

TALKING POINT

Health services administration and health services research

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It has been recognised for some time that health services research (HSR)—research into the delivery and effectiveness of health services—does not make an adequate contribution to the work of the NHS. What kind of HSR is important and how can the implementation of its findings be ensured? Confusion about the administration of the NHS and the nature of HSR as distinct from classical biomedical research has hampered the production of satisfactory answers. The elaborate structure of management tiers and the prominence given by them to planning has led outside commentators to believe that the NHS is controlled and its policies determined by a government department, with the help of subordinate executive agents—the health authorities—through a hierarchical system analogous with that in the armed Forces. In practice, operational revenue allocations, which account for 92% of expenditure, are controlled by the district management teams (DMTs). Provision is controlled by NHS staff; most important among these are doctors, three of whom are members of each DMT.

Two distinct philosophies exist in the NHS, one derived from the planning ethic, one from a quasi-market ethic. The former predominates in the textbooks,¹ the latter in the real world. In the textbook model the tier structure estimates needs and provision and endeavours to match them through defined health policies. In the real world staff respond to demands made on them in the light of available technical and financial resources. They operate in a medical market place² in which clinicians compete with one another—within the scientific community to enhance methods of care and within their districts to obtain from the DMTs the necessary finance to apply them. From the competitive process emerge the health policies that are implemented.

Nature of HSR

The objective of the independent scientist is to advance knowledge. He does not have a commitment to implement his ideas outside his own domain. Indeed, that could be regarded as a source of bias that might vitiate the integrity of his work. The scientist simply tackles a problem that he thinks he can solve and it is up to others to take up his findings as they think fit. In his report on government research and development Lord Rothschild likened this method as it applies to the research needs of a government department to scientific roulette.³ Industry endeavours to reduce the element of chance. A firm that maintains a research and development department not only requires research to be undertaken which is relevant to its interests, it is committed to the application of the results in the development of its products. That is why research and development encompass financial, economic, design, consumer, and organisational issues that lie outside the scope of the natural sciences.

Rothschild proposed that the DHSS should commission HSR on problems that concerned it from contractors in the research community. A chief scientist should be appointed, supported by civil servants in the DHSS, who would identify the problems that needed to be researched, and by a panel of scientific advisors from outside it, who would ensure that the right scientific approach was adopted.

These proposals were evidently formulated on the twin assumptions that the civil servants at the DHSS were not only equipped to define NHS problems for research but also empowered to implement the results. HSR would influence the NHS because the contracted researchers would inform the central "policy makers" of their findings. Rothschild must have been given the impression that the DHSS, through its planning system, could issue directives to its executives in the NHS. Alas, roulette describes not only the input problem but also the output problem. Though the DHSS arranges for a research and development team to include natural scientists, social scientists, and NHS administrators experienced in the problems of implementation, the most that the DHSS can do is to recommend to health authorities that they adopt or otherwise take notice of the results of the research it has commissioned. To the extent that the end point of HSR remains the publication of a paper—it being left to the medical market place to evaluate its findings and the DMTs to implement them in accordance with advice from local consultants—it does not equate with research and development as that term is normally understood.

Why is HSR important?

The need for HSR became pressing in the 'seventies for two reasons. The first is that throughout the developed world it is no longer possible to maintain the increase in expenditure on health services made in the two decades after the second world war. Choices have to be made and so priorities have to be determined between different branches of medical care. The question is, where can investments best be made in the public interest? At present there is no method of determining this. If we are to attempt to develop methods of making rational choices epidemiological, economic, sociological, and organisational skills will have to be deployed. Hence the increasing recognition of the need for research and development in the NHS, and of a multidisciplinary approach to resource investment that combines techniques from the industrial and commercial world with those of the natural sciences.

The other reason why HSR has become important is the greater emphasis now placed on services that provide for the care rather than the cure of patients. The acute inpatient is discharged after a mean stay of 9.2 days (though he may receive aftercare as an outpatient). During this time the doctors intervene, if they can, to influence the course of his illness and the techniques they employ come almost exclusively from the domain of the biological and physical sciences. The public increasingly realises, however, that despite the therapeutic advances of the twentieth century its improved health has largely been due to economic factors rather than to health services—increases in standards of living, better nutrition, housing, education, and conditions of work, and a less hazardous environment. Today about 60% of deaths are due to three causes, ischaemic heart disease, cancer, and stroke. Medicine alone cannot greatly reduce this mortality.

On the other hand, the problems of the elderly, the chronically sick, and the mentally ill and handicapped weigh increasingly on the com-

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munity. So the community requires more support for the disabled members of their families, partly for demographic reasons and partly for cultural reasons. Furthermore, a social, preventive, and care approach offers the best prospect of alleviating the relatively high morbidity and mortality among the disadvantaged in social classes IV and V and in inner-city areas. The local authority social services departments were established a decade ago to meet some of these needs but the major responsibility for the chronically ill and disabled, in hospital or in the community, remains with the NHS. Thus acute medicine—though as vital as ever—is less dominant than it was in the first half of the twentieth century. Its methods are not always relevant to present problems and its practitioners' concern with the individual patient can seem somewhat precious against the larger perspective of the public interest.

To discover how to provide better care for people who have to live with disability for long periods requires an appreciation of all the problems that affect them as a population with special characteristics in the wider community. An epidemiological approach that embraces a variety of skills is needed; that means not only medicine and nursing but also economics and sociology.

Content of HSR

Cohen identified the following categories of HSR: studies of service need, demand, and utilisation; evaluation of services and quality control; studies and experiments in different patterns of hospital and community care; studies of specific medical conditions (randomised controlled trials); prototype services and special service developments; and manpower, management, organisation, and economic studies.⁴

Widespread differences occur in provision between regions. For example, in 1977 the numbers of surgical operations per 100 000 population in different specialties were 77-137% more in the best compared with the worst regions.⁵ Do need and demand vary in the same way? How are judgments to be made about how many operations there should be? What is the influence of a relative excess of provision in one specialty on others in the same locality? The acute sector is relatively well developed in inner London and the other major conurbations; is this a bonus or is it at the expense of the non-acute sector? We don't know the answers to these questions. The basic facts about provision, much less about need and demand, have not been established. No criteria are available to management when determining future developments. Each professional group sets ideal standards of its own for its specialty with the consequence that a profound shortage of everything is felt to exist.

Again, HSR studies of the ratio of the different components of services are required to make the best use of resources. What should be the ratio of numbers of surgeons to operating theatres, beds, and support staff? For a start, no one knows how many operating theatres there are in the NHS. Yet there are large regional differences in the numbers of operations which the average surgeon performs. Moreover, the increase in numbers of operations has not kept pace with the increase in surgical staff. Between 1961 and 1977 the number of operations increased by one-third, surgeons by two-thirds, and junior surgical staff doubled. Is this evidence of declining productivity because of unbalanced investment in resources?

Clinicians must take part in evaluation; they can give access to the service they provide and judge what is practicable in clinical terms, given their overriding concern with the welfare of each patient as an individual. But they are ill equipped to undertake HSR without the help of experts in research design and data analysis who have time for the extra work that a careful analysis of services requires.

Changing the patterns of care, particularly in the non-acute and community sector, requires an organising centre that can influence the many agencies concerned to construct care systems that can be compared. Studies by outsiders who peer into the processes of the NHS—and publish their observations in their own journals—will never be an effective agent of change.

The widespread use of randomised controlled trials and similar research techniques to measure not only the benefits and drawbacks of therapeutic innovations but also systems of care is indispensable. Epidemiologists have exposed how facile conclusions may be drawn about the value in everyday practice of methods of health care that may be based on good biological hypotheses.

A series of financial problems is beginning to emerge as a consequence of the operation of the Resource Allocation Working Party (RAWP) formula.⁶ Historically, revenue allocations to health authorities were not merely inequitable but inversely related to morbidity. As the differences become less gross because of the operation of

RAWP how is the volume of morbidity in a region relative to other regions (and in a district relative to other districts) to be measured, and what allowance should be made for it in the budget formula? A more sophisticated understanding than now exists is required of the effect of health services on morbidity.

Science and social science, competition and planning

How then are these different categories of research and development to be undertaken and how are the findings to be implemented? The governing principle in the acute specialties is that of the natural sciences and this dominates the management ethos in which the DMTs make decisions. Services are provided by a medley of clinical firms and departments controlled by individual consultants who decide what policies should be adopted for each clinical condition according to the evidence. It is an easy extension of the same principle for consultants to discuss investment and organisational issues among themselves in their hospital medical committees, and so decide what developments should take place, according to the priorities they establish and the resources made available to them. Services are extended but not planned in the sense of making an identified level of provision for a defined population. Inevitably, all the characteristics of a market system ensue, most notably, a dynamic approach to the job and to new developments—and duplication of effort and wide variations in practice and provision.

New discoveries in the natural sciences are made piecemeal and on a micro scale, yet they may be prime causes of change in society: antibiotics, molecular biology, and genetic engineering are examples. The same is true of the acute specialties. In the social sciences this is rarely the case, Keynesian economics being perhaps an exception. Normally, the social sciences relate to the body politic as the physical and biological sciences do to nature, and their status reflects this. The community at large expresses its will and looks to its agents, which include the social sciences, to interpret and implement it. Increased demand for health care, particularly for the elderly, the disabled, the mentally ill, and the mentally handicapped, is expressed through such organs as the House of Commons report on Public Expenditure in the Social Services (PESS) and policy documents issued by the DHSS, including *Priorities for Health and Personal Social Services in England*⁷ and *The Way Forward*.⁸ The approach is generalised, comprehensive, and on a macro scale. So long, therefore, as the Health Service investments that are actually made are determined by DMTs, predominantly under the influence of consultants in the acute sector, who adopt the market approach of the natural sciences to developments, conflict will occur between the policies society wishes to pursue and those actually implemented, between socially determined objectives and scientific advances.

DHSS plans

In the table actual growth in expenditure in four groups of services (which together account for 83% of hospital and community health services expenditure) in the quinquennium 1975-6 to 1979-80, from figures in PESS⁹ is compared with planned growth for the same period from figures in *Priorities for Health and Personal Social Services in England*.

Planned and actual growth in health services, UK, 1975-6-1979-80

	Planned %	Actual %	Planned £m	Actual £m
Acute and maternity	3.7	5.7	108.2	166.2
Elderly and physically handicapped	14.8	9.4	64.2	40.8
Mentally handicapped	6.6	3.2	17.6	8.5
Mentally ill	5.9	3.0	34.6	17.4

According to the plan (or forecast) 48% of the total growth in the four categories shown in the table would be allocated to the acute services and 52% to the non-acute. In the event 71% went to the acute services and 29% to the non-acute. It is estimated that about £58m for additional growth went to the acute sector and that about £23m of

this was from services for the elderly and physically handicapped, £9m from services for the mentally handicapped, £17m from services for the mentally ill, and the remainder from other services not included in the table. This makes it difficult to understand the statement made in PESS that "service development in general has been broadly in line with departmental priorities as expressed in *The Way Forward*." (This document does not give detailed figures from which calculations can be made.) It is evident that the plan was not implemented, and given the absence of powers to direct the DMTs, who actually spend most of the money, this is hardly surprising.

Regional HSR units

Should there be central direction? Should the executive dislocation between tiers be ended and the DMTs instructed how to spend their money from above, by policy makers guided by centrally organised HSR? Would not the consequence of this be a deadening uniformity, a stifling of individual initiative, and the end of the competitiveness that is such a powerful stimulus to clinical activity? Must either the planning philosophy or the market philosophy prevail in the NHS and its research and development function? Administrative devices, such as the proposed annual reviews by the Secretary of State and the regional authorities,¹⁰ are not the answer because they cannot extend beyond a financial appraisal of local health policies.

The two most important issues about which the NHS needs the guidance of HSR are resource investment and the development of the care sector. To be effective this guidance must be based on the evaluation of services, and the logical way to provide this guidance is to base HSR at local level. A Health Service research unit in each region could influence DMTs to make more rational decisions about the NHS revenue budget, which they distribute, if health services studies were undertaken on their own populations and patients by their own staff working in collaboration with their own clinicians.

Local units would be best placed to undertake HSR on need, demand, provision, efficiency, and utilisation; on evaluation and quality control; and on experiments with different patterns of hospital and community care. Some regional centre trials could be undertaken locally, others would require multicentre collaboration and would be better controlled centrally, as would prototype services and special service developments. Organisation and method studies and economic studies must be local because of the overriding requirement to ensure staff participation and commitment, particularly in applying the findings.

It may be argued that the skill is not available in the regions. This is nonsense. One or two professional epidemiologists in each region would suffice, supported by local community physicians. Social scientists are available and, most important, the Health Service managers could be brought in and cease to act simply on the advice of committees of clinicians. Above all, the NHS clinicians would be encouraged to take part in programmes of HSR about their own services.

The advantages of local units may be summarised as follows.

HSR would be funded by the health authorities who would have a direct interest in the results.

The work and its evaluation would be done by the same people at the level at which decisions are made in the NHS.

HSR requires access to patients and to populations but this should not be a problem as the joint interest of the clinicians and the managers in the provision of local services creates a mutual confidence that makes each responsive to proposals by the other about projects of clinical or management importance.

Managers' responsibility for whole client groups and for whole sectors of Health Service provision means that they may perceive problems that are not apparent to clinicians. Also, if managers are able to initiate research of direct interest to them HSR will not be seen as an alien, somewhat esoteric activity.

In the non-acute sector particularly, HSR may be complicated because it encompasses a medley of services that are difficult to organise for service or for research purposes. To co-ordinate the different agencies so that evaluation can be done is difficult

without the executive powers of managers, who can ensure that programmes are properly implemented.

Local HSR will be relatively cheap because local clinical and management staff would be powerfully motivated to give their own time to it.

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Emergency services and industrial action

TUC's guidelines

The TUC Health Services Committee has issued the following code of practice to union members who are taking industrial action in the NHS.

(i) Any action which restricts services to patients due to an industrial dispute should be consistent with respect for human life, safety, and dignity.

(ii) In the event of an industrial dispute it will be a matter for each union or unions to consider the action that is necessary in the light of the circumstances of the dispute.

(iii) For the duration of an industrial dispute, the union(s) involved should make arrangements in advance and with due notice, in consultation and, preferably, by agreement, with the employer, or appropriate senior members of staff, for the maintenance by their members of supplies and services essential to maintain emergency services and services to high dependency patients.

(iv) Emergency services are those which directly involve the life, limb, or ultimate safety of a patient, for example, 999, renal dialysis, terminal discharges, maternity, radiotherapy, or serious accident patients.

(v) High dependency patients are those whose life, limb, or ultimate safety might be at serious risk without the maintenance of services, for example, children, severely mentally handicapped people, or elderly patients.

(vi) No services should be reduced to a level where satisfactory cover cannot be maintained in respect of emergency and high dependency patients. In particular, delivery and distribution of drugs, food, oxygen, and fuel should not be impeded.

(vii) Unions may wish to give additional and more detailed advice on instructions to their members appropriate to the particular circumstances of the dispute."