TALKING POINT

Child health records and computing

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Several recent national reports have emphasised the need for better medical records. The content, format, processing, retrieval, and analysis of the records, whether done manually or by computer, are being widely debated. Ironically, the main stimulus for this interest has been political rather than medical and the concern about computer held information has raised the subject of data protection in general. The effect, however, has been to delay rather than to help progress. At present the Government's White Paper[1] is still being discussed, but most doctors would probably agree that to operate efficiently a data protection authority must be independent of the Government and supported by legislation that includes sanctions against the miscreant. The principles apply whether the records are processed manually or by computer, but the need to restate these and to tighten security has increased with the ready accessibility of large numbers of records that is afforded by the use of computers.

It is perhaps unfortunate that the spotlight fell, almost by chance, on the work of the Child Health Computing Committee (CHCC). This was mainly because the child health system offered paediatricians and their health authorities a comprehensive computerised system (of which the neonatal discharge record forms an important part) at a time when concern about confidentiality and security was reaching its height and when the medical profession was finding it hard to keep pace with rapid advances in computer technology. This system has in fact stood up to careful scrutiny and offers helpful guidelines for the secure operation of all kinds of record systems.

The computer can replace much manual clerical effort, but the initiation of new systems and retraining of staff are expensive and progress has been disappointingly slow. The objective is clear enough—the capture and rapid retrieval of up to date, accurate clinical and management data so as to ensure the appropriate provision of service for the individual child. What is not so clear is the way in which this should be achieved.

One of the main difficulties is integrating the recommendations of the various interested administrative bodies and clinical organisations. The Computer Policy Committee (recently reconstituted), the Steering Group on Health Services Information (the Körner Steering Group), the CHCC, the Joint Committee on Vaccination and Immunisation, the British Medical Association, and the Royal College of General Practitioners are all considering aspects of future child health records and, while the British Paediatric Association and Royal College of Obstetricians and Gynaecologists are represented on some of these groups, recommendations have to be circulated and comments received. All this takes time.

Opinion among clinicians is divided over whether there is value in having a standard or near standard system, or whether people should be allowed to go their own way with their own personal preferences as to records and analytical programmes. Though the latter wastes effort and makes collation of information difficult, if not impossible, many paediatricians have not been prepared to wait for a national computer system and have developed or are developing local systems of their own. So a task for the future will be finding ways in which the information they possess may be abstracted so as to meet local and national requirements. The aggregation of personal information for preparing data of epidemiological value and of management importance has prompted concern. Where this information is required the data must, with rare and generally agreed exceptions, be in unidentifiable form.

One of the primary aims of the CHCC in constructing the national child health system is that it should be flexible enough for general acceptance. Undoubtedly some clinicians will think that the minimum basic data set suggested by the Körner Steering Group[2] and now incorporated into the child health system is inadequate for recording neonatal data. But this group has two prerequisites for including items in this minimum set—that the item can be collected in 100% of cases and that it must be accurate. The basic data are therefore standardised but there is wide choice about matters of a clinical nature. For example, the neonatal record leaves room for the collection of data that are decided locally and that remain unique to the initiator.

One composite system

Systems designed by clinicians tend to omit management data and vice versa, but it has been an objective of the CHCC and the Körner Steering Group to create one composite system collecting information for both clinical and management purposes, rather than two in which duplication would inevitably occur. This exercise in integration, which came at about the same time as development effort was subordinated to the revisions incurred by NHS restructuring, has to some extent contributed to the delay in presenting the child health system. In the long run, however, it should prove to have been time well spent.

The "problem oriented medical record" also has something to offer but this has not gained much acceptance in the United Kingdom. It is quite possible, of course, to use a problem oriented medical record as the clinical case record and structure it in such a way that extraction of required data for a computer program is achieved without difficulty.

What of the future? The next step as I see it is to encourage paediatricians and their health authorities to accept the various modules of the child health system as they become available and to request those who have their own system in operation already to add any missing items of the minimum basic set and devise means of abstracting the required data.

To some extent the way in which developments might proceed depends on which branch of the Health Service accepts responsibility for preventive child care—general practice or community child health. If general practitioners accept total responsibility—immunisation, developmental surveillance, and school health—then the record system could be practice based. While the

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Buying added years

BMA advice on improving pensions

The BMA's superannuation branch has prepared the following notes on the long awaited new added years scheme, which will become operable towards the end of December. The new scheme will allow those who are unable to complete 40 years' service by the age of 60 (subject to limits set down in table I) to buy the shortfall so as to maximise their pension entitlement on retirement.

The main features of the new scheme are:

(1) Members of the scheme may elect to purchase added years by a single lump sum payment within 12 months of joining or rejoining the National Health Service. The costings will be by reference to age and each £100 of superannuable income as listed in table II.

(2) Alternatively, members may elect to purchase by periodic deductions of a fixed percentage of superannuable income at any time before reaching 63.

(3) There will be three tables of costs (table III) from which to make the purchase. The first is for people up to 65 who plan to continue in service to that age. The second is for those up to 60 who plan to retire between the ages of 60 and 65. The third is for only mental health officers as they can opt for retirement at any time after 55.

(4) Unlike the previous scheme the purchase will not be restricted to only whole years. Purchases may be of years and days, or only days.

(5) The total of a member's contributions to the superannuation scheme (including the normal 6% contribution) cannot exceed 15% of superannuable income. The extra contribution towards the purchase of added years must, therefore, come within 9% of superannuable income.

(6) Those with part time appointments will purchase by periodic deductions of a fixed percentage of their part time income. Accordingly, each year purchased will be a part time year.

(7) The cost of buying added years will be fully allowable against tax if paying by periodic deductions. A lump sum payment will not attract tax relief.

In the case of officers in salaried employment every added year purchased increases the pension by 1/80th, the lump sum retiring allowance by 3/80ths, and the widow's pension by 1/160th of the whole time salary earned in the best of the last three years before retirement. Those with part time

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Applications for added years

The relevant application forms are available from employing authorities. It is advisable to submit the application form at least two months before the birthday on which the doctor wishes to start making the purchase.

TABLE I—*Number of added years that may be bought*

Actual service (in years) projected to age 60	Number of whole added years that may be bought	Actual service (in years) projected to age 60	Number of whole added years that may be bought
39	1	23	17
38	2	22	18
37	3	21	19
36	4	20	20
35	5	19	17
34	6	18	15
33	7	17	13
32	8	16	11
31	9	15	9
30	10	14	7
29	11	13	5
28	12	12	4
27	13	11	3
26	14	10	2
25	15	9	1
24	16	Less than 9	0

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responsibility for ensuring that all children receive appropriate surveillance and preventive care rests, as in most instances it does now, with the clinical medical officers, and until every general practitioner in a district is willing to participate, the system must be organised on a district health authority basis.

Sharing of information may be achieved by computer linkage, though there is some resistance to this idea at present. I would like to think, however, that clinical information obtained in general practice, the hospital outpatient department, and the community clinic (as well as existing inpatient data) could be collated on a life record and made available to anyone caring for the child.

One way of achieving such integration, probably the most acceptable today, is by using on line microprocessors, and to this end the CHCC is investigating ways of incorporating distributed computing in the national child health system, some parts of which will still, for the time being, operate on the new, more versatile main frame computers. Microcomputing is an excellent method of storing and retrieving data in a small way—for example, in a department or a single health centre—but there are technical problems if linkage of large numbers of on line terminals is required, as is the case in a fully comprehensive system for child health.

The aim of the CHCC system is to provide a framework on which paediatricians and their health authorities may choose a programme that will ensure a high use of medical services, give wide scope for individual freedom of clinical practice, and permit the integration of local record systems.

Those of us working on behalf of children in this area hope that the general trend will be a "coming together" of record systems. We also hope that the opportunity for integration that now presents itself will not be lost since, if every practice, hospital, medical unit, and community child health organisation were to go its own way more than one generation of doctors—and of computers—would pass before such another chance occurred.

References

1 *Data protection: the government's proposals for legislation.* Cmnd 8539. London: HMSO, 1982.
2 National Health Service and Department of Health and Social Security Steering Group on Health Services Information. *First report.* London: NHS, DHSS, 1982.

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