

PLANNING AND PREMISES

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Our primary medical training is second to none in the world and we leave our Alma Mater very well equipped medically, but with no training in the administration of these services or of our personal life unless we have had an outside hobby which has filled this gap in our education. The College of General Practitioners has realized that this gap exists and over the years has been building up a service to which any practitioner may turn for guidance.

The Practice Organization Committee has collected descriptions and plans of practices and premises which any doctor may study at the college headquarters, or upon request have suitable ones lent him for study at home. Each of these represents the ideas of individual practitioners based on their experience in running their particular practices. They are of great value in helping us to find out what doctors consider the most favourable conditions in which to work. In addition, over the past few years the committee has obtained a great deal of information about premises and equipment, and this knowledge has been placed at the disposal of any member who cares to write in for it.

Finance is probably the first of many problems which looms up as soon as we are qualified, and I feel that every doctor should receive instruction in this subject; as over the years he will have fairly large sums of money passing through his hands, and properly applied this will make his life very enjoyable. Assuming that one has a working life of 40 years in general practice the total figure will be at least £100,000. I mention this to bring into perspective the capital sum required to design, build, and equip our working premises. Builders give a figure of 55s. to 65s. per sq. ft of flooring. If a two storied building, then one needs to measure both floors to find the total cost. This figure is used for straight runs. If much broken work is planned then the figure will be higher. A single-handed practitioner contemplating building new premises of 1,000 sq. ft must therefore think in terms of £2,750—£3,250. This figure varies according to what type of brick and internal fittings are chosen. Woodwork and electrical work is included but not decorating, furnishing, and special forms of heating.

It is the design of these premises that will be his next problem. He may join a partnership and inherit them, or take over from an outgoing principal, or start from scratch by putting up his plate, but human nature being what it is, he will be dissatisfied with whatever he takes over and will endeavour to produce conditions of work

which will more nearly approximate to his ideals.

In planning new premises the first consideration is where to site them. For preference they should be in the centre of the population which they are to serve and at the focal point of the local transport services. I used to consider that the site chosen should be in a prominent place at the focal point of the district, but have changed my views and now would be quite happy to be in a side road off the routes converging to the centre of the district so long as it is easily accessible to them. This is a cheaper proposition, is less noisy, and it is more easy to obtain parking space for cars—a major consideration in modern life. One small point here is that in hilly country the surgery should be on the same level as these routes.

There are many designs of practice premises from which to choose and it is important that this should be so. It will be a poor day when we are so stereotyped that we conform to one pattern. When visiting Hadrian's Wall recently, I was struck by the majesty of its conception, sweeping over the countryside up hill and down dale, and its rigidity of design, with a fortified gate called "mile castle" every Roman mile with two turrets equidistant between them, but was completely taken aback when I found one of the mile castles on top of a precipice. This mile castle conformed to the rigid pattern of the others and the gates, being of no use, had been immediately filled in. So one essential of any design is flexibility, that is, the plan must be so designed that the building can be adapted to fit the changing pattern of general practice, whether it be increase of numbers of patients based on the building or number of doctors using it, or changes in the type and work-load of ancillary help employed. At this stage it is important for the doctor to crystallize his ideas into facts as to what he requires, trying to base them on what he wants now and what he visualizes the future to hold for him.

Appointment systems have come very much to the fore in recent years and acceptance of them influences planning, in that to run the system an office is required and the waiting room can be reduced in size considerably. It is interesting to note that appointment systems were not generally accepted as late as 1932 when King Edward VII Hospital Fund carried out an investigation on a number of hospitals. They have been used in general and consultant practice to a limited extent for many years but it is only since the advent of the National Health Service that they have been extended to cover all classes of patients. The arguments for the system are that it saves patients much waiting time and cuts down cross-infection in our crowded waiting rooms. It also enables us to have very much smaller waiting rooms, thereby saving quite a considerable amount of

money in building. It enables the doctor to plan his working day more easily and is probably the method to use to eliminate the late evening surgery. One unexplained consequence is that one's visiting list is considerably reduced. I feel that we owe it to our patients to treat them in the same way that we expect to be treated ourselves.

Examination rooms are also a development of recent years. It is doubtful whether they really save as much time as is assumed but they create a very good atmosphere. One consults in one's consulting room, and examines the patient and carries out minor treatment in the examination room. There is no doubt that the patient likes the privacy of a separate room for dressing and undressing and is far more ready to submit to examination. It also helps the doctor who, when pressed for time, wonders whether to examine or not, but he knows that he can go on consulting while the patient is undressing, slip in and examine his patient, and see another one in his consulting room while the one in the examination room is dressing again. Here I would mention that having had the use of such a room for some years I thoroughly dislike the idea of a patient undressing in my consulting room and as occasionally the next patient may require an examination the ideal would be two examination rooms to each consulting room.

A further consideration which will influence the plan is whether the building will be used for the field work of the public health services, maternity clinics, lectures, relaxation classes, infant welfare, and school clinics. The public health authorities lay stress on having large rooms or halls for these purposes. If an appointments system is properly run they do not appear necessary except for relaxation classes and lectures, and it may be necessary to provide for this purpose a larger waiting room than is necessary for general practice alone. There is a tendency for the field work of the public health services to revert to general practice and I think we should not lose sight of this when making our plans.

The size of some rooms remains constant whether we work in town or country, single-handed or in partnership. For some years now I have been advising that the *consulting room* when used in conjunction with an examination room should be a minimum size of 10 ft. x 12 ft. If used without a separate examination room then a minimum of 12 ft. x 12 ft. is required, in order to accommodate the examination couch. The *examination room* needs to be 6 ft. x 6 ft. 6 in., and should not only contain the couch, preferably slung like a bunk with a drawer at the foot to contain all the necessary instruments, but should also be made to serve as a dark room for ear, nose and throat and eye examinations. Instruments, such as height measurer, sphygmomanometer, cautery, and lights, should all be wall mounted fixtures to save wear and tear on the instruments

and to help to keep the room neat and tidy. The other room which is constant in size is the *lavatory*, a minimum of 5 ft. x 3 ft. is required. This will house a wash basin too, and I feel that if one is to educate the public to wash their hands at this time the basin must be in the same room.

Now we come to the three rooms of variable size, the *waiting room*, *dispensary* when necessary, and the *office*. The size of the waiting room will depend on the number of patients based on the building and whether an appointments system is used or not. When Lord Taylor did his survey he found that the number of seats allowed per patient varied widely from 2 per 1,000 to 10 per 1,000, and he recommended that 10 seats per 1,000 should be aimed at. This is the same figure that executive councils suggest. We have found in our practice where we use an appointments system that 2 seats per 1,000 are ample. Translating this into space, allowing 10 sq. ft. per seat gives a figure of 100 sq. ft. per 1,000 where no appointment is used and a figure of 20 sq. ft. per 1,000 where one is used.

The size of the *dispensary* is more difficult to define. In single-handed practice 8 ft. x 10 ft. is thought to be ample. This will give storage room for drugs, dressings, and instruments in everyday use, cupboards for bulk supplies, working space for a dispenser and also for any clinical investigations one undertakes, urine, etc. Naturally it will need to be larger for larger practices and additional space must be allowed for bulk supplies especially containers, bottles, boxes.

If ancillary help is used it should be used to the fullest extent possible. The most common form is the employment of a receptionist able to type and to take shorthand. Her job is to man the telephone, file records, and to deal with all the many queries patients bring to her. In order to perform the job efficiently, she should be housed in an *office* separate from the waiting room, but situated in such a position that she can easily control the flow of patients within the building. Its size will depend on the size of the practice but one other factor to be remembered is that our record envelopes will get more bulky for some years yet to come before their size becomes stabilized. This means we must allow for expansion of our filing systems. We can keep this down to a minimum by using the college summary card to enable us to get rid of the majority of the letters and clinical reports but we shall still be adding continuation cards to the envelope for another 20 years before the records become balanced.

A *minor operation and treatment room*, where required, must be large enough to contain a couch or operating table and leave enough room around it for an assistant to move freely behind the operator, and an anaesthetist to work at one end: a minimum size of

12 ft. x 12 ft. is required. In addition one must allow ample storage space for drugs, dressings, and instruments. The dangerous drug cupboard should be housed here if one does not have a separate dispensary. Just as the office is the hub of the administrative set-up, so this room becomes the hub of the clinical set-up. This is the nurse's domain but she should be trained to do other duties than nursing. She should be capable of taking blood samples, doing haemoglobins, setting up E.S.R.s and should be the technical assistant with the ECG machine.

In smaller partnerships the doctors tend to collect in one of the consulting rooms but in the larger ones I am convinced that a separate room should be set aside for this purpose. Preferably, it should be cheek by jowl with the office but quite separate. This enables the doctors to meet for coffee when they have finished their morning sessions and enables them to talk over any problems they have, to deal with their correspondence and lists which have been put in the room prior to their arrival, and any queries can be referred readily to the office which is next door.

Storage for drugs, dressings, and instruments has been dealt with but space for staffs' clothing, cleaners' cupboards, and office stationery must not be forgotten.

Having decided what rooms are required and what size one would like them to be, before making contact with an architect it is useful to consider the form of heating which will need to be installed. Here the merits of central as against the intermittent type of heating will need to be assessed. When a building is only used for a few hours a day intermittent heating is ideal but if the building is used most of the day central heating will amply repay its cost of installation. One factor to be noted is that when a building is centrally heated condensation does not occur and it is condensation in rooms which plays havoc with decorations. It is stated that rooms need decorating twice as often when heated intermittently as when heated centrally.

Methods of heating are constantly changing. The small bore copper pipe has halved the cost of installation of hot water central heating. The various methods of storing heat by use of off-peak electricity make this method most attractive. The time clock and ring main have made intermittent heating as automatic as any other form.

A decision will need to be made on the type of flooring, too. It should be quiet, non-slip, hard wearing, and easily cleaned. The most hard wearing—terrazzo—is unfortunately the noisiest. Wood is hard wearing, easy to clean and reasonably quiet. Tiling, whether in a plastic, linoleum, cork, or rubber is hard wearing as long as the right grade is chosen and it is properly laid by experts; it is quiet

and easy to clean too. No flooring except hardened steel stands up to stiletto heels, and the sooner they disappear the better for our pockets.

Lighting is very important to us and we must aim to get the right volume or number of lumens in each room. At the present time I am in touch with the National Physical Laboratory to find an answer to this. So far they have made it clear that one can only achieve this by use of the fluorescent tube to give the volume, aided by a tungsten lamp to supply the red of the spectrum, the missing element in fluorescent lighting. By this means one can achieve reproduction of daylight.

Sound proofing is very difficult to achieve. Lobbies sealing off the consulting room and examination room from the waiting room are the best method but add to the expense of building and make for much more time being spent in moving from room to room. A 4½ ins. brick wall is required to ensure that sound is not transmitted through it. If an opening is made, either a door or window, then sound slips through easily. Double doors help but the space between needs to be at least 6 ins. Sound is transmitted by air and it is the air around door jambs and other openings which makes it so difficult to ensure good sound proofing. It is very much easier to scramble sound, and where one only requires to prevent a conversation being overheard, low background noises are quite effective. A long playing tape is most useful for this purpose and carefully chosen music should have the effect of relaxing the patients listening to it.

I have not attempted here to design the premises, only to give a broad outline of some of the facts which we require to know before commissioning an architect to produce a design. Up to date we have not attempted to design premises, only to arm the doctor with knowledge of the factors affecting planning so that he and his chosen architect can produce premises in which he can work efficiently and with comfort both to himself and his patients.

THE CONTRIBUTION OF DOCTORS' WIVES TO GENERAL PRACTICE

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Most of my professional life has been spent in single-handed general practice. Being unmarried, I have often found the "domestic" organization of the practice as difficult as the profes-