breaking down communication barriers. If this is a desirable end in itself then creation of more or less water-tight general-practitioner units within district general hospitals should be viewed with reservation. The isolated unit may be a geographical necessity in many areas, but problems of communication will remain unsolved unless frequent visits by specialists can be arranged.

SHORTCOMINGS

Shortcomings in the delivery of health care in the U.S.A. derive from irregular distribution of resources—manpower and hospital—inherent in a system governed by the economic laws of supply and demand. Where facilities exist their utilization is efficient. Local over-provision, with corresponding deprivation in poor rural and urban ghetto areas, can be corrected only by federal government action. Together with the increasing and paralysing individual cost of care in hospital there are major problems requiring solution at political level.

In Britain a relatively even distribution of care has been achieved, but at the cost of widespread mediocrity, so that it is necessary to strike a warning note in conclusion. A British graduate in medicine now enters a world market for his services. Probably clinical satisfaction is his main requirement after qualification and financial considerations are of secondary importance. The higher standards of vocational training now being implemented are going to raise the graduate's requirement for full facilities for investigation and treatment of his patients rather than otherwise.⁸ These facilities are available only within hospital. The North American general practitioner enjoys them to the full, whereas his British opposite number is at present unlikely to have more than a limited access to them. In addition, the American general practitioner's income and standard of

living are appreciably higher than that of his British counterpart. Together these advantages exert a compelling influence on many of our most capable young doctors. It is beyond our power to remedy the financial differential, but to alter the British general practitioner's clinical opportunities by integrating him fully with the hospital service would cost nothing. It may demand faith, courage, and submission to an unwonted degree of discipline on his part. At its best in North America such integration produces some of the finest possible medical care. After 22 years of experimentation there is now no reason for the British National Health Service to aim at anything less.

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Reorganization of the N.H.S.

Effective Management of Health

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The "basic difference" between the latest, presumably final, consultative document on N.H.S. reorganization¹ and its two predecessors^{2,3} is, to use Sir Keith's own words, in the emphasis on "effective management", particularly at the regional level. Thus the document is very much in line with the present Government's entire thinking about public spending.⁴ Whatever changes are made in the details of the proposals after consultation with the profession, it would be naive to imagine that there will be any lessening in this emphasis on "effective management". In this paper we examine the implications for the professions and the N.H.S. as a whole of this proposed managerial revolution, without attempting to discuss all the aspects of the document.

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Case for Management

What does "effective management" mean? We define it as a system of decision-making which works within a framework of clear objectives, which has a hierarchy of consistent and coherent priorities, and which allocates resources in a rational manner. Equally our system includes a continuing capacity to monitor the results of decisions taken and, where necessary, to redeploy resources accordingly. The usefulness of this definition is that it emphasizes the absence of good management in the N.H.S., which has been largely run on the basis of a well-meaning stewardship.

To take the most outstanding example, one of the objectives of the N.H.S. was to secure an equitable distribution of resources across the country. In general practice the use of the designated areas system has contributed towards this aim. In the hospital services—which take over 60% of the N.H.S. budget—the historical inequalities of the regions inherited in 1948 have been perpetuated virtually unchanged. The amply bedded, high-spending regions of the past are still the amply bedded, high-spending regions of today. The top region spent almost 69%

more per caput than the bottom region in the early 'fifties, and still spends more than 64% now (£21 as against £13 per head in 1969/70), a difference of £8—or over two and a half times the average per caput expenditure on general practice.⁵ Only this year has the Department of Health and Social Security introduced a new system of allocating resources to the regions, designed to iron out some of the inequalities—though this process of equalization is to be stretched over a decade.

Another aspect of this failure to evolve rational methods of allocating resources is the Department of Health and Social Security's policy on bed "norms." The 1962 Hospital Plan⁶ laid down a national target of 3.3 acute beds per 1,000 population, to be achieved by 1975, though allowing some regional variations from this norm. By 1967 seven regions had already passed the 1975 target—but no major revision of the programme has come from the Department. Similarly, the apparently experimental norm for the "best buy" hospital of the future is 2 acute beds per 1,000 population, but in at least one area promised such a hospital this norm had already been achieved by 1968.⁷

Again, the effective management of an organization implies evaluating the outcome of what has been done. Yet policy and administrative decisions have been taken in the N.H.S. without any apparent attempt to monitor their consequences. Thus health centres are being introduced as an act of faith, reaffirmed by the consultative document; yet no one knows how far they are simply a merger of branch surgeries or performing as an integrated community team with a different content and range of work. There is a plethora of architectural plans but a poverty of information about the change, if any, in the content of medicine in new buildings. Again, cottage hospitals were first condemned as an administrative anachronism within the hospital service and only now has it become apparent that they might have a valuable part to play as community nursing homes for the family doctor.

Lastly there is the managerial failure in reacting fast enough to change and introducing innovation. Various changes in health practice—diagnostic tests before inpatient admissions, day surgery, progressive hospital care, discharge wards—have been tested and discussed for years, and if widely adopted would save the N.H.S. a great deal of money for reinvestment elsewhere. But while the loose structure of the N.H.S. makes it easy to experiment with innovations, it makes it difficult to encourage their subsequent use elsewhere. Lack of management is once again evident in the failure to evaluate, to communicate,⁸ and to create the conditions which will encourage innovation to spread.

What Does Effective Management Mean?

The case for effective management becomes all the stronger when one turns to look at some of the present day problems. Basically these revolve round the question of deciding priorities in three areas. Firstly, what are to be the priorities among the different sectors of the new integrated health care system, and how will they be settled? This question is important since the consultative document is disturbingly contradictory about the administration of the family-doctor services and their relations with the various tiers of authority. Is not the region too remote from general practice? There is a danger that general-practitioner independence will lead to isolation—and isolation, in turn, could easily lead to shortage of finance if the allocation of resources was decided by the pressure of rival lobbies as distinct from rational management.

The second main question is what are to be the priorities within the hospital service and how are the various competing claims to be decided? For example, at present pensioners account for 40% of all bed days in hospital and 38% of all costs⁹; by the year 2,000 the first figure could be 80%.¹⁰ How are the claims of this pensioner group going to be balanced against those of, for example, the young mentally handicapped,¹¹ for both these groups require extra resources?

Lastly, how are geographical priorities to be determined? Even a brief analysis of the hospital resources of the 70 new administrative areas¹² which will make up the proposed area health authorities outside London shows that the present regional inequalities will be greatly magnified under the proposed new system. Thus, taking the projected provision for 1975, Newcastle, Manchester, and Liverpool (regional centres

with a large peripheral catchment area) will have 7.3, 6.9, and 6.0 acute beds per 1,000 population, respectively, while Oldham and Coventry will have 1.8, Tynemouth 1.3, Solihull 0.6, and Bootle 0.1 beds per 1,000 population. Will the aim of policy be to try to make the new area health authorities as self-sufficient as possible, to limit the movements of patients? If not what is to happen if an authority with a low bed provision coincides with a local authority which is also low on home helps, places in institutions, and so on? There is nothing in the consultative document about the policy to be adopted in this case, yet it raises several important issues. Once again there will be an urgent need to work out methods of allocating resources which are acceptable to the health professions because they are based on rational criteria of effectiveness embodying coherent priorities: our definition of efficient management. But the consultative document leaves everything to yet another working party.

Limitations of Modern Management

Several management techniques are currently favoured in industry and Whitehall and have obvious applications for the N.H.S., where indeed a start has already been made on applying them. These include cost-benefit analysis¹³; and output budgeting,¹⁴ or planning programming budgeting.¹⁵ Though in the United States, the indiscriminate application of these techniques has been criticized¹⁶ and led to disillusion,¹⁷ Whitehall is still inclined to show the enthusiasm of the late convert. Nevertheless, these techniques are difficult to use in practice, as we have found in trying to apply them to sickness. They involve two principal activities. Firstly, measuring benefits as well as costs, so that the "yield" of alternative policies may be compared. Thus though we have much data about hospital costs, it is still impossible to relate resources used to benefit obtained in terms such as effect on working capacity, domestic dependency, let alone life expectancy. The second activity is looking at costs and benefits across sectors—in other words, not merely in hospital but across the whole spectrum of services, including home helps, neighbours, and relatives. Further, it means looking at the cost-benefit equation across time, as today much disease is chronic.

These management techniques can only be developed and used in co-operation with the health professions. For, paradoxically, efficient management increases the dependence of the administrators on the clinician and medical care research. While the bad manager forges ahead in ignorance, the good manager requires information. Indeed it is tempting to argue that efficient management simply means applying the findings of epidemiology¹⁸ as distinct from ignoring them. An integrated and comprehensive information system is the essential counterpart of an integrated and comprehensive health care system. At present there are many data, based on hospital inpatient inquiry and hospital activity analysis, about inpatients. There is some scattered information about the activity of general practitioners. But there is nothing, except crude totals, about outpatients. So at present the basic data required for an integrated health service are lacking. There is no reason why these should not be obtained and organized, on a cross-sectional one-day census basis, if necessary.¹⁹

COST-BENEFIT ANALYSIS

A cost-benefit approach can actually show where extra spending shows the best return. For example, it might show a very high return on capital invested in providing secretaries for general practitioners. Equally it might show that the extra staff required to man capital-intensive investments like x-ray machines for 24 hours a day would more than pay for itself in terms of shorter stays for patients now kept waiting in £8-a-day hospital beds to have diagnostic tests performed. If cost-benefit analysis were extended to take into account the time of patients (working days lost, etc.) the finances of the N.H.S. might look very different.

Many problems remain to be overcome, however, before this analysis can be applied to all sectors of the N.H.S. For though, on the input side, labour and capital equipment can be measured, how does one measure the equivalent of the manufacturer's raw materials—patients—and, indeed, the output. Several measurements of "productivity" are used in the N.H.S.: throughput, bed occupancy, case fatality, length of stay, and so on. Nevertheless, doctors for understandable reasons view them with some scorn. For these discount many clinical aspects—or, to use an industrial comparison, the state of the raw material on arrival and the quality of the finished product. Thus any hospital can improve its productivity as measured by throughput—for instance, by lowering its threshold, as by taking in less ill patients who consequently require less treatment.

Hence clearly the profession will have to devise satisfactory and acceptable measures of severity and outcome, for without indicators of productivity there can be no effective management. Nevertheless, the most important limitations on the managerial approach in medicine are the ethical judgments of the professions and the public. For example, cost-benefit analysis stops at 65—that is to say, a pensioner has no economic value to the community, and in economic terms therefore there is no case for treating him (the reverse, in fact). So management tools can help to decide between alternative means—i.e. they can show what is the most efficient way of achieving a particular objective—but they cannot decide the ends of policy, which inevitably are shaped by professional ethos and public opinion.

Clinicians as Managers

It is in the area of means, however, that Sir Keith's consultative document is likely to raise the greatest suspicion. Does his version of managerial efficiency imply more managerial control of the doctor, or more management by the doctor? Here the answer is bound to be speculative, since the document is short on detail, and what follows is therefore inevitably tentative.

The individual doctor may fear that efficient management could reduce clinical freedom. At present the only theoretical limitation on professional freedom is the judgment of the peer-group. Can this freedom survive managerial pressure? Would the system envisaged mean that findings about varying lengths of stay²⁰ would be translated into an administrative instruction that no doctor should keep a patient in bed for a particular condition for more than a specified number of days?

Even at present, however, clinical freedom is largely a myth. Already circumscribed by the decisions of politicians and managers, it is bound to vary with conditions in specific situations. More important still, one doctor's exercise of clinical freedom can limit another doctor's: thus, given a limited number of beds, one clinician's decision to keep a patient in hospital for an extra day will limit another clinician's ability to admit a new patient.

So doctors have in the past limited their own clinical freedom of action by failing to take an adequate interest in efficient management. When resources are short, they agitate for more money for the N.H.S.—inevitably running into conflict with the competing claims of schools, housing, and the social services. They have neglected the opportunities of maximizing their own clinical freedom by maximizing the use of the N.H.S.'s available resources. To take only one example, it has been pointed out that in conditions of scarcity, the "efficient use of manpower becomes a moral issue"²¹ and yet expensive medical manpower could be used much more economically by the use of more ancillary helpers.

This failure highlights a basic difference between the clinical and the managerial approach—respectively, the doctor's responsibility to the individual patient, and the health system's responsibility to the community as a whole. To acknowledge the difference between these two approaches is not, in our view, to point to an irreconcilable conflict but to the need for combining and synthesizing them. Management which is not based on the knowledge and values of the health professions will be ineffective. Clinical attitudes which reject managerial disciplines will aggravate the shortage of resources, which has crippled the N.H.S. throughout its history.

There is a further reason for regarding the doctrine of managerial efficiency as a potential ally, not enemy, of the health professions. One of the main tenets of the current Whitehall doctrine is the avoidance of unnecessary interference in matters of detail. Thus the Fulton Committee on the Civil Service²² recommended the introduction of "accountable units of management": units which would be allocated resources, set performance targets, and then allowed to manage themselves in their own way. Applied to the N.H.S., one can see that hospital divisions and perhaps also health centres are precisely such accountable units in embryo. In Cogwheel²³ there is already the basis of a system of self-management and there is no reason why more responsibility, including fiscal, should not be devolved; in return, though, a system of accountability will have to be devised for the use of what are, after all, national assets. Given financial responsibility it should be possible, for example, to devise a system whereby an efficient accountable unit would be allowed to spend at least a proportion of any money saved.

In this paper we have tried to deal only with the main implications of the consultative document's managerial approach to the problems of the N.H.S. We have not discussed the proposed administrative framework of the new system. This is partly because certain crucial details have still to be revealed—for example, the precise relationship between the regions, the area health authorities, and the general practitioners and the position of the community physician. It is also because, in our view, the effectiveness of the N.H.S. in the last resort does not depend on the lines drawn on a map of an organization chart. By the nature of the task the doctor is always the final decision maker. Therefore managerial efficiency can be achieved only by recognizing the doctor's central role. And the main danger, as we see it, is that the medical professional may refuse to accept its responsibility for good management, so that society will have to find a substitute for professional self-discipline—namely, a detailed medical audit, as in the United States.²⁴

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