

our methods going?

First we have to be practical and not over-ambitious. Let us see what is possible and then go for it.

Second we must be realistic and appreciate that lack of financial aid is a major obstacle.

Third we must find ways and means of helping general practitioners to help themselves.

My own suggestions are—

I We must develop an active and virile *operational research unit* within the College to work out and test various problems of organization, planning, and building.

II We must develop further an *advisory service* able to give useful and practical advice and assistance to general practitioners, based on experience and experiments.

III *Financial help* is essential if any worthwhile developments are to take place. The hospital service has a 10-year plan. We need a 5-year plan for general practice. A crash programme to help general practitioners reorganize and redevelop their premises.

The group-practice loans were an excellent start but are not enough. Most urgent help is needed by the single-handed general practitioner and partnerships who have no wish or opportunity to form large groups. They need help—advisory and financial.

The powers-that-be should consider loans to any general practitioner who presents a good scheme for improving his premises.

In addition some form of tax-relief should be available for the practitioners who plough money back into their practices as in appointment systems, secretarial help, and so on.

IV Finally, there is some need for *incentives* to stimulate all general practitioners—not only those in the College.

I agree that “distinction awards” may be difficult to organize and I believe that the best forms of incentives lie in encouraging others by example of what is possible in practice. We must also take steps to educate our patients and the public to appreciate what “good general practice” is.

An educated and aware public will expect and demand even “better general practice”.

PLAYING WITH RECORDS

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I am concerned this afternoon with some ideas about clinical records—not with how to write notes in your E.C.6s, but with some of the special pieces of paper you can put into them to make record

keeping easier or more efficient, and with some do-it-yourself machinery to help in their handling and use.

On the whole, we are not taught about these things in medical school. We were taught how to examine a chest or a fundus, how to test a urine or count red cells; how to diagnose, operate, prescribe, and investigate, but only very little about how to record, and nothing about how to use and manipulate the records we make. The reason is that in the hospital the approach is different.

Notes are made by the medical staff; content is their job, but manipulation and storage is someone else's pigeon. The lay staff deal with manipulation to their own satisfaction, and care nothing for content. The parts of the whole are not designed for each other, but as each has a separate staff to work it, this does not matter.

In general practice we cannot afford this sort of working. Our record systems must relate content, storage, and manipulation together as one operation, so that the thing can run as a one man band. We can delegate some of the working, but none of the design.

What I should like to invent for my records is a sort of medical juke-box. Every time a patient enters the consulting room, one of these electro-mechanical arms would come out of the wall, pick up the patient's E.C.6, and deposit it neatly on the desk. Then the other half of the machine would play back the notes we made at the last attendance. The trouble would be of course, that some patient's records are "long players"—very long players—and not awfully harmonious; while some of the shorter "pops" would be quite unsuited for a mixed audience. None of mine, I am sure, would make the "top twenty". No, the machinery I offer you is far less exciting. Only indexes, registers, and forms. But they *are* less expensive!

We all know how many N.H.S. patients we have got. It is a matter of some concern to our pockets. But how many of us can say how many females there are on our lists between the ages of 10 and 20, who may be expected to bring us problems of puberty—or how many males over 60, who may be the reservoir of our practice's active tuberculosis—or how many chronic depressives or asthmatics, who may make a disproportionate number of late calls? Yet these things also affect our pockets, by affecting our work-load.

An age-sex register and a disease index can tell us just these things.

Starting an efficient age-sex register is troublesome, and costs a good deal in time and effort, but not in money. Apart from being an essential research tool if any serious comparative epidemiology in the practice is contemplated, it has other uses, and may even have financial advantage. How to set about it was fully covered by an

article in the *British Medical Journal* in 1960. I will give a short summary.

You want a large loose-leaf, ring-backed book, with at least 50 lines to the page. There are not likely to be many patients in the practice over 90, so you subtract 90 from 1962, and head the first page "1872 and before". The next page becomes 1873, and so on right down to 1962. Some people spread the book at a double page, and enter males on the left, females on the right. Some, like us, use two books.

Then you check through all your N.H.S. records, entering each person on the page appropriate to his or her birthdate.

Now that simple-sounding operation is where the first snag arises. If your records are anything like ours were, nearly half the E.C.6s will have no birthdate. If nicely approached with a list of names and addresses, your executive council will probably be most interested and helpful (as ours was), but will only be able to supply details for about two thirds of the unknowns. The hard core will have to be chased up, in the surgery, in the street, by letter, or even by visiting. But even if it takes you six months, and you get heartily sick of the work, that is where one of the advantages comes in. While recording Mary Jones, you realize that she is almost overdue for her postnatal, rush out and do it, and get your claim in just in time. While doing that, you realize that not only has she not registered Jemima, the baby just born, but that little Tommy, her eldest—the healthy one—was never registered either, and has managed to avoid his vaccination and his polio shots. So you do all these, and get two more capitations and four inoculation fees. Total profit, about five guineas! That keeps the interest up for a week or two, and then you find another family like that. Doing our register added £12 to £15 a year to our capitation income, and removed several dozen useless E.C.6s (of patients long since dead) which were cluttering up the files.

Another advantage is that this register can save a register. If you rule your paper vertically in columns, you can make column-entries of date of joining list, date of leaving list, reason for leaving, receipt and despatch of E.C.6s to the executive council, and so on. Then your secretary may see some sense in a thing that to you started as a research interest, but to her seemed merely another of Doctor's mad ideas for making unnecessary work. And if she sees sense in it, she will keep it up, cheerfully.

The essentials for upkeep are simple. Each patient entered on the sheet appropriate for his birthdate. Existing patients at the time of starting the register. New patients as they join the list. Departing patients to be deleted as they leave. Alphabetical order of names

or date-order of birthdays, within the page, matters not at all—the fullest page will only have 50 or 60 names for a full list.

One last point about upkeep. Take a census once a year. Add up the numbers on each page on a set date, and keep these on a census-page at the back or front of the register.

When you have got the thing running, what have you got? Well firstly, for the first time in your professional life, you have a manuscript list of your N.H.S. list. Nextly, whenever you read a scientific article where age or sex incidence of a disease is measured, a glance at your census will show you the likelihood of meeting that rare or obscure disease in your own practice. Disparities between your own experience and the articles you read will stand out at once, and set you thinking—they may be due to a diagnostic blind-spot in yourself, or even to some real difference between your practice and the rest of the country. And if you are unlucky enough to be hauled up for excessive prescribing, you may even be able to prove that your practice is not an average one, having a real excess of infants or the aged.

Lastly, if you do research in your own practice, you will be able to validate any figures you produce not only by reference to total population, but also by population age groups. Sexing and age grouping of the population at risk can only be done in general practice, and not with hospital populations.

A Practice Disease Index

The next thing I want to suggest to you is a *Practice Disease Index*. This is a bit more complicated to describe, a bit more expensive in capital outlay, and has no financial return at all. But it is equally easy to maintain, and much more interesting in use. It also has a much more obvious research potential.

You need two things. A proprietary, looseleaf, ring-backed ledger divided into sections; and a classification of diseases which fits. It must fit or be relatable to a recognized system of classification in use by others, it must fit your own diagnostic habits and methods of thought, and it must fit the book too. My partner and I use a Twinlock book, and a classification of our own which is relatable to the College classification, and thence to the International classification.

How do you use the thing? Firstly it must always be handy—on the desk, or in the car. Whenever you see a patient and make a diagnosis, you enter simply the date and the name, on the sheet appropriate to the diagnosis you have made. If you diagnose a double pathology, you enter the date and the name on both pages, and you can cross-reference them. The time taken per consultation is measured in seconds only. It is an index to diseases and diagnoses,

not to attendances, so the duodenal ulcer or the hypertension is only entered once, and not on each attendance. Entering the same patient several times does not in fact do any harm, it only wastes your time.

When you have it running, it takes about 15 seconds to find out roughly how many diabetics you have in your practice, and about 20 seconds to find out what month the measles epidemic started this year, when it ended, and how many cases you saw. You can in some way star the measles sheets, or other notifiable diseases, so that every time you enter a case in your index, you remember to send off a notification, and get paid for it!

I said "find out roughly" just now. One of the advantages is that this is an index to your notes. Wrong diagnoses do not matter when you want to be spot-on accurate, because then you simply hand the index to your secretary, and tell her to fetch you the notes of all these people. You make your accurate count from your notes. If the diagnosis was changed after you had indexed it, then you just do not count him. If you had first indexed him as something else, but changed your diagnosis, you will have indexed the new diagnosis anyway. Of course, you may get a bit foxed if your index says "Disease X, 1 April 62, Mary E. Jones", and Mary Jones' card on that date merely says "Certificate, mist. pot. brom.". The results of using your index can only be as good as your notes, so if you cannot be bothered to keep adequate notes, do not start an index! If you do keep good notes, the number of clinical questions that your index will enable you to answer accurately will surprise you.

Keeping Good Clinical Notes

How to keep good clinical notes is a long subject, and I am no expert. But I can suggest three or four simple aids to notekeeping that may be new to you.

Ideally, one should never see a patient without having the notes open, and never shut them until you have made some more. The labour of finding and refiling when single-handed makes most of us less than ideal at times, and especially is this so when visiting. Some general practitioners get the notes as far as the car, but few of us get them as far as the bedside. On the other hand, the number of times when most of us see a patient without our bags is very few indeed. If you put in your bag one of those little roller-framed books called "Reporters Notebooks", you're sitting pretty. Finish your examination at the bedside, and then bring out the notebook as well as the E.C.10 pad. Double your script-writing time, and you've got notes made. Back at the surgery, give the sheet to your secretary. Then while you are seeing today's patients,

she is entering up your notes of yesterday's visits.

Now a clinical question—how often do we forget important facts, that are in the notes, but buried under junk? Such things as iodine-sensitivity in the candidate for an IV.P., or the long-quiet rheumatic heart that is proffering an injured wrist? You can give yourself warnings of this sort of thing by coloured stick-on tags. We use things called Arrowtabs, and wrap them round the top right-hand corner of the E.C.6. Have a copy of your colour code on the wall opposite the desk, where you can see it at a glance. We use blue for allergies or drug-sensitivities, green for catarrhal children, yellow for diabetics, white for chronic hearts, and red for hypertensives. When the notes are on the desk, these tags do actually get noticed sometimes—certainly more often than would the words “elastoplast rash” on the back of No. 3 continuation sheet.

We use a rubber stamp for our inoculation records. This fits nicely on the back of a continuation card. Our secretary enters them from the county record-card before posting that away for payment. It takes a school generation—that is, 10 years—for this to become complete, but we are now finding the use of it in the 5-year-old booster-dose age group—as it answers that awful question “what did he have when he was a baby?”.

INOCULATION RECORD

	1	2	3	4
Vacc.				
Diph.				
Pert.				
T/Tox.				
Polio (Salk)				
B.C.G.				

For my last examples I am going to ask you to think of forms.

Forms tailored to a purpose, designed for easy filling-in by the man who does the filling-in himself.

The custom-built examples come from the College, designed by the postgraduate education committee, with the research committee having fingers in the pie but no responsibility.

The pink one is a summary card, designed as a time-saver, and most useful for the patient with the “fat-envelope syndrome”. You go through the fat envelope while the patient isn't there, and enter the bare, bare essentials in chronological order. When the

patient is consulting you, you can read the whole of his life history while he (or she!) is still talking. This saves that infuriating five minutes that we all spend sometimes, searching yards of our own handwriting, and acres of hospital typing while the patient lies shivering and naked on the examination couch.

You can also use this card for summarizing records of those patients who leave your lists, should you need to keep them for research or medicolègal reasons. Though whether one should send the completed summary to the executive council and retain the originals, or *vice versa*, is a nice political point to which I do not propose to suggest an answer.

The second College card is an obstetric record, and the third is a menstruation chart. The really attractive feature of this last one is that you don't have to fill it in yourself—the patient does it for you!

My last form is a do-it-yourself one designed by my partner and me, and in regular use in our practice for 5 years. We designed it with several principles firmly in our minds:

1. A reminder, every time we see the patient, of every thing that ought to be done, at that time, for good obstetric care.
2. The ability to scan a "slope of progress" of important clinical features at a glance.
3. The ability to tell a normal case from an abnormal case, from the notes, in 2 seconds.
4. The absolute minimum of writing whenever you fill one in. Nearly everything is done by "ticking".

What sort of a strange hybrid resulted from these requirements? Here it is.

Down the left-hand margin, spaces for the date, already armed with the number of weeks. Across the top, the essential identification particulars, with a potted history. In the centre block, against each date, all the things that should be done at that date—with blood-pressures one above the other, in the clear on one side and weights in the same way on the other side. And we agreed to the principle of "abnormalities on the right"—we felt that this was a good clinical decision with no political strings.

Now as to the filling-in. When the patient enters, you write the date and are immediately reminded of the number of weeks. A check with the prominently marked E.D.D., and you are on the beam before she has taken her coat off. Weigh her before she sits down, and enter in the centre-section. This brings your eye to the right-hand column. If it is full up, she's abnormal, but if it is empty she's normal.

Then you take her blood pressure. This starts you on the left hand side of the centre-section, where you are told what to do. Everything normal gets a simple tick and so takes very little time. Anything abnormal goes in the right-hand notes-column. Blood-

pressures, weights, and abnormalities can be scanned vertically in a moment.

If the the course of your examination you see the need to check some special point on a future occasion, you simply enter it in the right-hand notes column for the gestation-period when it should be done. Then when you do it, you just tick it off. If certain things should become unnecessary, then you can cross them out beforehand, and not waste time on examinations which are not needed.

Five years experience of the form, and advances in obstetric care, have made some additions desirable. There should be a space for "Height less than 5ft 2in.", somewhere on the right. There should be a space for sugar-test of urine, as well as albumen, at least at the initial examination and at 36 weeks. And there should be another "spare" between 38 and 40 weeks for the weekly visit of the late toxæmia. Details of delivery could certainly be redesigned. But on the whole, it works.

NAME	ADDRESS	AGE	PLACE OF DELIVERY

Past Hist.	Para.	Ages	B.W.	B/F	Obst. Abnormality
.....	P.P.H.				
.....	Misc.				
.....	K.				
.....	B.G.				

ATTENDANCES

	DATE	WEEKS	Ht.	Chest	Colour	Teeth	L.M.P.	E.D.D.
1	[]	12	Abdo	Pelvis	Uterus at	Milk Certif.	[]	[]
			B.P.	Exit	Weight	Weight		
				Urine	Weight	Weight	ABNORMALITIES	
				Ankles	Weight	Weight		
2	[]	16	B.P.	Urine	Weight	Weight		
				Ankles	Colour	Colour		
3	[]	20	B.P.	Urine	Weight	Weight		
				Ankles	Colour	Colour		
				Movmts.	Signature	Signature		
				Certif.?	Place Fixed? ..	Place Fixed? ..		
4	[]	24	B.P.	Urine	Weight	Weight		
				Ankles	Colour	Colour		
				Mvts.	F/Ht.	F/Ht.		
				Blood	Exercises?	Exercises?		
5	[]	28	B.P.	Urine	Weight	Weight		
				Ankles	Colour	Colour		
				Fundal Ht.	F/Ht.	F/Ht.		
6	[]	32	B.P.	Urine	Weight	Weight		
				Ankles	Colour	Colour		
				Fundal Ht.	F/Ht.	F/Ht.		
6a.	[]	[]	B.P.	Urine	Weight	Weight		
				Ankles	Colour	Colour		
				Fundal Ht.	F/Ht.	F/Ht.		

Spare

7.	36	B.P.	Urine	Weight	ABNORMALITIES
			Ankles	Colour	
			Blood	Per Vag.	
			F/Ht.	Vertex OA	
8.	38	B.P.	Urine	Weight	
			Ankles	Colour	
			Nipples	F/Ht.	
			Engaged ..	Vertex OA	
9.	40	B.P.	Urine	Weight	
			Ankles	Colour	
			Engaged ..	F/Ht.	
			Position ..		
10.	41	B.P.	Gen. Cond.		
			Foetal Cond.		
			Disproportion? ..		

LABOUR

Spont		1st. L/M/S. Analges? ..	Delay?
Med/Ind		2nd. L/M/S. Delay? ..	Assisted?
Surg/I		3rd. L/M/S. Delay? ..	Assisted?
		P.P.H.	
		Perineum ..	Sutures
		BABY	
		Birth Weight	
		Gen. Cond.	
PUERPERIUM		Breast fed	Nipples
		Emotions	Exercises
		Perineum	Pyrexia
		Cond. of mother	Baby

POST-NATAL EXAM.

Date	B.P.	Breasts	Colour
		Perineum	
		Prolapse	
		Involution	
		Retroversion	
		Cervix	
		Coping O.K.?	
		Baby Gaining?	
		Signature?	

We keep the things interleaved with the claim forms in the E.C.24 books, and file them in the E.C.6s after the postnatal. E.D.D. against each name on the E.C.24 covers makes a simple " who's due " list.

Record-keeping is a wide field, and rather poorly cultivated. I hope these few examples of less-common items may have given you ideas, and that some of the ideas may be fruitful.

I started by inventing a fantasy juke-box for my medical records. Now I have played my tunes, and you are the jury.

REFERENCE

Brit med. J., 1960, 1, 1496.