

## **AUDIT**

# ***Medical records, medical audit, and community hospitals***

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**SUMMARY.** A survey of community hospitals suggests a need for improving medical records and communications and introducing review procedures. A new and extended system based on an A4 size unit record is described. The benefits of a medical audit procedure in which all general practitioners and senior nurses participate are discussed.

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### **Introduction**

Community Hospital is the name given to small hospitals designed to serve the hospital needs of local communities for non-specialist medical care. It is proposed that they should provide in-patient accommodation for acute medical patients who do not require admission to a district general hospital (Bennett, 1974). Other direct admissions would be for pre-convalescent patients from specialist medical departments, pre-discharge post-operative surgical patients from surgical departments, selected postassessment geriatric and psychiatric patients, selected physically and mentally handicapped patients requiring hospital care, and 'holiday' admissions.

Outpatient services should include, where possible, health-centre accommodation for the general practitioner and domiciliary team, preventive clinics, day-care accommodation, and consultant clinics. This would bring together several services which have in the past functioned separately and been administered by hospital management committees, local health authorities, and executive councils.

The old tripartite administration had independent systems of records. In planning an experimental community hospital, the difficulties and additional expense involved in perpetuating these were quickly apparent. It was readily agreed by all the medical staff that a new system of records was required.

### **Aims**

The aims were:

- (1) To introduce a system of medical records which can be used by general practitioners, specialists, and nurses.
- (2) To minimise costs through reducing duplication, storage, and cross communication.
- (3) To provide data in a form suitable for analysis i.e. medical audit.

### **Method**

From the outset it was apparent that a unified case record was required, capable of meeting the needs of the various clinical services and professional staff. The executive council record was not thought appropriate for this extended use and a decision to base the system on A4 size documents was taken. We chose the A4 size record folder and documentation described by Hawkey *et al.* (1971). A similar record folder is now under consideration for distribution through family practitioner committees (National Health Service, 1975).

Our policy is to include only data of lasting value in this unit record, which provides the focus for a number of sub-systems. The general practitioners' sub-system is integral to the unit record and data of importance are included on a summary or problem sheet. Other users maintain separate sub-systems and subsequently transfer records of permanent value. To reduce writing to a minimum, proformas are used wherever possible.

### ***Inpatient recording***

To aid recording and assist general practitioners to deputise for each other, a proforma was designed for a form of problem-orientated record as described by Weed (1969). This proforma is

a white, double A4 sheet folded down the centre. The first page, in addition to data about the heading and patient identification, carries the date and place from where admitted, date and place to where discharged, admission summary data base, discharge summary, predicted duration of stay, and place of intended discharge. These last two items are for completion by the general practitioner on admission and have uses both for management and audit.

Pages two and three carry the problem list and management plan at the left hand margin, a row for each problem/plan combination, and for progress notes on each problem. Page four is blank and available for transitory narrative notes as necessary, which are keyed to the problem number concerned. Apart from the summaries, which can be quite brief as the form is housed in the A4 record unit—itsself a data base—little day-to-day recording is necessary once the problem list and management plan have been constructed. The advantage of this method is that problem and progress notes can be readily identified by their chronological display across the page.

While this form of recording is suitable for patients directly admitted under the care of general practitioners, it is not appropriate for post-operative surgical patients transferred from the district general hospital for pre-convalescence nearer to their homes. For these patients the specialist notes come with them and the general practitioner continues to record sequential progress notes. When the patient is discharged the record is returned to the district general hospital where a summary is prepared in the usual manner, a copy of which is sent to the general practitioner. Conversely, in the event of the general practitioner seeking specialist support by transfer of an inpatient from the community hospital to the district general hospital, he adds a referral note to his clinical notes and a photocopy of these is sent to the district general hospital with the patient.

#### *Day-patient recording*

Rehabilitation is provided for inpatients and continued after discharge on a day-patient basis, as well as for patients who have not needed inpatient treatment. Treatment is related to disability and not to disease, and largely is carried out by a therapeutic team of physiotherapist, occupational therapist, and nurse, with the doctor supervising medical management (Bennett and Kirk, 1973). The problem-orientated approach has been adopted for the rehabilitation notes, which are recorded on a similar double A4 sheet.

Part of the first page lists activities and skills of daily living. The patient's ability is measured against each item to form a schedule of disabilities and impairments. Provision is made for subsequent assessments during the course of treatment. Pages two and three carry a list of the patient's disabilities and impairments at the left hand margin and the remainder is designed as a flow sheet for progress notes on each.

Page four records nursing procedures carried out, aids used on admission and discharge, administrative statistical data, and a classification on a disability scale at the time of admission and at discharge.

In addition, as rehabilitation has to take account of the extent of support of household members and others as well as the physical features of the accommodation, it is usually necessary to make home assessments. This information is recorded by a health visitor, social worker, or domiciliary occupational therapist using an additional proforma.

#### *Outpatient recording*

If the patient attends a specialist outpatient session in the health centre his complete unit case record is passed to the specialist. The referral note is usually a brief request written in sequence with notes of clinical findings, as is the common pattern within the district general hospital. The specialist records his findings, investigations, treatment prescribed, and progress notes in the patient's specialist unit record from the district general hospital. He also dictates a note of his findings and recommendations at the first referral, and any significant change in the patient's conditions or management plan at follow-up, and this is typed on gummed paper. This is stuck in sequence on the clinical notes form in the patient's A4 general-practitioner record. Thus, the specialist unit record at the district general hospital acts as a sub-system to the basic primary health care record.

Ellis-Martin (1972) proposed a continuous unit health record for use by both primary and secondary health services. This, he suggested, would be held by the primary health service and

passed to the secondary health service when its support was sought for inpatient, day-patient or outpatient specialist treatment at the district general hospital. However, while recognising the desirability of this, experience with medical records in a community hospital is that it is inappropriate to combine primary and specialist records.

The contra-indications are that it is difficult for general practitioners to release their records and there is the danger of loss. Further, medical records needs in general practice and specialist care are different. The accumulation of specialist records in the general-practitioner record would make its uses in general practice difficult. Specific disease case reviews would become extremely difficult for the specialist.

### Medical audit

Audit is a management tool designed to check that resources are not being wasted: medical audit is its application to the management of the care of the individual patient and the use of medical and paramedical resources. These resources are accommodation, equipment, expendable commodities such as drugs, and skilled manpower, which is by far the most expensive.

The basic outputs of these resources are the treatment and care of patients and the maintenance of skilled manpower through education and training. Audit is not an exact science in medicine, any more than it is in its many other applications and can best be looked upon as an operational substitute for evaluative research. It lacks the latter's precision in methodology, comprehensive data collection, and measurement, because by its nature it is selective and partial. Its purpose is not to answer fundamental scientific questions, but to provide regular guidance about the use of treatments and resources which are likely to be beneficial in some circumstances in contrast to those which are not. Its value to the participants is educational. McWhinney (1972) considers that a good system of medical audit is worth any number of postgraduate lectures. It simultaneously checks the use of resources and increases the skills involved.

Against this background, it was agreed between general practitioners and specialists that audit was an essential part of the hospital's general management arrangements (Bennett, 1973). Usually internal or self audit is practised (i.e. audit by the participating general practitioners), but external audit has been experimented with occasionally by inviting a specialist to join in when it was thought this would be helpful with a particular problem. Data of numbers of inpatient days, day-patient attendances, or physiotherapy treatments allow examination of the use of accommodation and expendable commodities. Alone, these data are of limited value, but in combination with data on the progress of individual patients and changes occurring during treatment and care, they can be related to use of skilled manpower.

Schedules are circulated in advance of the meetings giving data on inpatients' ages, diagnoses, dates of admission, predicted and actual durations of stay, and predicted and actual places of discharge. At the audit meeting attention is paid to marked contrasts between predictions and outcomes, to patients with durations of stay generally regarded as extremely short or long, to deaths and to patients transferred to specialist care at the district general hospital.

For every case in these categories the general practitioner responsible for the patient outlines the objective of the admission, clinical findings, treatments given, and progress observed and these are discussed generally. The aim is to try and identify treatment regimens which appear most beneficial, patient groups who benefit most by community hospital care, and patient groups with a high death or transfer rate.

This helps the participating general practitioners determine future lines of action, changing their practice where necessary by maintaining some categories of patients at home, admitting others directly to the district general hospital, or providing different treatment regimens within the community hospital. Notes of meetings are kept to show trends in changing patterns of practice over time.

After the clinical case discussions, numbers of admissions, bed occupancy, and durations of stay are reviewed. The admissions policy seeks a balanced mixture of cases on the inpatient wards according to age and sex of patients and whether admitted directly or transferred from the district general hospital. The nurses in charge of the inpatient and day-patient wards, who arrange all admissions, attend medical audit meetings and join in discussions about the use of beds. Quite apart from their contributions, their presence allows ready discussion of any operational changes arising from the review.

Rehabilitation treatments in the day ward are similarly reviewed. Schedules are again circulated in advance of the meetings, which combine statistics of admission, discharges, and daily attendance rates with data on discharged and current patients. These data include the patient's age, sex, source of admission, object of treatment, number of attendances, and disability on discharge or currently.

In discussion attention is paid to discharged patients who made little improvement, current patients who, after substantial numbers of attendances, show little improvement, and patient groups who appear to be benefiting from treatment. The aim is to identify the group of patients who benefit, in order to influence general-practitioner referral patterns. Also the discharge of patients is discussed who, after substantial numbers of attendances, have made little of the intended progress.

### Discussion

The record system described meets the objectives, at least partly. The joint use of a unit case record by general practitioner, specialist, and some other professional staff helps to ensure good record keeping and communication. The use of proformas designed for problem-orientated recording allows easy deputising by general practitioners as well as clearer and more complete identification of clinical and social problems by all members of the health team involved.

Duplication between different systems has been reduced and progressive accumulation of records avoided. Secretarial time spent as general practitioner/specialist communication for outpatient consultations has been reduced to a minimum.

The process of medical audit joining general practitioners, nursing staff, and specialist together is then complementary as it allows opportunity for looking at a wider range of clinical problems than is otherwise possible by any one general practitioner working in isolation. The attendance of all the general practitioners, rather than review by an audit committee has resulted in frank and open discussions with the nursing staff taking a full part. The educational function of audit is clearly manifest and the expression 'peer group review' acquires a new meaning.

Introducing the new system of records involved considerable costs for the purchase of A4 folders and documents and the provision of a room instead of filing cabinets for the storage of records in the health centre. In addition, multiple use of the unit record requires greater care being given to the handling and security of folders once removed from the general practitioner's consulting room in order to ensure confidentiality. However, any increase in the time spent making records has not been complained about. Perhaps this last point reflects the opinion of those involved that the advantages to them considerably outweigh any disadvantages.

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### REFERENCES

- Bennett, A. E. (Chairman) (1973). *The pattern of medical working appropriate to community hospitals*. Report of a working party. Oxford: Oxford Regional Hospital Board.
- Bennett, A. E. (ed.) (1974). *Community hospitals: progress in development and evaluation*. Oxford: Oxford Regional Hospital Board.
- Bennett, A. E. & Kirk, C. (1973). *Day care in the community hospital*. Oxford: Oxford Regional Hospital Board.
- Ellis-Martin, K. G. (1972). *British Hospitals Journal & Social Service Review*, **82**, 1039.
- Hawkey, J. K., Loudon, I. S. L., Greenhalgh, G. P. & Bungay, G. T. (1971). *British Medical Journal*, **4**, 667-670.
- McWhinney, I. R. (1972). *British Medical Journal* **2**, 277-279.
- National Health Service (1975). F. P. 100.
- Weed L. L. (1969). *Medical records, medical education and patient care*. Cleveland: Press of Case Western Reserve University.