Conclusion

The undergraduate period is the beginning of medical education; its task is to lay the foundation of further education, both graduate and postgraduate, and to prepare students for practice under supervision. The foundation is a rational understanding of mental and physical disease, and of the methods of identifying them in individuals with a view to treatment and prevention. New therapeutic opportunities will demand even higher technical standards in the future, and the problem will be to achieve them while ensuring that education remains as humane as I believe it does to-day. Without such a foundation doctors will be merely purveyors of welfare. With it they can learn to practise efficiently according to their temperament and their personal beliefs. Some will envelop their patients in a benevolent paternalism, others will pursue a philosopher's stone for positive health and universal prevention, but many will be content to practise medicine well, and perhaps, as

Parkinson has said, "will accompany their patients on the second mile, and to the end of the road."

BIBLIOGRAPHY

- BIBLIOGRAPHY Balint, M., Lancet, 1961, 2, 1051. Brain, Lord, ibid., 1964, 2, 325. Ellis, J. R., ibid., 1956, 1, 813, 867. Brtt. med. 7., 1963, 2, 585. Herridge, C. F., Lancet, 1960, 2, 949. Hill, K. R., ibid., 1964, 2, 84. Hutton, P. W., Williams, P. O., Graves, J. C., and Graves, V., ibid., 1964, 1, 38. Illingworth, C., ibid., 1964, 1, 283. Lewis, A., Brit. med. 7., 1963, 2, 1549. Lewis, A., Brit. med. 7., 1963, 2, 1549. Marshall, H. E. S., ibid., 1964, 2, 949. Parkinson, J., ibid., 1951, 2, 457. Pickering, G., Brit. med. 7., 1964, 2, 1615. Lancet, 1964, 2, 653. Platt, R., Linacre Lecture—Universities Quarterly, 1963, 17, 327. Tredgold, R. F., Lancet, 1962, 2, 1344. The Field Work of the Family Doctor, 1963. H.M.S.O., London.

Assessment of Postgraduate Medical Education

A Report to the Nuffield Provincial Hospitals Trust

The following report was prepared by Mr. D. H. Patey, Dr. J. O. F. Davies, and Dr. John Ellis. It is based on discussions with a special committee of the Trust, whose members were : Sir George Pickering (Chairman), Professor Hedley Atkins, Dr. John Fry, and Dr. John Revans. Mr. Gordon McLachlan edited the material, and Miss G. B. Bradfield acted as Secretary.

Brit. med. J., 1965, 2, 557-564

I. The Backdrop

This survey is yet another stage in the developments arising from the Christ Church Conference on Postgraduate Medical Education convened by the Trust in December 1961.¹

The Trust's policy in making grants was based on the general agreement reached at this conference, at which there were responsible spokesmen from all the main bodies and organizations involved in the field, that something could and should be done straight away to improve the arrangements for postgraduate medical education generally. The broad outline of requirements, unanimously agreed as urgently necessary, was based on the premises that postgraduate medical education must include the district hospital or hospital group, and be organized in regional schemes which would allow for a real association with the regional university. The immediate primary objective was to promote an educational atmosphere in the basic local hospital unit; to this end a consultant should be appointed by a fully representative and powerful regional committee as the "clinical tutor" responsible for the organization of teaching arrangements and the general care of those under training. At the same time all consultants and general practitioners should recognize their responsibilities to continuing education in the area. Equally the hospital authorities should be sympathetically and liberally disposed towards helping in the training not only of all grades of resident hospital staff but also towards the continuing education of all doctors. Among other things, this would entail the authorities seeking to provide certain necessary physical facilities. Ideally, too, attempts should be made to

develop criteria in order to set standards to which all such units should aspire. These would relate to:

- (1) standards of supervision;
- (2) quantity and variety of clinical material;
- (3) standards of records;
- (4) post-mortem service;
- (5) radiological and pathological services;
- (6) laboratory facilities;
- (7) seminars, clinicopathological conferences, etc.

At the regional level it was urged there should be a strong regional committee, the convener of which should be the postgraduate dean appointed by the university concerned. He should have proper accommodation and assistance and be responsible for the interrelationship between the regional hospital authority and the university regarding the arrangements for teaching (including the continuing education of general practitioners) in the region. Nationally it was recommended "as a matter of urgency" that some official body should be established as soon as possible representing the University Grants Committee and universities, the General Medical Council, the Departments of Health, the Royal Colleges, and the College of General Practitioners.

It was, however, recognized that in the absence of official and formal arrangements any immediate action would probably have to depend on local initiative ; and to a large extent the trustees' policy was to support the promise of such enterprise at this level.

Following meetings convened by the Chief Medical Officer of the Ministry of Health and attended by representatives of all the principal professional, educational, and administrative

[&]quot; British Medical Journal and Lancet of 17 February 1962.

bodies concerned in the whole question of postgraduate medical education, the Ministry of Health in September 1964 issued a circular to hospital authorities drawing attention "to the need for the continuance and expansion of arrangements for postgraduate medical education in Regional Hospital Board hospitals." It also described the framework within which boards should plan further developments and invited them to submit proposals for the Minister's consideration and thus, presumably, approval to implement these plans. This memorandum incorporated in the suggestions for the encouragement of postgraduate education a number of the basic requirements agreed at the 1961 Christ Church Conference, including the appointment of a postgraduate dean and clinical tutors. Again, in inviting boards to submit plans for developing the regional arrangements, it was stated that they should have regard to "the need to provide improved physical facilities." Unfortunately, the financial provisions of the circular left something to be desired, as it ended thus:

"The revenue allocations notified for 1964/5 and 1965/6 will be adjusted as necessary in the light of the expenditure which Boards are expected to incur on honoraria or incidental expenses (e.g., secretarial help) and for the work of postgraduate deans or advisers. Capital expenditure on improved physical facilities will fall to be met from existing allocations, and projects should be developed in accordance with the procedures adopted for the preparation and approval of individual building schemes within the Hospital Building Programme. The use of non-Exchequer funds would be appropriate to meet the cost of any of these arrangements, and, in providing estimates, Boards should indicate whether any part of the cost is to be met in this way."

From preliminary observations and a study of press reports it seemed that the enthusiasm canalized by the 1961 conference, and the response to the Trust's reserve of £250,000 for development grants, tended to be sporadic throughout the country and frequently haphazard even within the same region. It was also obvious that often there was no clear picture of what activities were actually being carried on as distinct from declarations of intent, or even how far intention was likely to be fulfilled in the face of financial discouragement.

Early in 1964, some months before the issue of the circular HM(64)69, the trustees commissioned a review and assessment of the effectiveness of the arrangements in operation of all the schemes sponsored by the Trust for the improvement of post-graduate medical education in the United Kingdom, in relation to the general position. A further objective was to secure well-based advice on which to frame future policy.

It was quite clear from the start that the objectives of the survey would have to be limited and its compass confined to selected areas. This interim report is based on seven regional surveys which have covered visits to five university/regional headquarters and nine provincial and three London centres, as well as to the West of Scotland.

The survey-group followed the terms of reference agreed by the Steering Committee set up by the Medical Consultative Committee of the Trust.²

- " (i) To act as a catalyst to the thinking and activities of the local groups visited.
- "(ii) To make a note of the strains and weaknesses of the various schemes, and in so doing to see if some of these conform to regular patterns.
- " (iii) To try to develop principles applicable to the physical structure of a centre and suggest how the arrangements generally should fit into the wider concept.
- ² Reports on the visits of the survey-group were drawn up immediately afterwards as the "clinical impressions" called for by the Steering Committee, and as factual descriptions of the situations found. The documents were in their turn supported by much background information collected by correspondence and the completion of the questionaries before each visit. While this information is, by its nature, private, the replies and the way in which the questionaries were filled up were in themselves indicative of the spirit and interest at the various centres.

"Briefly the survey-group should try to get 'clinical impressions' of the various schemes on which to base an interim report not only as an appreciation of the general position, but as a possible basis for a close and more searching study subsequently."

The survey-group's visits seemed to provide a stimulus and encouragement to those concerned with postgraduate medical education. Almost without exception the meetings provided opportunities for frank discussions on all current and future aspects of postgraduate training and continuing education, particularly with regard to the implications of the Ministry of Health's memorandum HM(64)69. As the survey continued, the members of the group were able to build on their experience of other centres, to make practical suggestions, and give advice.

In the event the results showed much repetition of pattern, despite differences in topography and organization, intent and fulfilment, so that it was felt by the survey-group that a number of useful general conclusions could be drawn from their observations.

II. The Audience

Hospital consultants, principals in general practice, medical officers of health, and established doctors in the various fields of medical administration all need to keep up to date with advances in their own field and in medicine generally. The provision of continuing education for each of these groups is an important part of postgraduate medical education, but it is only one part.

Another is the provision of the postgraduate training which is needed before a registered medical graduate is able to engage independently in the practice of any specialty or can be regarded as fully trained in public health. This training differs of course not only in objectives, but also in content and methods, from continuing education. Although some of it will be given in university departments or in teaching hospitals, much of it will properly be given in the postgraduate medical centres attached to the large district hospitals in which the "trainees" will be holding clinical appointments. This area of postgraduate training might best be described perhaps as "specialized vocational training," and it is to be hoped that before long it will be provided also for those intending to take up general practice.

A further type of training which must perforce be given after graduation is that which is given to provisionally registered house officers. This is not intended to be specialized and might best be described as "general vocational training."

There are therefore three main types of postgraduate medical education: (1) continuing education, (2) specialized vocational training, and (3) general vocational training. In each the objectives, and therefore the methods, are different, and in the case of the first two the content must vary according to the specialty concerned. It will not be often that one single activity in a postgraduate medical centre will be equally profitable to all the following categories of recipient for which the centre has to provide.

(1) Provisionally Registered House Officers

In comparison with the numbers of other categories of medical staff at the hospitals visited, the survey-group met only a few preregistration house officers. From those interviewed, the impression was formed that at this stage in their careers they are anxious to leave textbooks, formal classrooms, and their days as student observers behind them and learn through practical experience in the wards and clinics.

Clearly the practical work of these young doctors must be very carefully supervised by their seniors, and the British system of hospital organization provides an admirable framework for just the kind of apprenticeship which is needed. There can be every opportunity for responsibility under supervision, for the learning of therapy, for gaining competence in diagnostic procedures, for learning how to take decisions, and for learning from personal example. While this is not the time to lay down habits of learning (for these should surely have been established during the undergraduate course), it is nevertheless important that those habits should be maintained and strengthened. To this end attendance at clinicopathological conferences and similar activities should obviously be encouraged, but as things now stand those who have waited so long for a chance to take part in the care of patients (and have had three years of formal clinical education) are not likely to be very enthusiastic about leaving their new clinical responsibilities for more discussion and exchange of opinion. It seems likely that house officers will not be easily able to share in the more formally organized education in the postgraduate medical centre until the undergraduate clinical course is shortened, or until they have a more graduated approach to responsible clinical work.

The arrangements for the further training of this category of doctors are, of course, being considered in the current teview of medical education by the General Medical Council.

(2) Junior Hospital Medical Staff

(a) Generally

The junior hospital medical staff almost everywhere, particularly those on the surgical side, complained of lack of time for educational activities. However, when the importance of these activities becomes generally recognized and consequently an agreed time is set aside for study, more can be achieved by better organization, even within the present pattern of heavy clinical loads. It is hoped that the situation will be eased in the case of the young surgeons now that junior posts are examined for compliance with the new regulations for the F.R.C.S.

It is clear that the educational needs of junior staff differ from those of general practitioners and require some degree of separate arrangements. Career guidance is especially important for this group and this underlines the need for the executive officer of any postgraduate medical centre to have his own office (see below).

Throughout the country there is an encouraging increase in the number of rotating appointments in the intermediate grades. Rotation between regional board hospitals and teaching hospitals is on the increase, but this may put regions where there is no teaching hospital at a disadvantage. However, the success of schemes for rotating appointments on a sufficiently wide enough scale will depend to a large extent on the availability and standard of staff residences. Provision should therefore be made for more and better housing for junior staff, including accommodation for married residents.

There is a new and welcome trend to provide formally organized education alongside in-service training. Clinicopathological conferences, departmental and interdepartmental meetings, journal clubs, special lectures, and (here and there) active research all combine to create a new and more academic atmosphere in which senior house officers, registrars, and senior registrars fulfil the duties of their clinical appointments. This is perhaps the most significant change that has so far resulted from the postgraduate medical centres. It is rapidly altering the whole nature of specialized vocational training as a part of postgraduate education. Hitherto this has consisted primarily of long apprenticeship, interspersed perhaps by a whole-time course or a period in a teaching hospital. Now in many regional board hospitals the junior hospital doctor is coming to be regarded more and more as a postgraduate undergoing education and training to which the whole hospital contributes. (This also has a bearing upon the position of overseas graduates, who, if they are to obtain the maximum benefit from their time in this country, must be enabled to find their way to the right post in the right hospital.)

The trend towards this more careful and better-balanced specialized vocational training is enhanced by the provision in some places of highly successful courses for the higher degrees (Primary, Membership, and Final Fellowship). These courses are offered to junior staff holding clinical appointments at the hospital concerned or near by.

There is clear evidence that the introduction of, or increase in existing, postgraduate schemes raises the quality of applicants for junior hospital posts and therefore improves the standards of care in regional hospitals. Many hospital authorities now appreciate the importance of helping their medical staff to study for higher qualifications, and it is hoped that this outlook will soon spread to every hospital in the country.

Hardly any research is being undertaken at the level of the junior medical staff, many of whom are naturally preoccupied with obtaining higher qualifications. With the development of an educational atmosphere, however, their interest in research will almost certainly grow, so that space and facilities for such work should be included wherever possible in postgraduate medical centres.

On the general question of research it would seem appropriate here to mention that during the survey many of the authorities, including consultants, were unaware that, apart from those of the Medical Research Council, there are funds available for "decentralized research," for which they can apply to their local regional hospital board research committees.³ The pursuit of research is in so many ways bound up with postgraduate education that it is hoped that the visits of the survey-group may have stimulated some, who have hitherto been inhibited, to make fresh efforts in this direction.

(b) Overseas Graduates

It is hardly news that in the United Kingdom many of the junior hospital posts are staffed by overseas graduates. Yet, provided the system is not abused, this is something to be proud of, since apprenticeship is essentially a practical method of training. By affording such doctors practical clinical experience and at the same time enabling them to work for higher qualifications, this country has always been, and still is, in a unique position to make a contribution to the education of the graduates themselves and to the level of medicine in their countries of origin.

The question of alterations in the requirements for higher examinations, designed to prevent overseas graduates from com-

³ The scheme for locally organized or "decentralized" research financed by the Ministry through regional hospital boards and boards of governors came into operation in 1958-9 as part of the larger arrangements for the encouragement of clinical research which had included some years earlier the setting up of the Clinical Research Board of the Medical Research Council. Its purpose was to encourage local initiative in research and thus to complement the activities of the Clinical Research Board by ensuring that an easily accessible source of support was available to launch and foster local talent. The scope of the scheme is implicit in this aim. It was not meant for the support of those making a career in research or of the continuing programmes of established research departments. These remain the responsibilities of the universities and the central research organization.

Allocations made to boards are related to their own estimates and leave boards free to support work at their own discretion, subject to the advice of local research committees. Such scrutiny as the Ministry exercises is simply to see whether items are within the scope of the scheme or would more suitably be submitted to the Clinical Research Board.

In the early years the scheme made a modest start, but there has since been a rapid expansion in both the number of participating centres and the amount of money to be divided between them. In 1958-9 12 Boards shared $\pounds 36,000$; in the year 1964-5 43 Boards accounted for $\pounds 448,000$. ing here solely to cram for examinations in isolation from practical work, is being dealt with by the appropriate bodies.

In almost every direction, however, much remains to be done, particularly in view of the competition from other Western Thus there is need for more liberal study-leave nations. arrangements and better residential accommodation, but perhaps the most urgent need is to organize a training career system at the point of entry of these visiting postgraduates. In some places unofficial arrangements have eased the posting of many Commonwealth graduates to suitable training house appointments. There remains the vexed problem of introduction and assessment, particularly for the unsponsored and unknown graduates from developing countries. For example, the surveygroup met one graduate from overseas, very well spoken of by his chiefs, who had obtained his first hospital appointment only after sixty unsuccessful applications. The difficulty of course lies in the uneven level of experience and background of such doctors. It might seem that some national or regional organization is needed to assess and grade clinical competence. Certainly the experience of the experimental "schools" at Stoke-on-Trent suggests that such an "agency" or "bureau" would only be worth while at the national level or on a co-operative basis between regions.

(3) Entrants to General Practice

Not enough thought has yet been given to the question of training in preparation for general practice. Of the two experimental schemes reviewed, that in Wessex can be counted a success, the rotating internship scheme at Bristol a failure. The ease with which young doctors can now enter general practice is bound to militate against the success of preliminary vocational training schemes; this is undoubtedly a major factor in the disappointing result of the Bristol experiment. Indeed, it makes experiments under existing conditions futile and barren exercises. Yet more operational research needs to be undertaken into the content of general practice and the scope of training needed for this constantly changing field of medicine.

It seems clear that it is necessary to make it so easy for a young man or woman to obtain a special vocational training for general practice that no one will be appointed to a practice without such training. This requires that the Ministry supports a framework of service in each region on which the postgraduate organization can build up a training system. In this way each region will be involved, there will be a great variety of training schemes to choose from, and much less likelihood of them being bypassed by those intending to enter general practice.

(4) General Practitioners

The survey showed that there is increasing recognition among general practitioners throughout the country of the need for their continuing education. Official and unofficial contacts with the work of hospitals and with their hospital colleagues are always appreciated by general practitioners, and this is one reason for the success of medical centres. As with other groups, their load of work and the difficulty of finding mutually convenient times are hampering factors. Here again, medical centres which provide luncheons or refreshments are proving most valuable foci for postgraduate training.

General practitioners are themselves such a heterogeneous group, with such a wide scatter of interest, experience, and background, that it is difficult to draw up educational programmes which will attract everybody, and, as with other groups, there is a hard core composed of doctors who do not seem in the least interested. Some general practitioners appreciate open ward rounds and clinicopathological conferences; others, formal meetings on medical society lines; and others, week-end refresher courses or occasional courses extending over a fortnight or so. Many seem to be accustomed to methods of education calling for a passive role on their part; some prefer to learn by new methods demanding more active participation. But it seems on the whole general practitioners have come to regard themselves merely as recipients of education, so that any means to engage their interest as contributors should be encouraged for example, in presenting their own cases at clinicopathological conferences, or as speakers at clinical meetings, or as participants in well-controlled research.

It was notable that the reasons which general practitioners gave for their failure to take full advantage of educational facilities invariably disappeared when the practitioner needed particular experience to qualify for the obstetric list. Here there is of course the incentive of higher payment for increased skill.

Clinical assistantships are valued by general practitioners, despite the fact that it is sometimes said their development is inhibited by the Pool method of remuneration. Where these appointments are chiefly educational and not merely for reasons of hospital staffing, they should rotate among the doctors of the area. However, when a service is required from the general practitioner—for example, in anaesthetics—these posts should be for continued employment.

The survey-group found some evidence to suggest that one cause for the failure of general practitioners to make good use of facilities for continuing education is that their initial medical education did not instil in them the desire or the ability to go on learning. For example, it was maintained that it was not uncommon twenty years ago for students to be discouraged from reading the medical journals.

It seems that general practitioners at present make little use of libraries. However, this pattern will probably alter, and medical libraries should be ready to cater for a new generation of general practitioners who have acquired the habit of using libraries regularly.

A small number of general practitioners are anxious to co-operate in research projects, an interest promoted by the College of General Practitioners. In some places, also, the Public Health Service is willing to offer facilities for joint projects. Postgraduate medical centres should therefore include accommodation for this kind of research.

The opportunities for further education presented by the provision of open access for diagnostic facilities and by domiciliary consultations should be examined carefully by all hospital authorities.

(5) Consultants (as recipients)

The upsurge of interest in postgraduate medical education is beginning to be reflected in the attitude of consultants. As contributors to postgraduate schemes, they have benefited as a by-product through the increased care and attention which they must give to the preparation of lectures and in teaching during their ward-rounds. It is hoped that this, together with their participation in such activities as clinicopathological conferences and journal clubs, will act as a stimulus to consultants to make greater use of their own specialist associations and the facilities offered by some centres, as well as the Royal Society of Medicine and the Royal and other Colleges.

(6) Local Health Authority Doctors

The roles of doctors in the Public Health Service need to be more closely examined before prescribing their particular form of postgraduate training. Unfortunately, there was little evidence in the survey of joint training arrangements between the hospital and public health services—for example, by attachments of school medical officers and child welfare medical officers to paediatric departments. As a general principle, whatever special schemes may be fashioned for them, these medical officers should be encouraged to join in the main stream of postgraduate activities in their areas, and leave of absence should be granted for their participation.

(7) Medical Administrators

Most of what has been said in the preceding section applies also to medical administrators. Whichever way is found to train these doctors for their specific branches of the Health Service, their continuing education must be included within the general postgraduate medical education schemes.

(8) Re-entrants to Medical Practice

There is evidence of a need to provide some kind of training scheme to "rehabilitate" graduates who have been out of medical practice for a long period. This cannot be designed until the size of the demand is known; but, whatever its form, in addition to formal courses, even if specially tailored, a period in clinical appointments is certainly necessary. The residential accommodation provided by universities during the long vacation could conveniently be used for rehabilitation and other similar courses.

III. The Cast and the Stage-craft

(1) Consultants (as teachers)

In common with their fellows at all grades and in every branch of medicine, lack of time is an obstacle to full participation, and this may be particularly the case for surgeons.

While participating to some extent by giving prepared lectures, the present-day concept of continuing education by means of open and critical discussion is, of course, foreign to the medical upbringing of many consultants—particularly the more senior. There is, however, a growing number of these men throughout the country with energy, interest, and inquiring minds, the initiators and leaders of postgraduate schemes, who are constantly seeking new methods of teaching and questioning the traditional pattern of medical education.

The opportunities offered by direct contact with general practitioners through open-access facilities and domiciliary consultations need to be exploited to the full.

(2) Local Direction, etc.

Locally there is need for a committee, representative of the hospital, general practice, and public health interests, to plan policy and activities, and for someone to execute the decisions of this committee. From the evidence of the survey there is no one form of organization which fully provides this administrative structure, nor a title or set of titles which is wholly acceptable for the executive role. Yet it is probably difficult to find a better title than the obvious descriptive one "director of postgraduate studies."

At the present time one executive officer appears to be able to deal with all aspects of postgraduate training at a centre, provided he is supported by adequate secretarial and librarian assistance. However, this post may need to be reviewed as the schemes develop. There is the risk that all the organization and management will be left to devolve on this man. Yet, if several executive posts are created, there is perhaps the greater risk of diversification and dissipation of efforts.

At the management committee and hospital level, local interest, particularly at the outset, is absolutely essential if a postgraduate scheme is to be launched and established as part of the hospital life. All the ingredients of success in face of difficulties depend on it: meetings and library facilities; administration and secretarial assistance for clinical tutors; the inspiration for the many helpful, if minor, actions which encourage and increase enthusiasm for postgraduate teaching and learning against what may seem heavy odds in some present situations. The recognition that postgraduate medical education is an essential prerequisite to better service to the patient, and the consequent giving of some priority to educational faciliites, however low, is of fundamental importance in any intermediate or long-term plans affecting the hospital.

(3) Regional Direction, etc.

The regional organization involves a partnership between the regional hospital boards and the universities. The machinery for this association and its closeness varies considerably, and it is not possible or desirable at the present time to be dogmatic about an ideal arrangement. Most of the regional hospital boards in the areas visited seem to have a real interest in the development of schemes, as well they might, but it is perhaps too early to test the strength and reality of this interest. Not unnaturally it appeared that arrangements were best in regions in which co-operation between regional hospital boards and universities was closest.

There are, however, great differences in approach and the amount of good will on the part of regional hospital boards. Some have taken action before and well beyond the exhortation of the circular HM(64)69 and have been strongly supported at the local hospital level. But the real test will come for everyone involved when the plans submitted to the Minister can be examined in detail as to their adequacy.

It was difficult on occasion for the survey-group to measure the effect which the universities have had on the development of regional schemes. It is held in some quarters that the fact that the payment for postgraduate schemes will in the future be made through university channels should be one way of influencing the peripheral centres. This is a debatable point which assumes the doubtful hypothesis that the mystique of the university has an effect outside the campus. But even now they have great opportunities to use such influence as they have in helping to arrange, at the regional level, the kinds of activity which it is difficult for local centres to organize themselves ; it will be interesting to observe the way in which (if at all) such opportunities are grasped in the future.

(4) National Direction, etc.

There is wide variation in the way in which postgraduate medical educational activities are being organized all over the country and the strength of the response to these efforts. It seems likely that local efforts backed by the support of regional hospital boards and universities will, at any rate for a time, be the main springboard for advance. Yet there should be continual prompting from a higher level. At the same time as the situation develops decisions of policy on a national level will be called for. Much will obviously depend on the pressure and encouragement provided by the Ministry of Health. The colleges, too, have an obvious role in maintaining standards throughout the country.

In various parts of the country there are at present representatives of the Royal College of Surgeons concerned with postgraduate activities. It is not clear whether the other Colleges intend to follow the example set by the Surgeons, though it is perhaps too early to assess the effectiveness of this experiment. While allowing for special arrangements which may be necessary to comply with examination requirements, the question of the integration or co-ordination of such college representatives in regional schemes needs to be looked at coolly and carefully. Some kind of national organization will probably be necessary to represent all interests. It is therefore to be hoped that one of the urgent recommendations of the original 1962 conference will soon be fully implemented—namely, the establishment of some official body on a national level for "the formulation of principles and of policy for postgraduate medical education."

IV. The Stage and the Props

Although, during the survey, centres were visited which were lively and well organized in spite of poor and inadequate accommodation, there is no doubt that good structure as a tangible focus for postgraduate medical education is an incentive in itself. The catalytic effect of a building which is labelled "postgraduate medical centre" cannot be overemphasized, and efforts should be made so that everyone in the health services, not least lay committees, should be made aware of their importance to the whole scheme of medical care.

The difficulty of finding capital for these centres is recognized, but with modern types of prefabricated construction, which are well suited for their purpose, their cost is a very small proportion of total building programmes. Therefore it is questionable whether the Ministry memorandum HM(64)69, ruling that capital spending on medical centres shall be met from existing regional hospital board allocations, is realistic and economically sensible. Indeed, there is no certainty that the example set by one or two boards, notably Wessex, will be followed by their less enthusiastic brethren. The permitted separate allocation for recurrent expenditure on postgraduate schemes is an excellent means of bridging the gap between hospitals, general practice, and local health authority services, and a change of policy on capital to secure specially designated allocations for medical centres could only be to the advantage of the Health Service and would not be excessively expensive.

It is not possible, and it may even be undesirable, at this time to give detailed guidance in designing and planning postgraduate medical centres, but after close observation of existing situations certain principles can be stated and some basic requirements listed.

(1) Location of Centres and Some General Considerations

The choice of a hospital on which to base a postgraduate centre will be dictated partly by geography, partly by size and quality of hospital, and partly on "doctor density."

Since medical centres serve as a meeting-ground for resident staff of hospitals and general practitioners, they enable contacts to be made between junior medical staff wishing to enter general practice and general practitioners looking for partners. The development of postgraduate medical centres in underdoctored areas might thus help to improve the distribution of medical manpower.

Psychiatry poses a special problem. There is a need to improve the postgraduate training of psychiatrists, which often takes place in institutions separate from the rest of medicine. In the mental hospitals of the Birmingham Region clinical tutors have been specially appointed for this purpose. It is equally important, however, that postgraduate psychiatry should reach out to those training in general medicine and play its part in continuing education. In the Wessex Region there is a welcome development in the effort to mobilize the psychiatric services, to bring them into contact with the postgraduate medical centres there.

As a general guide to the position of a postgraduate centre, three-quarters of an hour by car is the maximum distance to expect general practitioners to travel for regular meetings. Traffic routes and adequate parking facilities are also important considerations. Locally, centres should be built within the inter-call circuit of a hospital, and, so far as site limitations allow, be accessible to all departments of the hospital. There must be easy access for patients and adequate waiting-space for them.

(2) Basic Requirements of the Building

Accommodation for Teaching

(i) A set of small rooms for seminars, discussion groups, and (ii) A larger room for more formal meetings.

Whereas the small rooms need to be kept available all the time for postgraduate medical education, a large lecture theatre to seat audiences numbered in hundreds is so seldom required that it would be wrong to demand such accommodation for the exclusive use of a medical centre. The larger room might be provided by a flexible series of smaller spaces which could be expanded, as, for example, by shifting partitions, to take meetings of different sizes. An alternative would be to use a room shared with other hospital educational activities, particularly for nursing and ancillary staff. Where club facilities are regularly used the common dining-room could also serve as a room for larger meetings.

Catering Facilities

(iii) A Dining and Common Room, etc.—A common dininghall provides the best means of regular contact between all levels of hospital staff and local general practitioners, and is one of the most useful assets to a postgraduate medical centre. Its psychological effect and the educative value of such a meetingground is undeniable.

Administrative Offices

(iv) A "Clinical Tutor's" Room.—It is most important that the executive officer of a postgraduate scheme should have his own separate office, where it is known that he can be found by his colleagues, and where he can act as career-guidance officer to the junior staff.

(v) A Secretarial Office.

Accommodation for Learning

(vi) Research Space.—Ideally, permanent space should be provided for three different types of research: (1) individual study-rooms (which can be incorporated in the library), (2) rooms for co-operative or group research, and (3) laboratory and bench space.

(vii) "A Room for Teaching Aids."—The survey-group dislike the connotation of the word "museum" with its image of surgical trophies and dusty glass cases, but have not been able to find a suitable name for this room. They feel it is necessary for a centre to contain a place in which to keep various aids to teaching and special equipment, and where "individual learning" would go on as new educational techniques developed.

(viii) Libraries.—It must be stressed from the outset that no medical library can, or should, attempt to replace the "working tools" in individual departments for on-the-spot reference. If possible, libraries should be accessible at all times to hospital medical staff, and there should be adequate space for students to read in comfort. The survey-group found that at the present time general practitioners rarely use the libraries at postgraduate medical centres, but the optimum size of medical libraries should not be based on such a factor, because it is to be hoped that future generations of general practitioners will have acquired the habit of keeping themselves informed about current developments in medical science and practice.

An efficient secretary/librarian is essential to every postgraduate medical centre. She should be given sufficient instruction to allow her to make full use of central stores of medical books, medical lending libraries, and the local public library service. The resources which some public libraries put at the disposal of local hospitals are quite remarkable in their range and efficiency of service. Where possible it would obviously be a great advantage to develop an abstracting service, using modern copying techniques.

Having put this staffing requirement first, the survey-group thought it important that an adequate range of current journals should be kept. It is not proposed to comment on the content of libraries in detail before the findings of the National Book League's investigation into book and journal services for doctors and nurses are known, including any recommendations about the important subject of shared facilities with nursing and ancillary services.

On the question of costs, to judge from the replies to the survey-questionary, the amounts of annual spending on libraries vary considerably throughout the country. The survey-group believes that the basic starting-point for financing libraries may therefore be the salary of the secretary/librarian, which will have to be borne by the hospital management committee plus recurrent expenditure on stocks of books and journal subscriptions.

V. Stage Management and the "Method(s)"

Postgraduate activity should aim to involve actively all types of participant. There will, however, inevitably be those who are willing to play the part only of passive recipients. Postgraduate medical education needs to be organized for a heterogeneous group. Multiple aims must result in a multiplicity of methods, and it is not intended to go into a detailed assessment of the educational value of any specific technique to achieve a specific objective.

The various forms of postgraduate activity reviewed were those which took place within the confines of a medical centre for the benefit of those who came into the centre. With the exception of the Scottish and B.B.C.2 Television series, the local medical broadcasts at one centre in the West of England, and an experiment in telephone-linked seminars at another in the Midlands, there appeared to be no other attempts at reaching out into the periphery to provide for those isolated from the centres by geography or other factors.

Different ways of linking the centres to the periphery suggest themselves—for example, regional correspondence courses, peripatetic teaching and demonstration teams, and travelling seminars. Clearly the use of television, teaching machines, and similar media needs to be explored at a high technical and intellectual level. (It is understood that attempts are being made to evaluate the existing medical television programmes.)

Such efforts could be directed not only to general practitioners in outlying districts but also to hospital medical staff who cannot get more formal education during the course of clinical appointments. Local experiments should therefore be encouraged, but eventually some system of regionally, or nationally, co-ordinated exchanges between centres will need to be introduced.

It cannot be stated too often that there is need to explore the potential value to continuing education of the consultations offered by proper use of open-access diagnostic facilities and domiciliary visits.

VI. Prompts to Success

During the survey some of the factors leading to the success or otherwise of schemes clearly identified themselves. Although they have all been referred to in the text of this report, it is felt to be no disadvantage at this stage to summarize those which seem to be the most important, before drawing together the threads for a final chapter leading to some speculations for the future.

(1) Time and time again it was clear that the drive of one individual had been of incalculable value to a scheme, particularly in creating and maintaining enthusiasm among his colleagues. As interest in postgraduate medicine grows, almost as a specialty in the British medical scene, the supply of these young consultants is not likely to dry up.

(2) Among the younger generation of consultants there appeared to be a genuine desire to teach. This did not always apply to their seniors, who tended to limit their contribution to preparing and delivering formal lectures, a less onerous task and one not so likely to expose them to the cut and thrust of open discussion.

(3) Buildings put up for the purpose of postgraduate medical education clearly have positive advantages as morale-boosters and stimuli to improved facilities generally.

(4) General practitioners always appreciate the chance of getting to know better those who can help them when their patients require hospital admission. Thus common rooms with catering facilities afford them the best informal access to consultants and resident hospital staff. Many junior medical staff welcomed these opportunities for the interchange of ideas, so that this contact is as important to them as to their seniors.

(5) The news soon gets back, particularly to overseas sources, that certain hospitals offer good training facilities. Active postgraduate schemes for registrars and house officers are becoming more and more accepted as a form of enlightened self-interest, resulting in more candidates of better quality applying for appointments on their staff.

(6) The difficulties put forward as reasons preventing general practitioners from attending postgraduate activities were repeated again and again to the survey-group. Yet these were readily overcome when it was a matter of the doctor taking further training to get his name on the obstetric list. Practitioners on this list receive 12 guineas for conducting a confinement; otherwise they only receive 7 guineas for the same task. There is also the arrangement whereby general practitioners who attend hospital as clinical assistants for specified periods, certified by their consultant-chiefs, receive $\pounds 60$. The lesson to be learnt from these incentives seems obvious enough.

As undergraduate education improves it can be expected that a larger number of family doctors will be anxious to make good use of all the continuing education available.

(7) It has been proved in practice that to set aside agreed times for educational activities during the week is an essential factor to attract a good attendance of hospital staff and general practitioners. This implies agreement among the general practitioners not to hold their surgeries at such times, and among hospital staff to suspend routine but not, of course, emergency work during these periods.

VII. A General Critique and Some Speculations About the Performance

A general consideration of the present state of postgraduate medical education should measure how far the immediate steps proposed at the Christ Church Conference have been implemented.

It seems quite evident from the survey that in some areas the basic suggestions have not only been adopted but enthusiastically developed. Yet it is notable that there is no regularity of pattern emerging from the arrangements which were studied. In particular the framework which was suggested of a regional organization, with the university at the apex and postgraduate centres in district general hospitals forming the bases, can hardly be hailed as a *sine qua non* or even an essential ingredient in success. Nor can it be claimed that every district hospital now has adequate arrangements for postgraduate medical education. Indeed, it is doubtful if without some means of probing the situation there is any simple test of the effectiveness of educational arrangements in any area or region.

The position of postgraduate psychiatric education needs special consideration.

It is doubtful whether enough time has elapsed to judge whether the kind of criteria which were proposed at the original Christ Church Conference have been sufficiently developed. In any event it becomes increasingly clear that it is impossible to divorce continuing education from the main stream of services for medical care.

Most of the places visited had some accommodation for postgraduate activities, but these varied considerably in adequacy, attraction, and space. What became absolutely clear is the great advantage which a strong physical focus in a new or reasonably well adapted building has over scattered or shared temporary accommodation.

It is still too early to judge what effect the announcement of official policy in HM(64)69 will have, particularly with regard to the different principles of dealing with revenue and capital expenditure. It would appear that money for the recurrent financing of schemes is to be a separate allocation, so that it will not be necessary for postgraduate education to compete with other interests in regional hospital board annual budgets. It is hoped that the plans submitted under this circular will be bold and imaginative.

It is disappointing that a similar policy does not apply to capital for buildings, save in new hospitals. Most of the visits were paid immediately after the issue of the Ministry's circular, so that it was too early to judge how the existing schemes would be affected; but it would seem important to keep experience under constant review. In any event it cannot be too strongly stated that the establishment of a building has an important effect, not least on morale, far beyond the amount of capital involved. In these days, when about £70 million a year is being spent on hospital building in this country, it seems absurd not to designate separately the tiny proportion of capital needed to accommodate postgraduate medical education. It is only natural that the very mention of new buildings conjures up grandiose designs with complex engineering services. Postgraduate centres need not be power-houses filled with expensive audio-visual equipment, large auditoria, and overspacious offices. This is not to deny these centres advances in educational techniques, aids, and equipment ; but the concept of the building should be kept in perspective. It should not be envisaged as a technological centre, more likely to deter than encourage those who most need postgraduate education, but more as a friendly meeting-place for those who wish to teach and those who wish to learn more. Above all, there is a need for its importance to be seen in full perspective at all levels of administration as an essential element in the arrangements for good medical care. At its best it could be as important as a medical school: the absence of efficient postgraduate centres would certainly nullify the value of good medical schools. To quote the Lancet: "Can we really be content with medical education until every hospital in the land is in some sense a 'teaching hospital'?"

Schemes, both at regional and at local level, are developing with such rapidity that the growing enthusiasm for postgraduate medical education can well be likened to the spread of a forest fire. Yet it was a general comment on the survey that hospital residents almost invariably gave lack of time as the reason which prevented them from gaining full profit from postgraduate facilities. While residents do work hard, here and there it was felt that better organization might overcome some of the difficulties and so enable them to attend lectures and other activities.

To this end it would seem of the utmost urgency that the importance, objectives, and requirements of postgraduate education should continue to be stressed to all hospitals and regional and university authorities at every available opportunity and by way of administrative actions.

The money which the Trust has already injected into the movement towards the improvement of postgraduate medical education has been well spent. It has probably had an immediate effect in raising standards of medical care as well; this trend will continue to gain momentum all over the country when it is fully realized that improved postgraduate education schemes do mean improved patient care.

What is now needed is a series of experiments in methods of education and operational research studies in depth of the needs of postgraduate students. For example:

- (a) A critical study of methods of postgraduate training and education.
- (b) Experiments in new forms of techniques for taking education from the centre to the periphery.
- (c) Experiments in and a study of specialized vocational training of general practitioners.
- (d) A job-analysis of the work of hospital medical staff, particularly in the junior grades.
- (e) A study of the role of doctors in the public health services.
- (f) An assessment of needs, region by region, to determine the logistics of the problem.
- (g) The accumulation of information about the cost and adequacy of existing buildings for postgraduate medical education.

In addition a number of outstanding questions touched on in this report remain still to be explored at the highest possible policy level:

- (1) A realistic analysis of the aims of postgraduate medical education. It was clear from the survey that the objectives of schemes were not always the same, particularly in their direction towards different categories of doctors.
- (2) Some speculation about the structure of a national and regional organization.
- (3) The relations between universities and regional hospital boards ; what they should embrace and where costs should lie.
- (4) The working relationship necessary between the various bodies in the field—for example, medical societies, postgraduate education committees, the British Medical Association, the Royal College of Surgeons, the College of General Practitioners.
- (5) The designation and status of clinical tutors and/or area directors and chairmen of postgraduate committees.
- (6) The need for some kind of retraining organization to attract and retain medically qualified people who have been out of medicine for some years. It is said that there are many doctors capable of taking on part-time appointments for example, with the schools and Public Health Services —and even within hospitals. What is not known is their number, and their needs in terms of postgraduate training.