

It was the Rothschild Report which caught public attention and which was extremely influential in the
the events relevant to health services research and It is outside the scope of this paper to examine in full although even so it was in some respects more compound the problems of the new system; positions due to career moves may have tended to leave him relatively little time to support Sir Douglas who had adopted an advisory role. 6 And since the Department's policy forming divisions had had little time to adjust to the new planning machinery to meet the challenge. 5 However, in England the new arrangements ran into difficulties stemming from a variety of causes. These included factors relating to the key personnel involved, the problems facing the NHS from 1974 onwards and the difficulty of defining and fulfilling the envisaged customer role. For example, shortly after Dr Cohen retired and Sir Douglas Black accepted the position as Chief Scientist, Sir George Godber also left the Department, to be succeeded as Chief Medical Officer by Sir Henry Yellowlee. The latter was soon faced by the tribulations and industrial conflicts of the newly reorganised NHS, leaving him relatively little time to support Sir Douglas who had adopted an advisory role. 6 And since the Department's policy forming divisions had had little time to adjust to the new planning arrangements or to lay down coherent approaches to priority identification (the first departmental publication on priorities did not emerge until 1976) it was hardly surprising that civil servants found it hard to take a fully effective part in the new research commissioning process. The transience of their positions due to career moves may have tended to compound the problems of the new system; although even so it was in some respects more successful than has sometimes been alleged.

It is outside the scope of this paper to examine in full the events relevant to health services research and allied medical and social research which took place in the period 1974–1978. A number of other publications, notably those of the Nuffield Provincial Hospitals Trust and the Department of Government, Brunel University, serve as valuable guides to what occurred and also to the special grievances of groups like the DHSS Unit Directors (see Kay 1977, Whitehead and McLachlan 1978, Dollery 1978, Kogan et al 1980, Illsley 1980).

However, before moving on to discuss the current arrangements for health and medical research management and funding in England two points are of special note. The first is that it has been claimed that in originally introducing a three-tiered structure of committees 7 supporting the Chief Scientist the architects of the scheme were not merely attempting to mirror the revised structure of the MRC, which was planned at about the same time as the DHSS innovations (Cohen 1980b). Rather they had first envisaged an executive role for the Chief Scientist's organisation perhaps ranging right across the DHSS research responsibilities. It might be argued that it was in part because its functions did not in the event assume such dimensions which led to the apparent irrelevance and eventual dissolution of the upper two tiers, leaving only the Research Liaison Groups. The second is that at the start of the post-Rothschild arrangements officials of the DHSS and the MRC agreed a new version of the concordat (Buller 1980). This seems in effect to have ensured that the latter's pattern of activity would continue the same way as it had done before the changes of 1973, so to a degree nullifying the reforms' intended purpose.

The decision to transfer 25 per cent of the MRC's funds was based on the estimate that this proportion of the Council's work could not be described as 'fundamental' but was of potential practical relevance to the DHSS's role in terms of evaluating

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4 The ARC had half its resources transferred to the MAF. The NERC was affected to a lesser extent. The White Paper also provided for the establishment of an Advisory Board for the Research Councils (ABRC) to determine the relative funding of the recipients of the DES science vote and to advise on their development.

5 Amongst other changes introduced at that time was the appointment of the Chief Medical Officer and the Chief Scientist of the DHSS to full membership of the MRC.

6 This was consistent with the Rothschild recommendations, although the Department lacked the complementary R and D executive director originally envisaged. At the MRC the powerful figure of Sir Harold Himsworth was replaced by that of Sir John Grey.

7 The committee structure supporting the CSo was originally three-tiered, like that of the revised MRC structure. At the 'top' was Chief Scientist's Research Committee, with responsibilities for all aspects of DHSS/HPSS research. The Health Services Research Board, The Personal Social Services Research Group and the Panel on Medical Research had an intermediate role whilst below them were the Research Liaison Groups and the Small Grants Committee. Today only the RLGS and the SOC survive. See Kogan et al 1980.
Present arrangements for health research in England

social aspects of health interventions or, say, examining the toxic effects of environmental pollutants (Cohen 1980b). The object of the Rothschild linkage between the MRC and the DHSS was to encourage a more integrated approach towards issues of direct interest to the latter. Yet in reality the commissioning of research by the DHSS became little more than a ‘rubber stamping’ of the MRC’s independent plans. Indeed, the Department apparently tied its hands in relation to this matter in agreeing that all the transferred moneys should be used for research labelled as ‘biomedical’.

During 1977 a civil service management review of the DHSS was conducted, one of the products of which was a specific analysis of the Department’s R and D arrangements. This was produced at about the time Sir Douglas Black left his post as Chief Scientist for the Presidency of the Royal College of Physicians. Hence the appointment of the new Chief Scientist, Professor Arthur Buller, in 1978 provided a good opportunity for the implementation of the review’s proposals. These included bringing the spending of the Department’s biomedical and health, social services and social security research funds under the direct administration of the Chief Scientist, who retained an advisory role in relation to the three other areas of Departmental R and D, supplies, computers and building and engineering. To support the Chief Scientist in his new responsibilities the Office of the Chief Scientist (ocs) was formed comprising staff of two types, those directly responsible to the former and professional staff administratively responsible to the head of their professional divisions (Buller 1980). These last include five doctors and three (part-time) nurses whilst the first group number not only the civil servants responsible for the day to day running of R and D related affairs but also a small in-house social security research group. The Rothschild ‘customers’ for health and personal social services research are, at present at least, the civil servant heads of DHSS departments, some of whom chair Research Liaison Groups (RLGs). The latter comprise professional advisors within the Department, independent scientists and representatives of the ocs and have the role of commissioning research relevant to their designated topics. By late 1980 there were ten RLGs operating in the fields of children and young people, the elderly, forensic psychiatry, homelessness and addiction, local authority social services, mental handicap, mental illness, nursing, physical disability and reproduction and allied services. The 1979 DHSS Handbook of Research and Development (DHSS 1980a) details the wide ranging work of these bodies, which in many respects are exciting and important innovations. However, it must be admitted that the system has a number of problems, including those of inter RLG liaison and the fact that to date the groups formed do not cover some key areas, like general practice and acute services. It is also of note that even now some 70 per cent or more of the RSR they allocate resources for is passively commissioned, that it is initially proposed by outside workers to the RLGs (Buller 1980). There has not been an active pursuit of the customer role in the sense of defining precisely the areas they want.
investigated and then inviting potential public or private sector contractors to submit applications (ie tenders) for outlined projects. And the administration to which the RLGs are linked lacks, according to many commentators, sufficient managerial expertise to direct adequately commissioned HSR.

Another key body is the Small Grants Committee, which distributed resources for small scale projects which do not lie within the main sphere of interest of an RLG or one of the policy making decisions. Increased use has been made of this scheme in the last year or so (although its budget is still only about a third of a million pounds) whilst RLG activity tends to have slackened.

Regarding the Departmental arrangements for commissioning research defined under the heading 'biomedical' in the period 1973–80 the MRC acted as sole contractor. Although an early attempt was made to identify DHSS priorities in respect to the main disease groupings (Black and Pole 1975) this was never regarded as a sufficient basis for making specific demands on the Council. The process by which the Department was given and then more or less handed back the transferred MRC funds was criticised as a wasteful, merely symbolic gesture (Dollery 1978).

Thus in 1979 the Public Accounts Committee argued that the abandoning of the commissioning arrangements for biomedical research should be considered. In the negotiations which followed the DHSS Chief Scientist indicated his Department's willingness to accept a return of the 'transferred' funds to the MRC, provided that the latter would agree to maintain liaison between itself and the Department and would also look at the possibilities for extending its commitments in the health services research area.

Concord on these main issues has now been reached, with the MRC agreeing to double its financial support for the latter area in the period following the return of the 'transferred' funds held by the DHSS/SHHD to the Council via the DES science vote in April 1981. (See appendix 11). However, there is concern about this move, notably from some Directors of DHSS Research Units involved in HSR. In this context two points are of note.

The first is that the new DHSS/MRC concordat envisages that the MRC HSR 'base' will be able to take on extra work and specific commissions funded by the DHSS on a customer/contractor basis. This presumably, in the long term, implies some transfer of work from units currently funded via the DHSS programmes. Indeed, in an editorial published shortly before the official announcement of the new arrangement the magazine 'Nature' (1980) suggested that if the MRC proved effective in the area ranging from 'clinical research to conduct of social surveys' the prize for success could be a 'substantial slice' of the HPSSR resources. This fear appears to be shared by other commentators (McLachlan 1980). Yet in balance it should be noted that the revised concordat stresses that 'although the DHSS looks for greater deployment of MRC resources into (the HSR) field in order to help provide a high calibre national capability, the MRC will not be the sole contractor for DHSS in the field of health services research'.

The second is that in mid-1980 the Chief Scientist established an advisory committee9 with the following terms of reference:

1 To consider what research resources, in terms of training manpower and organisation, are required in England and Wales to enable the DHSS to commission the research it needs in support of its responsibility for health and personal social services and social security.

2 To consider how far the existing research base (ie the Department's present stock of research units taken together with the resources provided by other organisations) matches this requirement.

3 To recommend how a more equitable match might be achieved having regard to the policy that, wherever practicable, responsibility for management by the research councils should be considered and the need to limit Departmental manpower committed to research management.

Clearly what scientists like economists and sociologists in HSR fear is the long term transfer of the management of their activities to what may prove to be a relatively unsympathetic MRC. Their worries have in some cases been amplified by the weakness of the relationship between the DHSS and the SSRC, a point highlighted in the 1979 government review of the post Rothschild arrangements (Cmnd 7499). It may be of interest in the context of the future possibilities for SSRC cooperation that the Advisory Board for the Research Councils and the University Grants recently established in mid 1980 a working party (expected to report in early 1981) to study the support of research conducted in Universities. There was appointed to it only one social scientist, a professor of law. The precise terms of reference are 'to review the current arrangements for the support of university research in the natural and social sciences; to consider how far these arrangements make for the most effective use of

9 Its eight members (including the Chief Scientist) have a majority of individuals with close MRC links. There is no health economist on the committee, although advice on this topic is of course available to it.
existing and likely future resources; and to report to the ABRC and the UGC.'

However, in balance to suggestions that the Department would not wish or might prove unable to extend its cooperation with the SSRC the DHSS appears since the publication of Command 7499 to have begun to explore the possibilities for closer cooperation with the former. And regarding the MRC's capacity to manage HSRR the Council can claim to have had some success in the field of social medicine, epidemiology and health sociology, often showing in its running of its own units greater involvement in, and understanding of, the work in hand than the small, and recently quite severely cut, research management staff of the DHSS has been able to muster.

**Funding**

The precise sums spent on biomedical, health services and other forms of health related research in this country are difficult to calculate, not least because of the problems involved in drawing boundary lines between the areas involved. Yet 'order of magnitude' figures can provide a useful guide to the relative significance of the bodies contributing to this sphere of health activity.

Figure 2 shows the current levels of funding of the five research councils. The third ABRC report (1979) noted that 'real' growth in their spending peaked at around 13 per cent per annum in 1966-67, although in fact the MRC managed to maintain an average rate of increase of 10 per cent per annum throughout the twenty years between 1950-70. But by 1972-73 the science vote growth rate was down to 4 per cent per annum and it has since fallen even lower.

Indeed, with specific regard to the MRC the Council actually suffered at short notice a 10 per cent cut in the funds transferred to it from the DHSS in 1977-78 although overall some small growth has probably been achieved even in recent years, give the MRC's slightly changed responsibilities. Total spend in 1979-80 was around £73 million. Of this about 60 per cent is allocated directly to establishments like the National Institute for Medical Research, the Clinical Research Centre and MRC Research Units and external staff. It has been estimated by the Council that only about £2 million per annum was spent in 1979-80 on health services as opposed to clinical and biomedical research (Gowans 1980), although questions of definition can make the significance of this figure difficult to fully understand. Its main components include not just items such as the quarter of a million pounds per annum cost of both the MRC Medical Sociology (Aberdeen) and the Epidemiology and Medical Care Units (Harrow)\(^{10}\),

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\(^{10}\) Although known as an MRC unit this also receives substantial DHSS resources.

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2. The Research Councils' total proportional UK spending in 1979-80, including funds from all sources

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<th>MRC</th>
<th>SSRC</th>
<th>ARC</th>
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**Source** Annual Reports of the Research Councils

but also, for instance, the £440,000 used to fund the Institute of Hearing Research and £141,000 for Clinical Research Centre radiology.

The SSRC is, in contrast to the MRC, the youngest and also the least well supported of the Research Councils, with about 6 per cent of the DES science vote. Despite this it has recently suffered a disproportionately high share of the loss of funds by the Councils. The SSRC has had little chance to establish a 'track record' in regard to health related research, particularly as the Department of Health has in the past tended to commission such work directly. However, in 1977 it established a Panel on health and health policy research, with an initial budget of just over £250,000 for research purposes. In 1979-80 the SSRC committed through initiatives and grants about £317,000 to health and social services research, the majority of which was for health (Stacey 1980).

Total DHSS spending on all forms of R and D in 1980-81 year was around £33 million of which £14 million was allocated to biomedical research (and hence for transfer to the MRC) and £12 million to HPSS activities. Of this health accounted for approaching two thirds of the total outlay. The precise proportion of spending going to particular areas is decided by a
Defining health services research

Departmental Research Strategy Committee, chaired by the Chief Scientist, which has the ability to move money from one area to another either during or between years. Approximately 50 per cent of the Department’s HPSSR budget is spent by the Research Units, whilst the remainder goes to fixed term five or six year programmes or one to three year projects. There are overall 300 of the latter currently in progress. Other state funded organisations contributing to biomedical and HPSS research include the University Grants Committee, the Office of Population Censuses and Surveys, local authority social service departments, Community Health Councils and local health departments. At present the contribution of the latter is largely through the Locally Organised Research Scheme, devolved to them from the Department in 1978 and costing £2–3 million a year. It has a strong clinical content although some Regions and Areas may in addition finance broader economic and socially relevant studies out of other funds. Currently such initiatives are very limited in scale. But the present government’s commitment to devolution might eventually result in a transfer of funds ‘down’ from the Departmental R and D budget to Regional or the NHS district authorities. No final decision as yet appears to have been made on this possibility. Regarding privately financed research data from the Association of Medical Research Charities indicates that in total, including funds derived from organisations not attached to the Association, some £355 million was available for research in 1979 from British voluntary sources. Pharmaceutical industry R and D outlay in the UK for the same years was about £200 million, nearly all of which was devoted to biomedical or clinical activities. Several million was also spent on equipment research whilst in addition industry spent some relatively small amounts on activities like health economics research. These broad figures indicate that total funds for health related research in this country now approach £400 million per annum. Of this it seems unlikely that more than £15–20 million per annum is spent on what is below described as health services research. Given that the total cost of the NHS is currently in the order of £10,000 million per annum some commentators feel this figure to be excessively modest, both absolutely and in comparison to other biomedical and clinical research outlays. Others, however, doubt the capacity of the existing NHS infrastructure to utilise significantly increased sums effectively. Consideration of how the latter might be changed in order to allow useful extensions of activity in this area of scientific investigation must be predicated by analysis of its nature and underlying objectives.

Research on health related topics may, as Figure 3 outlines, be seen as involving a spectrum of activities ranging from on the one hand, natural science oriented observations of life processes or human behaviour through to, on the other, social scientific investigations of the overall structure and function of the health and allied services. The stages between these shade from the development of specific therapeutic or preventive interventions to the economic and social evaluation of such techniques in relation to the individuals who receive them and the intermediate level agencies which deliver them. The model shown places clinical research at the centre point of this spectrum, with health services research to the right and biomedical and allied research to the left. However, it must be stressed that there are no ‘hard and fast’ boundaries and that different authorities define HSR in different ways. For example, in agreeing in the new concordat to extend the amount of their NES science vote funds devoted to health services research, MRC officials may have had in mind some activities lying towards the clinical centre of the spectrum (Gowans 1980).

Considerable time and energy has been spent in debate as to the definition of ‘applied’ as opposed to basic or fundamental research. The Rothschild Report argued that the latter aimed at ‘the discovery of rational correlates and principles’ whilst the former has practical applications as its goal. The Dainton Report divided research into tactical, strategic and basic categories. Such approaches may in certain contexts have value, but they can also serve as vehicles for the perpetuation of counter-productive intellectual snobbery within scientific circles. Medawar (1979) has pointed out that this is still a very real danger in England. Disputes between individuals with different academic or disciplinary credentials competing within a finite pool of health research funds often tend to confuse the processes of problem identification and draw attention away from the realisation that pure intellectual interest in research topics and the pressure to resolve immediate practical issues may be seen as complementary rather than opposing driving forces behind research endeavours. It was reportedly Pasteur who observed that there is no such thing as applied science, but that science has many applications. In the light of this Figure 3 attempts to avoid

11 A recent Central Statistical Office review put total UK R and D in all sectors of the economy at £3,250 million (£1978). Central government outlays account for just under 50 per cent of this total, the main item being ‘defence’ R and D. In today’s terms the latter cost around £1,000 million per annum.
The Health Research Spectrum

Intersections with 'social' science disciplinary spectra, eg, sociology and economics

Intersections with 'natural' science disciplinary spectra, eg, biology and chemistry

Medicine

Dominant health concepts relate to specific 'biological' system malfunctions

Biomedical research

'Disease' oriented health models are most common

Clinical research

Health services research

Health concepts merge with those of social and economic distress

presenting a needless dichotomy between fundamental and applied work. Rather it emphasises that whilst in clinical research medicine is the dominant discipline a variety of other academic specialisms may play key roles at either end of the health research spectrum. Polarity occurs in as much as social scientists, with their distinctive 'mind sets', cluster in the health services research area whilst natural scientists, with their contrasting approaches, tend to concentrate in the biomedical/primary behavioural fields.

This model does not, of course, indicate that conflicts between individuals working at different points along the health research spectrum are inevitable. But it does help to show how they might arise. For instance, attempts to extend medical authority out from the central area where that profession's competence is most relevant may be a potent source of discontent, particularly where the other disciplines involved suffer a relative lack of self-confidence or resent the economic privilege and employment security of the medical profession.

In addition cooperation between individuals whose primary loyalties are to discrete academic disciplines may be hampered by methodological clashes. This is illustrated by reference to the work of two leading commentators on health research, Professor Colin Dollery, a clinician and a member of the Chief Scientist's current advisory committee on the future of health services research, and Professor David Mechanic, an American sociologist.

In his 1978 Rock Carling Lecture 'The End of an Age of Optimism' Dollery argued strongly in favour of an improved 'intelligence' function in medical research, designed to keep workers in the field fully abreast of worldwide developments. Few would question the need for such innovation. But he made a second point to the effect that British researchers failed to capitalise on their expertise in the field of 'randomised controlled trials and clinical experiments generally'. It may be thought that (despite more recent statements by Dollery stressing the special needs of health services research) implicit in his 1978 essay is an advocacy of this type of approach throughout the health services research field as well as that of clinical investigations.

Cohen (1980a) has questioned Dollery's criticism on factual grounds, noting the many trials instigated by the MRC/DHSS/SHHD since the early 1960s. But from an interdisciplinary viewpoint it is perhaps more
important to record that in the same year as 'The End of an Age of Optimism' was published Mechanic wrote of evaluation studies in health services research:

'To the extent that the evaluator views his task as comparable to a controlled clinical trial, he faces a high likelihood of failure. Most important evaluations performed from outside an ongoing system tend to get caught in a critical cross-fire from those who have something to lose, and there are innumerable opportunities to sabotage any such data collection. Evaluations that are seen as attempts to improve practice through identifying problems and unexpected consequences - and that are organised in close cooperation with those who execute programs - have more potential. Most professionals are open to improving their practices if they are not threatened, and thus the challenge in evaluation is to provided productive feedback without arousing defensiveness.' (Mechanic 1978).

The significance of this passage is that it emphasises that although innovative work at any point in the health research spectrum may ultimately undermine the established positions and working procedures of individuals involved in health care the challenge presented by health services researchers like sociologists and economists to professions such as medicine and nursing can be particularly acute. Mechanic (1980) has also stressed that HSR may be affected in its development by other unique factors, including funding uncertainties linked to its lack of clear professional/academic identity and the special relationship between health services research and policy makers and executors. This last is of critical importance in that it raised the topic of what the ultimate goals of health services research are or might realistically be.

**HSR objectives**

The question of what function health service research projects may fulfill can be approached from three viewpoints; that of those conducting them (the researchers themselves), that of those who are usually the primary 'purchasers' of HSR (the individuals administering and politically responsible for the NHS and allied services) and that of the ultimate customers for all activity in the health sphere, those in need of health service support.

Regarding the former, one of the most powerful motives for conducting research is frequently interdisciplinary advance. That is, whether the individuals concerned be anthropologists, psychologists, epidemiologists, specialists in community medicine, statisticians, economists or sociologists, their aims are largely 'vertically' oriented towards achieving progress and/or personal success in their chosen area of specialist activity.

The fact that 'horizontal' transmission of knowledge across the health research spectrum may contribute to diverse developments in other disciplines or to new ways of tackling specific health related problems may often be a secondary gain to the individual researcher, even when he or she is working in a 'multidisciplinary' context. However, as Professor Williams' paper on economics in health services research (appendix 1) helps to show, it would be foolhardy to oversimplify this point. And it would also be incorrect to suggest that most participants in HSR would be happy to accept that their findings are rarely likely to have direct effects on policy decisions. Indeed, some may subscribe to the view that policy formation in fields like health should follow on from research activity.

From the contrasting standpoint of the immediate (although in ultimate terms proxy) customers for HSR, those who are responsible for overall NHS administration and/or policy formation, its fundamental purpose must appear rather different. They are more likely to require information for use in response to external criticisms of or internally revealed malfunctions in the working of the health services, information capable of helping them to identify 'solutions' to specific problems. That is in practical terms guides to the action which may be taken to relieve immediate pressures on the administration. 'Scientific' acceptability of findings remains of course important for such customers, but they are unlikely to share all the discipline-specific concerns of particular professional groups.

The day to day tasks of civil servants and ministers relate to maintaining the function of existing facilities in relation to existing public expectations. Thus although they may recognise that HSR can in the long term cast useful light on the possible future goals of or working methods in the health services they are unlikely to see it as prime tool of policy formation within the essentially political environment of their work. Rather the reverse. It could be argued that, in sensitive areas at least, research is most likely to be commissioned by government controlled bodies in areas where its findings will probably support established policies and tentatively planned actions and least likely to receive money where it offers a fundamental challenge to the current tide of events. (See Todd 1980).

12 Mechanic argued that the overt purposes of HSR are fourfold: to provide descriptive information; to develop and/or test particular hypotheses in relationship to health services provision; to evaluate the outcomes or possible outcomes of care and to aid or to analyse the processes by which health policies are formed.
This from the viewpoint of the ultimate customers for health research, those minorities whose wellbeing is or will be directly influenced by the availability of specific health or allied services, is not necessarily a reassuring conclusion. Against a background of professional groups competing for status and influence within the health service, of researchers seeking to establish their own approaches and academic standing and of administrators trying to balance conflicting pressures the interests of health care consumers may not be clearly identified. From a patient stance, HSR ideally plays a dual role of both guiding specific policy decisions and also generally alerting the public and political establishment to the extent and experienced nature of ill-health related distress in the community and the possible ways in which it could be alleviated, regardless of whether or not the measures prescribed are viable in the short term future.

In balance to this last point, it may of course be noted that voluntary bodies sometimes act as alternative 'proxy' research customers for particular client groups. But their expertise, influence and resources are usually limited. And in any case it is often found that the individuals most firmly placed in the health research establishment act as advisors to both official bodies and the voluntary funding organisations, an 'agency' relationship which can be compared to the position of a doctor who is both the patient's representative and the supplier of his or her health care. Hence the state/science interface as relevant to HSR is the area of key importance.

This in many respects highly simplified discussion helps to highlight the main problems underlying the formation of an acceptable institutional structure for commissioning health services research in England, the basic stages of which are outlined in Figure 4. These include a) the need to form a relationship between researchers, policy makers and health service administrators which is close enough to ensure that the latter's problems are clearly transmitted to the former (and vice versa) but which is b) flexible enough to ensure that researchers are both free and motivated to investigate matters of scientific or general public concern even if the authorities of the day fail to see their relevance or disapprove of their airing whilst being c) controlled enough to contain interdisciplinary disputes and to ensure the production of relevant work within time periods acceptable to research customers and d) structured in such a way as to provide reasonable career security for those working in HSR at all levels. In this last context the plight of younger researchers in DHSS Units or otherwise employed on the
programmes is the most serious. Yet even Directors of the Units may lack security beyond the relatively close horizons of the ‘rolling contracts’ which support their activities (Warren 1980).

In brief, the essential difficulty now facing those wishing to promote health services research in England is to develop the means by which the diverse intellectual skills of people working in the field are made available within the machinery of health service management without the researchers’ fundamental integrity of purpose being undermined. That is to say if the process of asking new questions (as opposed to answering old ones) and extending awareness of distress in the population is to be unimpaired, then ways must be found for the health service research community to be able to resist the constraining powers of the civil service, political and its own academic establishments whilst working closely with them.

Following the report of the Royal Commission on the NHS, published in 1979, there has been an increased level of public debate about the future of HSR. The Commission noted the dissatisfaction with the post Rothschild arrangements which had been expressed by many commentators and proposed that ‘a solution to the critical problem of encouraging systematic research into health care issues would be the establishment of an Institute of Health Services Research’. It envisaged that such a body would provide training and a career structure for at least some researchers; that it might be linked to the SSRC and/or the MRC; that it might raise monies by conducting studies for outside bodies; and that it might help coordinate research conducted by universities and other agencies.

Yet the Commission’s ideas, although at first sight reasonable, were not worked out in detail. There appear to have been considerable differences in opinion between individual researchers and Commission members as to what was implied by the Report’s suggestions. It may now be assumed that in themselves they do not constitute any complete formula for future action in this field. Indeed, given the background debate which was in progress during the Commission’s existence its comments on HSR may even at the time have seemed rather disappointing.

More recently a number of alternative, although once again frequently vague and not necessarily mutually exclusive, proposals for the institutional support of HSR in England have been put forward. These include extending the role of the MRC in this context, either unilaterally or to create some form of tripartite MRC/SSRC/DHSS directing body for health services research, and the establishment of a discrete Health Services Research Council (HSRC).

All of the above possibilities have both potentially desirable and negative characteristics, some of which are examined below. But before their discussion two points are worthy of emphasis. The first is that, as Robert Maxwell (1980) – a consultant to the DHSS during its restructuring in the late 1960s early 1970s – has recently pointed out, large scale reorganisation is frequently not the panacea it has often been presented as in British politics over the past ten to twenty years.

Radically changing the existing DHSS arrangements for commissioning and conducting health services research may be the wrong approach. Rather continued ‘organic’ development of those which have survived so far may have much to be said for it, particularly as authorities like Professor Kogan (who has had unusually close access to information on this topic) claim that despite criticisms there are many
laudable aspects of the Department's achievements in 1973–80 period (Kogan et al 1980). To move the base of governmental support for this type of research, which needs close liaison with the policy makers and care providers in the DHSS/NHS, away to 'surrogate' management bodies in the research council system or elsewhere could be more an evasion of duty than its fulfillment. Secondly, most public (and private) analyses of the organisational changes which may be needed in relation to HSR have ignored the possibility that if changes are needed it may be in the body of the civil service/nhs management itself that intervention has to take place. Sir Harold Himsworth, a former Secretary of the MRC, recently compared the organisation of the Ministry of Defence to that of typical civil service departments of Government (Himsworth 1980).

He stressed the role of expert serving officers in the military system and recalled that the 1968 Fulton Committee had urged the creation of specialised policy advisory machinery for civilian Ministries. Although Himsworth's arguments (which have been strongly criticised by some individuals familiar with the field — Godber 1980a, 1980b) related more to possible revisions in the nature of the Chief Medical Officer post in the dhss than to the problems surrounding HSR the basic point that the avoidable weaknesses in the system might well be on the 'customer' rather than the research provider side still stands. The generalist tradition of the civil service, with its practice of moving individuals from position to position and from department to department (presumably in part to prevent them 'going native') may in the context of today's complex health problems unacceptably impair the processes of planning and policy formation in the dhss. However, attempts to alter this situation could face formidable resistance and do not in any case appear to be under consideration at present. More likely options involve the expanded role for the Medical Research Council already initiated in the new DHSS/MRC concordat.

The MRC and HSR

The late 1970s saw two events of major significance in relation to the evolution of dhss research policies — the appointment of Professor Buller as Chief Scientist in 1978 and the change of government in 1979. From not very long after the latter the return of the 'transferred funds' to the MRC began to appear a realistic possibility, which by the middle of 1980 had become a strong probability. In early autumn of that year Sir Douglas Black indicated his support for the ending of the Rothschild approach in an article in the Lancet (Black 1980a). His main conclusions were:

1 The information system at the disposal of a large department of Government gives them an opportunity of identifying those problems whose solution would confer an important advantage. However, their preoccupation with the necessary tasks of maintaining services, and their lack of a strong expertise in biomedical research, are crippling handicaps in the attempt to dictate the ways in which solutions are to be sought.

2 On the other hand, a well-tried apparatus is available to them in the shape of the Medical Research Council. A strong relationship is to be encouraged between the Health Departments and the MRC: but a correct relationship is impeded, and not encouraged, by the ill-starred attempt at financial control by the mechanism of 'transferred funds'. The Council is by no means limited in its interests to biomedical research, having supported social medicines from the earliest stages of the development of that discipline; and it has recently recognised the need to give further support to epidemiology by establishing an MRC unit in Southampton.

From the viewpoint of HSR the last sentence of the above passage was the most interesting in that it may be thought to have hinted at the extension of MRC activity implied in the MRC/DHSS concordat finally announced by Patrick Jenkin at the end of October 1980. As already described, the Council has by this agreed to move towards doubling its commitment to this field of research, that is to bring its DES science vote financed HSR spend up to £4 million (1980 prices) within roughly the next five years. But in addition the DHSS may out of its own funds place future service orientated research with MRC units on the customer-contractor basis which has been abandoned with regard to biochemical work.

This does not, of course, represent a total shift of DHSS health and social service research activities away from Departmental management to that of the MRC. But it might possibly be a herald for a move on these lines if in the future the DHSS/MRC relationship proves satisfactory and the MRC is successful in the HSR area. If the MRC were to become the main support agency for the health services research community the advantages could include greater security of employment and a more satisfactory career structure for researchers and the additional status of being associated with the Council. Possibly the MRC could establish (a) prestigious Health Services Research Institute(s) along lines like those outlined by the Royal Commission on the NHS. But against this some social scientists fear that, even if a special MRC Health Services Research Board were created,
medical domination would spread out from the clinical/social medicine/epidemiological research areas to restrict their work in what to them would be an unacceptable manner. The DHSS as manager at least allowed freedom even if it allegedly lacked positive competence. The rights and wrongs of this debate cannot be judged easily. Certainly from outside the disciplines concerned it does appear that significant proportions of the £100 million (£1980) or so that the DHSS has spent on HSR in the last decade have not produced work of direct importance. But to dismiss the contributions made out of hand would be unjustified, particularly in the case of a relatively young research activity which as the economic figures presented earlier in this paper show is very weakly supported as compared to, say, basic biomedical or pharmaceutical research. From, for example, revealing unsuspected aspects of the suffering of some children in hospital (and so affecting both medical knowledge and medical education) to changing care for and attitudes towards child bearing, mental illnesses, mental handicap and pathological ageing HSR can already show positive achievements for the community (Illsley 1980). Perhaps the most that can be said at this stage is that the concerns of researchers who think that, in a time of adverse economic conditions generally, the government would like to rid itself of its responsibility to support HSR and would not be adverse to seeing its management transferred to a relatively unsympathetic, biomedically orientated, independent agency are understandable. The savings might not only be possible run downs in direct HSR spend. They could also include those associated with a lessening of pressures on government to improve services in areas where levels of suffering are not widely perceived. This would leave policy makers free to concentrate on raising awareness of topics like personal responsibility for preventive health measures where health service incurred costs should be small, at least in the short term. Reasonable sounding slogans like ‘prevention before rescue’ or ‘a national health service, not a national disease service’ or ‘there is not a pill for every ill’ may all be employed to support such a strategy.

Nevertheless, against this ‘worst case’ scenario for the future of HSR it may be suggested that the staff and members of the MRC would not willingly lend themselves to such a cynical programme and that it must be stressed that unilateral control of HSR by the MRC has never been publicly advocated by the DHSS Chief Scientist. As Black (1980b), Cohen (1980c) and Illsley (1980) have all pointed out, what might prove more generally desirable is a tripartite arrangement between the DHSS, the MRC and the SSRC, although the precise details of how such a management system would work do not appear to have been explored in any detail. Given that the future of SSRC is currently somewhat uncertain, as indeed is the entire binary Research Council/University Grants Council system of research funding, this is perhaps not surprising.

A Health Services Research Council?
A distinctly different alternative favoured by a significant number of senior individuals with the health services research field and discussed in detail by Professor Williams in appendix 1 of this paper is the establishment of a new research council specifically orientated to HSR. This, it is presumably envisaged, would have the advantage of being independent of direct Ministerial supervision and controlled by those most influential in the sciences involved. It might thus be able to support an internally consistent programme of research development as well as solving problems like those of security of tenure and the lack of career structures within HSR. Despite these attractions the disadvantages of the idea are, however, of some magnitude. For instance, the very independence of an HSRC may undermine its capacity to coordinate its efforts effectively with the NHS, the support of which was and should surely be the primary goal of government funded activity in this field. And if its membership and constitution were to be so formed as to ensure its full integration into the existing health care/research system its advantages for individuals like the current DHSS research Unit Directors seeking greater self determination and security might to a degree prove illusory.

In purely practical terms this last option appears at this time to enjoy little support from powerful institutions like the Advisory Board for the Research Councils, which is currently chaired by Sir Alexander Merrison. As such the short term probability of a new research council being funded seems remote, particularly in times of limited or negative national economic growth. Rather it is only likely to emerge if the strategy of strengthening the MRC involvement in HSR coupled with the formation of stronger linkages between the DHSS/MRC/SSRC fails to provide a satisfactory base after the coming five years of development effort. In such circumstances an HSRC might well grow out of the experimental arrangements now being discussed.
Conclusions

This paper has outlined the history of the British research council system, at the core of which lies the Medical Research Council. The MRC is arguably the most successful biomedical research management institution in the world and after three generations it has become an integral part of the British medical establishment. But this brief study has pointed to the special problems surrounding the commissioning of systematic research into the structure, function and efficiency of the health service in Britain, particularly in the twenty years or so since the NHS has had to face the ‘post infectious disease’ era of modern medicine. In so doing it has highlighted the relative imbalance between this country’s success in the fields of biomedical, clinical and pharmaceutical innovation and its seeming failure in being able to support a self-confident and productive health services research community.

To the extent that the latter phenomenon is genuine, and not simply a reflection of the inevitable economic and social difficulties facing Britain’s now relatively mature health service, it can be attributed to two basic sets of conflicts. First, those between rival professional/academic power groups. Second, the tensions inherent between the governing and research communities, which stem in part from poor communication and insufficient mutual appreciation of each other’s tasks and objectives.

It may be suggested that a fundamental fault in the health research management arrangements adopted in England after the 1971 Rothschild Report was a naive belief in a civil government department’s ability to use scientific enquiry in the process of achieving administrative/political goals in the same way that a consumer of, say, fuel oil or industrial chemicals might contract to a supplier. The subtle, evolving interaction between administration and research was reduced to a convergent, one way relationship in the Rothschild model. In practice it proved impossible to work, at least as originally envisaged. But such was and is the independence and social position of the Medical Research Council that it was able to continue its biomedical and clinical activities more or less unaffected throughout the 1970s. It is in the younger, less established and more fragmented field of health services research that a ‘crisis’ has been more overt, although this is not to say that the efforts of the 1973–80 period were wasted.

Indeed, it may be that, despite some understandable dismay (Cochrane 1980), the current desire in certain quarters to limit the costs of research management or even the global DHSS spend on HSR has led to an exaggeration of the Department’s basic inability to manage HSR. The development of the Research

Liaison Groups in particular has proved a useful exercise in improving liaison between policy makers, administrators and researchers. Nevertheless, a number of alternative arrangements are now under active discussion and the research management provisions of the DHSS could undergo further radical change – it is even possible that the post of Chief Scientist and his/her Office could be eliminated altogether.

For the moment, however, the abandonment of the Rothschild inspired MRC/DHSS linkage is the most important development. It has opened the way for the Council to involve itself more deeply in the HSR field. Perhaps paradoxically, it is on a customer/contractor basis that a new MRC/DHSS relationship is most likely to emerge. It would be unrealistic for those in health services research not to explore this area in depth in the coming months, just as it would be foolhardy for existing achievements to be discarded out of hand.

Possibly the most sensible strategy for people concerned with the progress of health services research to adopt in the immediate future is one of keeping their options open, especially during the period of acute economic depression likely to exist over the next few years. Despite the low morale which uncertainty can bring advocacy of a pluralist development base, in which new structural arrangements may be tentatively explored but not allowed to totally supplant those extant until they have fully demonstrated their adequacy, would seem an appropriate tactic.

Certain specific moves, like a shift towards the ‘regionalisation’ of the central Departmental HPSS research programme, seem even now unlikely to be beneficial. Others, like encouraging a more competitive market for that type of HSR which private agencies could conduct or involving community representatives such as Community Health Councils more closely in research planning, look more worthwhile but may meet a hostile reception from those groups who in the past have profited from or become used to controlling this area. Whilst yet others, such as the development of an adequate HSR ‘intelligence’ service capable of keeping researchers and other interested observers abreast of work in the field in as painless a manner as possible, appear very attractive.

In broader terms the problem of providing adequate career structures for researchers in HSR is pressing and needs resolution (ARMS 1980), although this has shown itself not to be an easy task. Similarly it would also seem desirable to attempt to break down the destructive conflicts of interest which often appear to exist between individuals working at different points...
along the health research spectrum; and the needless aura of intellectual mystification which can occasionally prevent people in the general public from understanding the contribution that studies in the fields like health economics and sociology may potentially make to their wellbeing. For example, from the biomedical research side it would be absurd for anyone to ignore the enormous benefits which advances in the natural sciences are presently set to confer on mankind in the shape of new or improved pharmaceutical or allied therapies. It is a fact of profoundly exciting implications that, as Sir Andrew Watt Kay observed in 1977, 'the objective of controlling or eliminating disease is neither unthinkable or beyond our imagining.' Providing adequate world-wide investment is made, the scientific advances of the late twentieth century will very probably bring that goal near to medicine's theoretical grasp.

But a community's capacity actually to deliver care to its people will inevitably depend on the efficiency of its health services. For this to be maximised an understanding of, for instance, the resource implications of alternative therapeutic interventions and of the social barriers which may affect access to the provision of services is essential. As the report 'Inequalities in Health' (DHSS 1980b) has noted, areas such as this last provide an HSR challenge which at present should be addressed by the MRC, SSRC and DHSS acting in close collaboration. Failure to provide an adequate institutional basis for health services research in the 1980s will inevitably lead to the perpetuation of much needless distress, a cost which the most vulnerable in the country could ill afford to pay.

References

Appendix I: Economics and health services research

Professor Alan Williams
University of York

I propose to use this opportunity to sketch my personal views on the following topics:
1. What is the nature and potential contribution of economics to health services research?
2. What are the priorities for health services research, as seen from that standpoint?
3. What organisational structure is needed for the support of that research?

Economics and HSR
In thinking about the nature and potential contribution of economics it is useful to distinguish economics as an area of study (or 'topic') from economics as a mode of thinking (or 'discipline'). By the topic of economics I mean the multifarious ramifications of the economic system, in the study of which economists have special expertise. This special expertise accumulates because by sustained thinking over several centuries about how different economic systems work and develop, it has proved useful to use certain concepts and structural relationships, to ask certain questions, and to collect certain data, all of which come to constitute the corpus of knowledge transmitted from one generation of investigators to the next, with increasing specialisation and internal subdivision of expertise as that corpus grows in volume and complexity. This 'special expertise' itself is what I call the 'mode of thinking' or 'discipline' characteristic of the subject.

But although the relationship of the discipline of economics to the topic of economics may be a special and even possibly a dominant one, it is not an exclusive one. It is non-exclusive in two respects; firstly, the topic of economics may fruitfully be investigated by other disciplines, and, secondly, the discipline of economics may fruitfully be used to investigate other topics. Let me give an example of each.

The topic of inflation is clearly within the ambit of economics, and one on which the discipline of economics is much utilised. But it is also very enlightening to view inflation as a political, sociological or moral problem, and to apply the special expertise of those disciplines to its analysis and clarification.

Conversely the discipline of economics may be applied fruitfully to topics which are not conventionally regarded as 'economic' ones, for example, whether or not particular types of crime should attract the penalty of imprisonment, how stringent fire and other safety regulations should be, or how many doctors we need. Thus although every 'topic' usually has some discipline which has a special relationship with it, in some cases this is rather tenuous, and not at all 'exclusive', and for such broad-ranging topics many disciplines could stake out a special claim. I believe the health service to be such a topic.

If we first of all look at the overlap between the topic of economics and the health service, we can observe the fascinating relationship between the workings of the economic system and the working of the health care system, and investigate such questions as (i) what effects does the industrial and occupational structure have on the level and pattern of ill-health? (ii) to what extent does the health care system raise productivity – for instance by reducing absence from work through sickness? (iii) to what extent does the general state of the economy impinge on the resources available for the development of health care?

Similar questions arise if we look at the health care system itself as a resource-allocating mechanism, for instance, (i) what are the effects of different charging systems on 'consumer' behaviour? (ii) what are the effects of different renumeration systems on 'producer' behaviour? (iii) what are the effects of various methods of financial allocation and control on real resource allocation? All these would be readily recognised as legitimate areas of economic investigation because they belong to the topic of economics.

We run into more difficulties when we turn to the discipline of economics and ask what are its strengths in the field of health services research? The discipline of economics is essentially about relative valuation. It is concerned with the manner in which relative valuations are made manifest in people's choices and behaviour, and in testing whether the value of what they get (or produce) is greater or less than the value of what they sacrifice in order to do so (which is the issue of efficiency). It can be positivistic in its orientation (i.e., describing and analysing what is) or normative (i.e., suggesting that if you hold certain values you ought to do such and such in some specified situation). Thus we are particularly interested in priorities, how they are formulated and implemented, whether the mechanisms chosen are in fact conducive to achieving these priorities, whether better mechanisms exist, and generally with the tension generated between people's vague aspirations and the hard realities of resource constraints. Since these tensions are often worked out most clearly in market-type situations, we tend to employ analogies drawn from the analysis of markets (though not necessarily from so-called 'free' or 'perfect' markets) but this does not imply, as some

naive observers seem to think, that we ‘believe’ in markets in some theological sense. They are a useful point of departure for much analytical work, even when ‘market solutions’ have been rejected. Thus the discipline of economics has a potential contribution to make wherever priorities have to be established and enforced because of resource constraints, which is pretty well everywhere.

Priorities in Health Economics Research
This brings me to my second question, which is, what are my own priorities for the use of the limited amount of economics talent available to us. Before plunging into that I must make a couple of important caveats. The first is that the topic ‘economics of health’ is broader than the topic ‘economics of health services’, and it is only due to shortage of time and the particular focus of this meeting that I have adopted the narrower realm of discourse on this occasion. The second is that within the discipline of economics there is a sub-discipline of health economics, with some distinctive differentiation of concepts and structural relationships which itself needs sustaining and developing if the discipline is to be capable of innovative work on the topic of health services. I will give two examples. Health service resource allocation is mediated to a large extent by doctors who stand in an agency relationship with the ‘customers’, yet are part of the supply mechanism. Thus the analysis of the ‘market’ for health care, even the private market, requires an apparatus rather different from orthodox supply and demand analysis which assumes that ‘demanders’ and ‘suppliers’ are quite different people. My second example concerns the nature of health itself. Is it a stock or a flow concept? It may be fruitful to see it as a capital stock, of which we each have a different inheritance at birth, which can be added to or drawn upon at different stages on our lives according to our selected life styles, and which is subject to severe time-related depreciation in later life due to the ageing process. Poor people may inherit a poor health capital stock, and also have a poor stock of financial capital. The only way they can ameliorate their poor financial situation may be by deliberately running down their health capital in ‘unhealthy’ but relative well-paid occupations. The demand for health care then gets generated as a secondary mechanism designed to make good this depreciation of the capital stock, yet they will obviously continue to enjoy worse health than other people. The more affluent may also deliberately run down their health capital, of course, but in their case it is more likely to be demands on their health capital generated by their consumption pattern that is the reason. This potentially rich conceptual framework may enable us to explain a lot of disparate observations about people’s health behaviour, and it stems from rather abstract analogies with standard capital theory which are still in their infancy. Thus the discipline of economics generates its own momentum in stimulating new thinking in health economics, as well as the stimulus that comes from the public interest end.

From three recent surveys by British health economists (Akehurst, Gravelle, Hurst) of priorities in health services research from an economist’s viewpoint, the following key areas emerge as pre-eminent:
1. Outcome measurement and valuation; especially in conjunction with cost-benefit studies of particular procedures, substitution between inputs, and different places of treatment.
2. Determinants of the supply of different inputs, and particularly of staff of all types.
3. Decision-making about resource use in the NHS, and especially the doctor’s role therein, and experimentation with differing budgetary and incentive structures.

I subscribe wholeheartedly to these views, and they are entirely consistent with my own later survey of the territory, which was as much concerned with foreign as well as British experiences and problems.

Organisational structure
Some of this work we economists can formulate and conduct on our own (given the resources) but much of it requires multi-disciplinary collaboration, and while all of it is of immediately obvious policy relevance, some of it requires quite a long and sustained research effort before results will emerge which could be applied with any confidence, so it needs a support structure which can take a fairly long-term view, detached from ‘the crisis of the month’. This organisational structure must provide for each of the following kinds of work as far as the economists are concerned:
1. The development of the discipline itself;
2. The conduct of analytical work which economists...

Gravelle, U S ‘Health Survey Research Strategy – an Economist’s View’ ibid.
formulate and pursue themselves;
3 the conduct of analytical work which economists formulate and pursue in collaboration with others;
4 the conduct of analytical work which others formulate but in which the role of economists is central;
5 the conduct of analytical work which others formulate and in which the role of economists is peripheral;
6 the training of new researchers for all these purposes.

1 In the development of the discipline we rely mainly on the UGC support for academics in general, with some small-scale (but very important) support from the SSRC by way of grant support for study groups, conferences, etc. Private foundations have also been helpful in providing ‘seed-corn’ for innovations, but a more liberal attitude by other sponsors towards conceptual development within applied work would be helpful. No marked changes in that pattern of responsibility seem appropriate.

2 Applied work formulated and conducted by economists has been supported by the DHSS, the SSRC and the private sector, but it is of relatively small volume, both in relationship to the importance of the problems outlined earlier, and in relation to the sums devoted to other topics (e.g., technical studies of computers, buildings, engineering and equipment, the economics of which is often studied only as an afterthought and out of petty cash). Again, the organisational pattern seems right, even though the priorities sometimes seem a bit odd.

3 Studies formulated by economists but pursued on a multi-disciplinary basis seem virtually non-existent, and various possible explanations may be suggested, viz:
   i Economists only think of projects which only economists can do.
   ii Nobody but economists wishes to work on economics projects.
   iii Such projects do not get taken up until they are promoted by some non-economist, and hence reformulated in a different manner.
   iv Nobody wants to work with economists at all. My casual impression is that there is a germ of truth in each of these and if one thinks of the intellectual history of RAWP, Clinician Budgeting, Studies of the ‘Need’ for Doctors, and Output Measurement problems (all of which have been promoted for a decade or more by economists) you can see the problems we have been up against, and still are. In each case the DHSS has been the main research supporter, not the Research Councils, and certainly not the MRC, and this therefore remains a major area of concern regarding the organisation of research support.

4 Research formulated by others in which economists play a central role is a fast-growing sector, and our main problems here are (i) influencing problem formulation at an early enough stage; (ii) ensuring an accurate perception of what economics as a discipline can contribute and (iii) finding the economists to do the work. The DHSS’s attempts to grapple with the Rothschild principle through the RLG System have been a praiseworthy effort to deal with the first two problems, and I still think it important that this System be strengthened, not dismantled or bypassed. How else is the process of mutual education between administrators and researchers to be focused sharply and given a cutting edge (painful though it may be for all concerned)?

5 Peripheral economic input to other people’s projects is rather a severe logistical problem at present, since a lot of it is being demanded with very few obvious places from which it can be supplied. The Economic Advisers Office in the DHSS, the Health Economics Research Unit in Aberdeen and the Institute of Social and Economic Research in York all act in this capacity on a large scale, and the SSRC-supported Health Economists Study Group provides a handy list of members’ interests which can be exploited for this purpose. Research monies are not usually available for such ‘consultancy’ or ‘minor works’ input to projects, and it therefore looks like being a continuing problem.

6 Training: the training of economists generally is of course the responsibility of the UGC at first degree level, and of the UGC and SSRC jointly at higher degree levels. The DHSS has played an important role in the training of health economists without which we would indeed be in rather a sorry state, and the pharmaceutical industry is also providing some limited support. This is still a severe problem, but I am not sure that more money alone would help. Deep down it is again the familiar problem of the uncertain career prospects for researchers, which means that people go for teaching rather than research posts, and in such posts they see themselves as better off with a general training in economics than any specialisation in or commitment to health economics. I would advocate that closer links between research posts in DHSS or SSRC-sponsored units/programmes and the Government Economic Service be explored as a
means of offering greater security of tenure for middle-level committed researchers in this field. Against this background let me turn finally to two specific innovations in the organisation of Health Service Research which seem particularly to need further discussion.

a) Giving the MRC a much larger role.

b) Creating an Institute of Health Services Research.

**a) MRC take-over**

I hope that what I have said about health economics is enough to make it clear that there is an enormous chasm between the kind of work for which the MRC is rightly renowned, and the kind of work we want to do. It may be that work close to clinical practice could be usefully handled through this channel, for instance, attempts to turn studies of effectiveness into studies of cost effectiveness, but this is only one small though important segment of the work which economists want to do. If the answer is that the MRC will develop new specialised structures to handle this broader role my reply would be 'then why lock this new organisation into the MRC, where it will inevitably find itself dominated by medical thinking and attitudes, and expected to conform to criteria flowing therefrom?' On the other hand, I cannot see the limited resources of the SSRC being able to cope with such a large body of work alongside its existing problems in sustaining mainstream disciplinary work in the social sciences. Hence my favoured solution would be the creation of a separate Health Services Research Council in which the various contributing disciplines might start afresh with some chance of parity of esteem and equal opportunity to influence priorities, problem formulation, etc, and to generate appropriate multi-disciplinary responses thereto.

**b) Creating an Institute of Health Services Research**

There are three important objectives lying behind the Royal Commission’s proposal, each of which I think is well worth pursuing, viz:

1. To increase the volume and quality of health services research, (if necessary at the expense of clinical medical research);
2. To improve the career prospects of researchers in this field;
3. To ensure that there exists at least one non-medical multi-disciplinary research group with a large enough capability to make a significant impact upon the scene.

The question one must ask is ‘Is an IHSR the most cost effective way of pursuing each of these objectives in turn?’

1. Improving career structures and providing security of tenure to researchers, comparable to that enjoyed by teachers, is important to keeping good middle management and moderately experienced researchers in research. It is a problem which the MRC keeps taking a gentle run at, then allowing itself to run out of steam before anything tangible happens. It needs dealing with across the board, and I think it would be both inefficient and unjust if researchers in any IHSR had better terms and conditions than comparable researchers in other research units. If this proposal galvanises the system into action on this front, all well and good, but it is not right, in my view, to have the IHSR as a privileged group.

2. Improving career structures and providing security of tenure to researchers, comparable to that enjoyed by teachers, is important to keeping good middle management and moderately experienced researchers in research. It is a problem which the MRC keeps taking a gentle run at, then allowing itself to run out of steam before anything tangible happens. It needs dealing with across the board, and I think it would be both inefficient and unjust if researchers in any IHSR had better terms and conditions than comparable researchers in other research units. If this proposal galvanises the system into action on this front, all well and good, but it is not right, in my view, to have the IHSR as a privileged group.

3. The third objective generates a much more compelling case for an IHSR, since it is quite evident to me from my RLC, my SSRC, and my Royal Commission’s proposal experiences, that a sizeable, smoothly functioning, imaginative and enterprising social science multi-disciplinary team would fill the legendary ‘long-felt want’, and that no such team exists. It is evident that such a facility is (a) a natural response to a certain class of problem arising frequently in health services where it is desired to improve the manner in which health care is organised and delivered; (b) very difficult and time-consuming to create and keep productive; (c) dependent on the selection of people who are socially as well as intellectually compatible, since they have to work much more closely together, and tolerate a greater range of ‘deviant’ behaviour from colleagues in other disciplines, than is called for in ‘normal’ research units (where there may be people from other disciplines, but they work on other projects, and you don’t have to get along with them). This is the bit of the case for an IHSR which convinces me of its desirability, and it is in...
these terms that I will consider its size, structure, responsibilities and possible locations. Its success will depend on getting three or four very strong top people, widely respected in their respective disciplines, who are willing to share managerial responsibilities by rotation and who should spend the first year cloistered together in intense intellectual discussion working out a research programme with each other (which should extend over five or ten years) before they start worrying about staffing, etc, so that they go to the research community with a coherent prospectus to offer and a clear statement of expected roles. They will then have to work hard 'absorbing' and 'integrating' staff, who need (at least) six-year contracts, with a running three-year 'roll-on' provision, with tenure possible any time after the first three-year period has expired, and usually offered to people by the age of 30. Clearly the three or four 'top people' are the key actors, and they should be of professorial standing, preferably in the 45 to 50 age range so that they have 15 years or so to offer the Institute. A 'business manager' would be a useful adjunct to take off their shoulders the logistic problems of the Institute but they must also be prepared to deal assiduously with personnel matters and personal/social relations within the team. This means four or five senior posts and minimal secretarial support for a year or so, then a rapid build up over the next two years to a research team of 20 or so people, plus ancillary staff. Premises and equipment, travel, etc, in addition to staffing costs means that we are probably talking about a cost of around £500,000 per annum when the Institute is operating at full stretch.

Its location and links with the outside world are also of some relevance. To have the necessary prestige and independence it needs to be linked to a University strong on the social science side so that the various disciplines represented within it do have others of their own ilk with whom they can talk occasionally should they feel the urge! Whether or not a medical school is also an advantage is a moot point. A suitably orientated one could be a great help, an unsuitably orientated one a great hindrance. The University link would also assist its teaching and conference activities, which could then use University capacity cheaply in the vacations. As a distinctive feature I would favour orientating its service contacts towards the NHS (and LASS) rather than towards the DHSS, even to the extent of giving the NHS a special role in any steering group (within the SSRC). To reinforce this detachment from the DHSS (and central government and the Research Councils) it should not be located in or near London, but preferably in one of the Universities in one of the larger central conurbations (eg, Birmingham, Leicester, Manchester, Nottingham, Coventry). It should not be developed out of any existing unit, but start afresh (though it will obviously have to poach staff from existing units).

**Conclusions**

1. Strengthen, don't weaken, the DHSS's research commissioning capabilities.
2. A HSRC is a better bet than a mixed MRC/SSRC division of responsibility.
3. An enlarged role for the MRC carries the danger of medical domination of health services research, which, however well meaning, I do not think they understand.
4. Simplify the role of the IHSR so that it can do one limited but important job well.
5. Create and sustain a well-behaved pluralistic system, since no one organisation could satisfactorily cope with all the diverse needs of HSR.
Appendix II: Arrangements for the cooperation of the Health Departments and the Medical Research Council

Introduction
1. This document sets out an agreement on the principal features of revised arrangements for cooperation between the Medical Research Council and the Health Departments which will take effect on 1 April 1981. It replaces the agreement that became effective on 1 April 1973, designed to implement those parts of Cmd 5046, 'Framework for Government Research and Development' under which a proportion of the funds, referred to in this document as 'the commissioning funds', provided by the Government for biomedical research undertaken by the MRC was transferred to the Health Departments from the DES Science Budget.
2. The new agreement stems from a fundamental review of the present arrangements. It takes account of the previous Government's White Paper (Cmd 7499), which briefly reviewed the impact of Cmd 5046 on the biomedical research field; and of a report by the Public Accounts Committee (PAC First Report, Session 1979/80) which expressed the view that the Government should 'give full weight to the possibility of abandoning the full commissioning arrangements ... if they add nothing of substance to the guidance and advice which the Health Departments could in any case continue to provide through the improved arrangements for consultation and liaison with the MRC'.
3. The Health Departments and the Medical Research Council agree that the commissioning funds will be transferred back to the DES Science Budget on the understanding that the Medical Research Council will continue to meet the needs and priorities of the Health Departments in the Council's programme of biomedical research, and will also undertake to mount and manage, in partnership with the Department of Health and Social Security, some health services research on the basis of agreed administrative and financial arrangements. Thus the agreement will provide the opportunity to develop further a partnership of value to both the Departments and the Council by broadening the fields of interaction while at the same time further simplifying the administrative arrangements.
4. The new agreement will take effect from 1 April 1981 when the commissioning funds will be transferred from the DHSS and SHHD votes to the DES Science Budget.

The arrangements for Biomedical Research
5. The Health Departments will maintain a close interest in the biomedical research undertaken by the MRC and will wish to participate in the work of the Council. The Health Departments and the MRC note that the Secretary of State for Education and Science intends to continue the practice of appointing the Chief Medical Officers DHSS and SHHD and the Chief Scientist DHSS to be members of the Council. (The Welsh Office will be represented by DHSS.)
6. The Chief Officers DHSS and SHHD and the Chief Scientists will be full members of the MRC Boards; and will have the right to be present at those meetings of Board Chairmen concerned with the allocation of funds to particular research proposals. Other Health Department officials will be able, as appropriate, to attend Board meetings as observers. If neither the CMO, DHSS nor the Chief Scientist DHSS is able to attend, then the designated Deputy Chief Medical Officer may attend in his place.
7. The Health Departments will also nominate three independent scientific members to each of the three MRC Boards (Neurosciences, Cell and Systems), taking into account the requirement to cover adequately the subjects for which the Boards are responsible. The responsibility will rest with the Departments for briefing these members concerning matters of special interest to the Health Departments.
8. Day-to-day interaction between the Health Departments and the MRC will continue to be developed at all appropriate levels.
9. The Departments and the Council will arrange an annual meeting at an appropriate high level. In advance of this annual meeting the Health Departments will prepare and circulate notes on any matters they wish to bring to the attention of the Council. The Council will circulate a note on its new and anticipated scientific developments which could affect health services, together with a commentary on work that has been specifically requested for the Health Departments. The arrangements for the timing and conduct of these meetings and the format for the papers will be developed in the light of experience. A jointly agreed report based on the minute of the annual meeting will be produced for circulation and publication by the Departments as required. The report will also be made available to Council.
10. Requests for advice on or specific proposals for biomedical research may be brought to the attention of Council by the Departments at any time.
11. The Health Departments may continue to commission biomedical research elsewhere, funded from their own research budgets.
12. The MRC will continue to provide the Health Departments, as appropriate, with information relevant to Ministers' correspondence and Parliamentary business.
The arrangements for Health Services Research

13 The Medical Research Council will, as opportunities arise, engage in health services research to a greater extent than at present in MRC Units and by grant support to universities. The agreed aim is to increase, over time, that part of the ‘base’ for health services research provided by the MRC so that the Council may also undertake commissions for such research in a customer/contractor relationship with the DHSS.

14 The DHSS accepts that further development of the ‘base’ for health services research depends in part on the emergence of suitable workers in this field, and that the establishment of new MRC Units is a matter for the Council. It will be the responsibility of the DHSS in consultation, where appropriate, with the Welsh Office to put proposals to the Council about the areas in which the Department would wish to see provision made by the Medical Research Council. In due course the DHSS and the MRC will review the need for the establishment of appropriate machinery for the customer/contractor interaction.

15 MRC Health Services research should be jointly monitored by the Council and the DHSS. MRC officials will also be invited to accompany Chief Scientist’s visits to DHSS research directors.

16 Although the DHSS looks for a greater deployment of MRC resources into this field in order to help provide a high calibre national capability, the MRC will not be the sole contractor for DHSS in the field of Health Service Research.

The financial arrangements from 1 April 1981

17 The DHSS seeks to establish financial arrangements which will themselves contribute to the harmonious and closer relationship that both the MRC and the Department wish to maintain and develop.

18 The arrangements should be on the following lines:

a A small part of the present commissioning funds should, as current biochemical projects are completed and consequential funds become available, be gradually applied over the years ahead to objectives identified by the DHSS and agreed with the Council. The amount to be made available in this way from the DES Science Budget would grow over the period of 5 years, commencing 1981/82, and should be within a total of £2m (at 1980 Survey prices) in any year.

b These objectives would be achieved by undertaking in MRC establishments and University Departments new work which, while of adequate scientific merit, met Departmental needs. New work in health services research, together with that already being undertaken in existing MRC establishments, would combine to provide a wider MRC ‘base’ in this field. The DHSS envisages that it will contribute from its own funds towards the establishment of this wider base. Where it possesses the appropriate expertise the Council will also undertake specific commissions in health services research which will be funded from the DHSS’s own budget.

19 Thus, in the future, the additional contribution to health services research may be funded from the DES Science Budget using the arrangements summarised in paragraph 18a; and from the DHSS Vote for further development of the ‘base’ and for specific commissions, as envisaged in paragraph 18b. These arrangements may need to be adapted in the light of experience.

Review

20 The arrangements could be jointly reviewed at the end of five years.