

Priorities in medicine*

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I HAVE been asked to talk about priorities in medicine and thinking round that rather ambitious title, I realized that it means something vastly different now from what it might have meant 20 years ago. I believe that at the beginning of the Health Service most of us were thinking of the job as one of ensuring that everyone could get all the medical service he needed and few of us thought of a situation in which medical skills and knowledge had developed so far it was no longer possible to give people everything that was available. Of course we knew that unlimited medical and nursing attention for everyone was impossible even then. Perhaps some of you remember that there was a great deal of talk at that time about the treatment of Parkinson's disease and a clinic in Germany run by Dr Woehler attained something of a vogue for being able to do things for the sufferer from Parkinson's disease that no one else could achieve. But all that was being done in that clinic was to provide for a few people an amount of individual attention from physiotherapists and others that simply could not be generalized and prescribed for all. Even then the concentration of attention on a few people could get them some advantage in results. Yet at the same time the waiting list for our hospitals was well over half a million and with turnover in the hospitals only about three fifths of what it is today the waiting time was a great deal longer. Priorities for attention existed even then. Curiously enough we had about 30,000 more hospital beds occupied at any one time, but the length of stay of patients in most of them was about half as long again as it is now.

The sort of priority we were thinking about 20 years ago was adequate hospital provision for pulmonary tuberculosis. In the late 1940s the annual deaths from pulmonary tuberculosis were running at nearly 20,000 and to reduce this we had first to increase hospital bed provision by 5,000 beds. Go back a little further and the concept of medical care was very much that of a relationship between one patient and one doctor who provided most of the professional care needed. Of course at the end of the last century the possibility of active therapeutic intervention was very small indeed. I suppose digitalis and morphine, in one of its forms, must be almost the only known active medicaments of that time that still remain to us and they remain in quite different forms. The big change in this century has been the scientific sophistication of medicine and as soon as you begin to elaborate the basis of scientific knowledge and the technology associated with it, the one-to-one relationship begins to be diminished in some ways.

Hippocrates was the personification of that one-to-one relationship but his contribution to patient care, of necessity had none of the scientific content of today and was more diagnostic and social than therapeutic. Another Greek named Democedes had rather a different approach as the man hired by the population of Aegina to provide the whole island with medical advice, or maybe be a political influence at the Court of Darius. But the point I am making is that there wasn't much question of priorities early in the century, largely because there wasn't much you could do.

Priorities began to come into the argument when you had to think about organizing

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medical resources whether organization took the form of collection of the necessary animal organs for production of insulin, or the provision of resources for a programme of active immunization. Yet between the wars I do not think we really got down to questions of ordered priorities because the operation of the market in medicine then largely did whatever planning there was. We weren't then thinking of meeting all needs. Some special services were laid on complete, for instance, the provision for diagnosis and treatment of venereal disease. This was only possible because the government gave it special attention in the first world war and for once kept on and developed the service in the peace that followed.

With the onset of war the war-time emergency medical services did bring us hard up against priorities both in planning and execution. Not many of you will remember that in August 1939 we had the hospitals organized to provide beds for something like 350,000 casualties in the first week of war. On top of that there were special schemes like that which provided emergency maternity homes for women sent out as evacuees from the large cities. I was involved with medical officers of health in the North Midlands in organizing maternity units which took women from London, Hull, Sheffield and the south east to the tune of nearly 200 a week for most of the war and housed them in converted mansions, convalescent homes and the like. Indeed those homes helped to establish the vogue for institutional confinement that has extended until now the Peel Committee on the Maternity Services has come down firmly in favour of all deliveries being in hospital. That indeed raises questions of priority in an acute form—should fewer women be admitted but stay longer or all be admitted for a shorter time? Or perhaps are there other greater claims to hospital beds? Professional prejudice all too often supplies the answer rather than a calm appraisal of group needs. Again the decision is made on other grounds than individual need, by balancing needs of many. The war-time service in that particular field was fairly straightforward—an air raid shelter was no place to deliver a baby—but the selection of priorities in other fields led, for instance, to the crowding up of many mentally ill or retarded patients, so as to clear hospitals or parts of hospitals to deal with the physically sick or injured, and the retention of many chronically ill patients at home. The other kind of priority, with which we are much more concerned now, began to creep in with the special arrangements made to conserve the first limited stocks of penicillin for military and similar uses and later the strict reservation of streptomycin to remediable cases of tuberculosis when supplies were insufficient for every patient. Then too during the war special steps had to be taken to develop within the emergency medical services pathology and radiology which were only just emerging before the war as absolutely essential medical specialities for all acute hospital work. Perhaps Sir Philip Panton's development of clinical pathology in the EMS, the development of the Public Health Laboratory Service by Professor Topley and Sir Graham Wilson and the deliberate provision of special training facilities in radiology gave us the best start for the reorganization that had to come after the war. In 1939 pathology, radiology and radiotherapy in many important hospitals were side activities of other consultants whose main concern was with clinical medicine and surgery. The pathology department in one acute general hospital I know—even then of 450 beds—was one room not 20 ft square with a small side room as an office. In another even larger hospital the radiology department was little larger and radiotherapy was barely safe. This region had a unique development based on Christie and inspired by Ralston Patterson.

The war and the immediately preceding preparation had held up all the necessary structural changes in hospitals and when the Health Service took over in 1948, it inherited a collection of buildings which, except for some EMS additions in temporary buildings and a few contributions like the new sanatorium for tuberculosis outside Nottingham which was almost redundant a dozen years later, were probably in worse condition than they had been ten years earlier. Lancashire was at least lucky in that it had been guided by Lissant Cox to build small units for tuberculosis associated with other hospital

provision rather than large remote sanatoria which we can no longer use effectively. Even the Cheshire "Joint" of famous memory is being closed. Some of the newest hospital buildings in Lancashire were in small units which do not readily fit into a modern hospital programme. Anyone who read the report of the hospital survey by Sir Ernest Rock Carling and Dr T. S. McIntosh will recall that the description of almost every hospital centre proposed that it be entirely rebuilt. The limited building resources available to the Health Service in the 1950s went very largely in attempts to plug the gaps by providing diagnostic departments, outpatient facilities and operating theatres attached wherever space permitted to existing old hospitals that were mostly hopelessly out of date already. Serious planning in terms of priorities for hospital building was hardly possible in the first ten years of a Health Service that only spent about £100 million on capital development in the whole of that time—less than we spent in the last financial year.

The sophistication factor in modern medicine

The priority in the hospital service in the early days was one of medical manpower planning to make adequate use of the physical resources. The best achievement of the Health Service so far has been the provision of specialist services wherever they were needed. Admittedly, the provision is not enough by a long way, but there must be about four times as much consultant time in the Salford group as there was before the service began. The number of consultants in England and Wales has more than doubled since 1948 and the total hospital staff has increased by nearly as much. There was some serious attempt to prepare for that in the action that was taken to hold on to newly-trained specialist staff coming out of the Forces under the EMS until the Health Service came in. Ever since that time the department, working with the profession, has been trying to use the trained staff that becomes available to build up those areas where the shortage is greatest and this has meant sometimes denying an increase in, for instance, psychiatric or anaesthetic staff to relatively well-provided areas in the south so as to give a chance to some of the regions further north. In a way the operation of the market has been the principal factor in the rapid growth of specialties like anaesthetics and psychiatry because it was obvious that aspirants to consultant status had their best chance there. I will come back to the question of priorities in the development of the profession as a whole later on.

The increase in specialist staff in the hospitals has been mainly in the other specialties than general medicine and surgery. The sophistication factor has been most prominent. Specialties like neurosurgery and plastic surgery took out of general surgery and traumatic surgery some of the work with which they had been trying to cope. For instance the treatment of major burns would be recognized now without hesitation as being the primary concern of plastic surgical departments, but it was part of general surgery for the most part before the Health Service. Thoracic surgery evolved from general surgery and in the last 20 years has moved from the surgery of the lung towards the surgery of the heart. Cardiac surgery is a good example of the application of priorities because open heart surgery had to evolve technically in a limited number of specially-supported centres, for instance Guy's, Hammersmith, Birmingham and Leeds, before it could be developed generally in all the regional centres. And yet cardiac surgery is one of the examples of a technical rescue that can be performed and give a full, even a normal life to a child or a young adult who would otherwise live an invalid and die young. The first developments in haemodialysis for acute renal failure were at Portsmouth, Hammersmith, Halton and Leeds on much the same lines.

This kind of specialty brings out the sophistication factor in modern medicine perhaps more than any other. The support of diagnostic and monitoring services, radiological, pathological and clinical physiological is absolutely essential to cardiac surgery. The surgery indeed is only the surgical part of cardiology and it has only been

made practicable because of the evolution of anaesthetic and clinical physiological techniques. I remember in the early days of open heart surgery being taken into the theatre at Hammersmith when the bypass machine was working. There were two surgical consultants at the operating table, another consultant supervising the bypass machine, two anaesthetic consultants, one of whom seemed to be concentrating on continuous electroencephalography and a cardiologist sitting in front of a console of dials that would have done credit to the cockpit of an airliner, telling the surgeon more or less what he could do. Of course they have got it a bit more streamlined than that now, but that is how it started. That just underlines the amount of medical effort that has to be put into the mounting of a major clinical advance like that; but who can deny that it was justifiable. These are young patients who can be given normal or near normal lives.

Specialties like radiotherapy which used to involve perhaps a couple of 250 Kv units and a stock of radium needles, now require a paraphernalia of highly-expensive radioactive isotope units which make the original radium bomb look like a trifle, and linear accelerators operating at four to ten million volts, not to mention things like cyclotrons and neutron beam units and sophisticated services involving physicists and computer calculations of dosage that would make Dr Ralston Patterson's apparatus here 25 years ago look like a model T Ford beside a Rolls-Royce of 1970.

Transplantation of organs is the latest excursion. Twenty years ago we were concerned with no more than the organization of collection of cornea, bone or blood vessels with none of the immunological problems which beset the transfer of actual functioning organs nor the tight time-table which adds enormously to the difficulty of obtaining consent. The medical, nursing and scientific problems greatly increase the cost, yet the by-products in the science of immunology as well as the prospect of conservation of life in reasonably humane conditions after chronic renal failure justify some special treatment. Indeed the ethical and social obstacles present greater difficulties than the medical priorities.

The progress of hospital medicine in the last 20 years is the progress of specialization and the application of medical science. Beautiful new hospitals, where we have got them, are not beautiful as architectural monuments but as places where new scientific techniques can be applied and the work of the other health professions which has gone through a similar process of sophistication, can be carried on with facilities that make total modern medicine practicable.

All this sounds as if progress in medicine was a matter of doing ever more complicated things. I happen to have mentioned those first because they are obvious examples of medical advance, but they are really not the big and important ones. Anaesthesiology is now the biggest of the hospital specialties. There are nearly 1,200 consultants, one third more than in general medicine or surgery, but most of their work is not with this highly specialized surgery but in giving far better service for the ordinary surgery. The rate of turnover in general surgical beds has almost doubled and the number of anaesthetics given each year must be around four million. The surgical risks that can now be taken are infinitely greater than 20 years ago. Surgery is often far more radical and many of the patients are older and more frail. Yet the number of deaths registered annually in England and Wales as associated with anaesthesia is just about two sevenths of what it was 20 years ago. Not only are the deaths greatly reduced, but the morbidity and the discomfort associated with anaesthesia are almost trivial compared with former times.

The great increase in potency and efficacy of new drugs has simplified some medical jobs but greatly complicated others. The new psychotropic drugs have given an added urgency to psychiatric diagnosis of, say, a depressive illness as well as effectiveness in treatment. The hypotensive drugs make active treatment of hypertension a priority with a return in the prevention of cerebrovascular accidents, and raise the question of

screening. Oestrogen–progestogen mixtures have provided an entirely new approach to family planning, and set a new problem in appraisal of the admissible risk. Three years ago we were ready to accept the hazard of death from thrombo-embolism at a rate of three per 100,000 woman years. A woman would have to take the pill for eight years to incur even so small a risk of death as she would meet in one pregnancy. A report in the *British Medical Journal* shows the low oestrogen dose pills now in use could be taken for 16 years before the same risk had been incurred. Incidentally this exercise has shown the enormous public interest in the subject and the great difficulty of informing the profession without alarming the public. It also emphasizes the priority we must give to safety control of drugs.

Priorities in mental care

To take a totally different branch of medicine, psychiatry, the turnover in hospitals for the mentally ill has roughly doubled. The length of stay is progressively shortening. The number of patients who become permanently hospitalized is very greatly reduced. The number of beds per 1,000 of population in use has been reduced from 3.4 per 1,000 population by about a fifth despite a one third increase in old people in the population. In this hospital region the number of patients admitted to psychiatric beds in general hospitals is greater than the number admitted to mental hospitals. We are thinking in terms of getting down to a number of beds occupied by mentally-ill patients that may be no more than a fifth of the present figure, although of course there will have to be more geriatric beds. Some people doubt whether this enthusiasm for home care is fully justified but I first met Hugh Freeman when he was a senior registrar doing the first outside evaluation of one Lancashire project that convinced me as it did many others of the soundness of the policy. Sir Denis Hill has analysed the position well in his Rock Carling monograph and concludes that we have concentrated too much on questions of bed numbers and that equally good results can be produced in different ways. The change here is a different kind of priority. It is a priority given to the restoration of mentally disturbed people to ordinary home life by the use of drugs and other methods which make it possible for this to be done without risk to them or the community. Our outlook on the mentally ill has been revolutionized, but the full realization of that change is still far off and should be one of our highest priorities for a long time to come. Sir Denis' title was *Psychiatry in medicine* and the change that implies was simply not in our minds 20 years ago.

That change in outlook has occurred toward the very long-stay patients in other services. We used to think of institutional accommodation for the chronic sick as a matter of providing virtually permanent care for bed-fast patients. There has been a social change in this approach and far better realization of the patient's own wish to be restored to his home if that is at all possible. And that is why geriatric medicine has emerged as a specialty within general medicine because it needs organizing in a different way.

There are two small groups of long-stay patients—children with major physical disabilities and the younger adult chronic sick who present a special and grievous need for educational, social and occupational care which we in medicine too often ignore. Sometimes, as in some cases of spina bifida or head injury, the problem is medically created. Once created by medical intervention it certainly merits priority when one thinks of the lifetimes involved.

Then too in mental subnormality we have been rudely awakened within the last year to the need to give priority to what is largely social care of another group of patients, many of whom could live in the community with support. This isn't technical medicine so much as a social responsibility associated with a medically definable disability. The care of the mentally subnormal has improved a great deal in the last 20 years but not at the pace that could have been achieved, perhaps because it isn't so much a medical as a

social improvement that we need. But in the care of all these long-stay patients we have begun to give priority to the conception of limited inpatient stay and greater support for care at home. It is a social rather than a medical priority that has been missing in some of this, but it brings out another aspect of medical care as a whole, that it needs to be organized as part of a total programme of care, and medical priorities cannot be set entirely aside from social priorities. Doctors—and nurses too—can be possessive and exclusive in their attitudes toward ‘their’ patients and too often unaware of what social workers and teachers can contribute to patient care. Let me commend to you Margot Jeffery’s inaugural lecture at Bedford College or Robin Huws Jones’ “Heath Clarke Lectures” at the London School of Hygiene on this theme.

Priorities in preventive medicine

Everyone knows that the great change that has come over medicine in the last 40 years has been largely influenced by the introduction of new therapeutic agents. Insulin and liver extract were the big developments of the 1920s, but the significant change which came in the 1930s was the development of new antibacterial drugs, the sulphonamides which were so important to us in 1939 and occupy so reduced a place now. Penicillin was the big break-through and all the family of antibiotics which have come along since have given us a degree of control of infections that we wouldn’t have thought ever likely to be possible at the time when I was going through medical school. I can remember persuading the medical superintendent of an LCC infectious disease hospital to let me try *prontosil rubrum* on children with meningococcal meningitis who were obviously going to die on the older therapy. We now have such a degree of control over many infections with bacteria that we think of death from infections as something that should not happen. We cannot control a lot of the viruses yet, but things like acute mastoiditis or osteomyelitis have become relatively insignificant threats. We are even now beginning to get antiviral drugs. Interferon is a possibility. Amantidine and methisazone have had some success in influenza and smallpox respectively. Work in this area is obviously one of the priorities for the future.

The acute specific infections have had their impact radically changed by specific prophylaxis. Smallpox of course is a rarity, but diphtheria which used to produce perhaps 1,000 notifications a week in the autumn and winter produced only 12 in 1969. We have had one death from acute poliomyelitis in the last three years and only one notification in the last 13 weeks. Tetanus kills perhaps a score of people a year, and need not kill any. Measles on which we really only began to operate in the spring of 1968, produced perhaps half a million less notifications in 1969 than we would have expected without immunization. But because there were fewer cases last year and immunization faltered, the pool of susceptibles has increased and unless immunization is pushed within the next few months we may find that all we have achieved will have been a postponement of the usual biennial epidemic from 1969 to 1970; we had over 7,000 notifications the week before last. The number of notifications of tuberculosis is about a fifth of what we might have expected in 1949; the number of deaths only about a twentieth and most of the notifications and deaths are at later ages. In that BCG must have had a part. Even whooping cough, where the antigen had been the least satisfactory of all, in 1969 produced less than 5,000 notifications and only five deaths, about a fifth of the figure two years earlier and far less than 20 years ago. Campaigns against specific infections like that, when we have a good prophylactic, are relatively easy. They may cost a lot, but they can even be worth it in financial terms when one thinks for instance of the saving of 10,000 hospital admissions and 100 deaths from measles and heaven knows how much prescription of antibiotics and the like. We used to calculate that the country needed over 40,000 hospital beds for infectious diseases. It doesn’t use 4,000 now. The point I am trying to make here is that the accent in personal preventive medicine is now substantially on the maintenance of specific prophyl-

actic programmes like immunization and the development of what is more clearly secondary prevention. By that I mean the limitation of disability from injury or from unavoidable disease. There are many examples of primary prevention applied to the environment like the reduction of atmospheric pollution, the elimination from industrial processes of known carcinogens, like naphthylamine or dust from crocidolite; and biggest of all, the abolition of cigarette smoking, but some of these reduce the incidence or postpone the onset of a condition such as chronic bronchitis rather than eliminating it entirely. One part of this environmental primary prevention has a strongly medical connotation for it depends upon the avoidance of incorrect use, or the actual abuse of drugs. In personal primary prevention the great hope for the future must remain that of finding an effective treatment or prophylactic agents against virus respiratory infections. If we had something that would do for the common cold or even influenza what penicillin will do for scarlet fever, the impact on acute morbidity at all ages and chronic morbidity in the middle-aged and old as the sequel to infection in infancy and childhood, would be enormous. We used to lose 27 million days of certified sickness absence from work from tuberculosis each year in the early 1950s. The figure declined rapidly to 4,500,000 days two years ago. We still lose 30 million days a year from bronchitis and a large amount also from rheumatoid arthritis. The Royal College of Physicians report on Atmospheric Pollution and Health shows other things society can do—given smokeless fuel. We can do something about bronchitis by giving up cigarette smoking, but what can we do about rheumatoid arthritis? While 300 million days of work are lost each year as a result of illness, many more are lost from premature death, for instance 190,000 man years of working life are lost each year as a result of premature deaths from diseases related to cigarette smoking.

The proportion of the male insured labour force on long-term sickness absence goes up rapidly by age from the early 50s and at 64 has reached 12 per cent. What an enormous amount of life effort is wasted there.

We have still not solved the problem of primary prevention of infections. Influenza in a winter can make a difference of five per cent or more in the general death rate for the year and we have no reliable prophylactic in prospect. In a four-week period in December 1969, 5,400 deaths were registered as due to influenza or influenzal pneumonia but the excess number of deaths must have been of the order of 13,000, most of them being labelled pneumonia or bronchitis. In the middle of the winter the excess respiratory deaths must have been double this. True most of them were older people—90 per cent aged over 55 but surely not negligible. Some were vigorous younger people who died of the highly toxic illness we know influenza can be. Labile though this virus is antigenically we surely need a means of increasing resistance to it—chemical or immunological. 'Old' after all means for most of us 'older than me' and I confess to a serious interest in morbidity and mortality in the age group 55 to 65.

If then we look at the way in which we use our medical resources, we are going to find that by far the greater part of the general practitioner's time is spent in the care of patients with chronic and degenerative disabilities which naturally increase with age. Of course his crises are related to acute incidents but influenza or acute bronchitis are a lot more common than cancer or an acute abdomen. On the hospital side the commonest cause of admission is pregnancy usually for normal delivery. There were over 750,000 such admissions last year, more than 80 per cent of confinements taking place in institutions. There were over 122,000 admissions for head injury and nearly 300,000 for all other injuries, an increase in total of about 50 per cent in eight years. Admissions for the treatment of malignant disease were only about one third of the number of admissions related to pregnancy. On the other hand there were 160,000 admissions for tonsillectomy, using 666,000 patient days, and there were almost 50,000 admissions for the treat-

ment of varicose veins using about 750,000 patient-bed days.

Big and little medicine

One in eight of our population is now aged 65 or over and at the time of the 1961 census 320,000 people, roughly one in 15 of the whole population aged over 65, were elsewhere than in private households on the census night, nearly half of them were in hospital, an increase of 50 per cent over the census figures for ten years earlier. By 1991 it is forecast that there will be over 7,500,000 people aged 65 or over and over 1,500,000 aged 80 and over. Today, at any one time there are about 390,000 patients in hospital and 150,000 of them are aged over 65. So although acute disease in younger people still constitutes a high proportion of all hospital admissions, it represents a much smaller proportion of total hospital work in terms of days of care. Professor Henry Miller in an article in *Science Journal* for October 1969 has underlined this by emphasizing that what he calls 'little medicine', the medicine of the everyday things, requires far more of our efforts than what he calls 'big medicine', the dramatic episodes like transplantation of organs. Should we be thinking of priorities in medicine in terms of the spectacular advances that are only possible with large and highly scientific teams or should we be thinking more about improvement of the ways in which we do ordinary things? One can't answer this with yes or no on either side. Medicine for a whole country is a huge undertaking with a scientific aura that is expanding at an accelerating rate. If we were to decide that we could not afford the science, and that expansion of it should stop until we can draw up our administrative tail, I think we would do irreparable harm to medicine as a whole. Some of the work on transplantation of human tissues has already yielded enormous benefits. Transplantation of cornea for instance has made it possible for many people, who would otherwise be blind, to see. New work on a plastic prosthesis might carry this even further. Kidney transplantation is held up now by the general uncertainty about the availability of donor organs. In Scandinavia they have a system between the four countries which is already leading to better tissue matching and more successful transplantation so that many patients can thereafter lead lives much more nearly normal than if they were living on intermittent dialysis. But what are we to make of the technical achievements in transplantation of hearts. Last November the *Lancet* carried a report which suggested that it was no longer a reasonable undertaking to transplant a heart into a patient already severely affected by atherosclerosis. I am not going into all the controversial field of transplantation of organs. I am not suggesting that it should stop because there is, if nothing else, a tremendous by-product of progress in immunology. But surely this sort of thing must stay in a few centres for the time being, while we must keep on a dialysis service both because of the immediate relief to nearly 1,000 patients and because it is essential to the later progress which one can foresee in transplantation of kidneys. The use of an implanted prosthesis to replace a damaged hip joint is of a different order of practicability and John Charnley at Wrightington and McKie at Norwich have shown what remarkable results can follow. But have we given the desirable priority to capitalizing on the advantages that concentration on such specialized units can give? There are other areas of surgery where great progress has been made in, for instance, making it practicable for handicapped children to have a normal or near normal life prospect. The simplest example is the closure of a persistent ductus arteriosus. But how far does one carry that kind of surgery with the most gross cardiac abnormalities in the new-born? How far should one go in preserving patients with spina bifida? The Sheffield and Liverpool groups have shown that a substantial proportion of children born with this deformity can be given normal or near normal existence, but many others survive to a grossly handicapped existence. The trouble is we cannot tell in time which will be which any more than we can be certain which child will benefit from tonsillectomy; it may be only half of those operated on.

On the medical side what would have seemed a miracle, the resuscitation of a patient

after ventricular fibrillation, is now commonplace. The effort involved in a short space of time can be prodigious, but a few months ago a paper appeared from Edinburgh showing that 53 patients leaving hospital after an episode of fibrillation complicating acute myocardial infarction, had a fairly good long-term prognosis not adversely affected by the incident of fibrillation. Of the surviving male patients 92 per cent have been able to return to work and two thirds of them to the same job as before their infarction. What is wrong is the application of resuscitation techniques without regard to the circumstances of the particular patient. Some of the crises in which one could do almost nothing in my early days after qualification may have been smoothed out, but we never had to face the critical decision, to be taken in seconds in the middle of the night without support, that some of these cases represent for newly-qualified house officers and for nurses.

Perhaps it is in the multiplication of positive things that one can do to save or to prolong life, or to investigate and monitor disease that the greatest increase in medical work has occurred. This is why double the number of junior staff with greatly increased senior staff behind them still have an intolerable burden of work in their junior posts in hospital. We all had long hours of work and even longer hours on call in my age group when we were juniors in hospital, but we did not have so many or such anxious things to do and decisions to make as our successors have. In a society where there is so much more leisure, so much greater ease in social life and earlier matrimony, small wonder that junior doctors in hospital should seek easier conditions.

I hope nobody expects me to talk about priorities in medical research. Project-orientated research may be more important to our future than it was in the past, but still the pursuit of new knowledge depends upon the man with an idea rather than the organization with a plan. Application and development need the organization with a plan, but original research depends mainly upon the man or the team. But there is great need for operational research, for examination of whether we do things in the most efficient and expeditious way or indeed whether we should do them at all. This certainly has had too little priority in the Health Service and if we have made quite a lot of the right decisions, we have made some of them almost by chance.

Take our faithful adherence to general practice. Some people at home and abroad think it is simply our own particular version of a sacred cow. And yet I found in the July 1 issue of the American Hospital Association's Journal *Hospitals* a paper by an American PhD, Martin Rein, which examines a great deal of our own material on practice in and out of hospitals and ends with the conclusion "In short then a system of medical accountability by generalists, combined with a free on demand comprehensive care system, appears to contribute to equalization of care among social classes. This finding is heartening since it does suggest that it is possible to create a system that reduces class inequalities of medical care".

We seem to have been right by chance or instinct rather than by logic. Yet are we wholly right? We have not yet got medical practice in or out of hospital organized for efficiency. We are moving that way, and we are moving that way fast by the rapid trend towards group practice outside hospital and by the development of divisional systems of organization inside hospital. In fact we are beginning to look after our priorities. We will never have enough resources of skilled time to do the new things if we do not eliminate the waste of time on the old. There will never be manpower enough to do all the things within our compass if we do not pace ourselves and plan our work in this way.

Half the general practitioners in the country are now receiving the special allowance for group practice. Around three quarters of the practitioners attended a postgraduate educational course last year. Group practices are becoming much better organized. I know it is said that the attached health visitor enables one to do one's work better and so to do more, but some groups are showing by selective delegation to health visitors

and nurses that they can keep the demands upon themselves within reasonable bounds. In October I went to the opening of a health centre in Somerset where all seven doctors in a small town have gone into a health centre, with the health visitors, the district nurses and the midwives, on a site adjoining the small hospital and they do not only the general practice but all the maternity and child welfare work and the school health work for the same population. I am sure that is the way we are going in future.

I won't recount the Cogwheel Report now. It must be familiar to you all, but it can be made to work. Over 90 hospital groups were working it in November last in some form. There was a paper in the journals a few months back on the way it had been done at the West Middlesex Hospital and there are plenty of others. The teaching hospital in Manchester was one of the first to show that it works and it improves medical work.

Indeed divisional organization is *necessary* to the fully effective use of medical and allied resources in hospital. There may be local variations in precise form, but the method that makes it possible to group comparable work in a mutually supporting way will also make it possible to lighten the load on individuals at all levels. Do we for instance organize our night rotas of junior staff with reasonable economy of their lives and leisure as well as their work? We certainly have not organized our hospital staffing to meet the training needs of young doctors in a competent and humane way. We are causing them to spend 12 or 13 years acquiring training that need not take more than for a hospital specialty. Who can blame them for their recent protests. The divisions too make it possible to link specialty services with general practice in a far more efficient way.

The so-called Best Buy hospital projects at Bury St Edmunds and Frimley are not so much plans for hospital buildings as plans for organizing district medical services. Managing with a much lower proportion of beds to population depends on shared responsibility between group practices in the community and the large group practice of specialists in the district general hospital. Their focal point is not so much the hospital as the medical institute at the hospital. And when we get our services organized in that way, surely the inter-dependence of generalist and specialist practice becomes an accomplished fact. We can get a better quality of both if we do it this way and we can also make sure that the other professions have their full and appropriate part. It is the "greater medical profession" both within and outside the hospital not just we who are medically qualified, with whose work we should all be concerned.

Given this sort of approach, it becomes very much simpler to organize things like day hospitals for the mentally ill or retarded or for geriatric patients or outpatient surgery for those many patients who need not be admitted, given the appropriate techniques and shared responsibility. Ronald Peatfield from Bedford had an excellent paper in the August number of *Health Trends* on this. There are two others in this month's issue on the same theme. I know it works, my wife has benefited from it.

Conclusion

I don't know whether you hoped for more startling stuff than this for priorities that reflected the more rarified and extravagant medical techniques. But surely common things are commonest? We can have the other things if we organize ourselves to do the common things without waste. We can do that in all forms of medical practice, using the word medical in its comprehensive form. If we don't, we can't have the higher peaks. We want both. I am not trying to pretend we don't need more money—of course we do.

Finally let me quote from Sir Max Rosenheim, speaking to the European Committee of WHO at Varna, Bulgaria 18 months ago, in an address celebrating 20 years of WHO. "If we spent the next 20 years ensuring the general application of what we know now there would be an immense improvement in our health services." If that is true in Europe how much more significant it could be in Africa and South-East Asia. How much it could mean for the world, for peace, for our grandchildren.