Medical audit in general practice

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As an educational experience a good system of medical audit is worth any number of postgraduate courses—McWhinney (1972).

SUMMARY. Increasing interest is being shown in the standards of medical care in general practice. The method of measuring these standards, known as medical audit, is discussed in relation to general practice in Great Britain.

Introduction

The family doctor is a manager as well as a clinician and uses a wide range of hospital, social, and governmental services. He is instrumental in spending substantial sums of money. It is, therefore, hardly surprising that increasing interest is being shown in the evaluation of quality and costs in primary care (Capstick, 1974).

The evaluation of costs is known as financial audit while the assessment of quality of medical care is called medical audit (*British Medical Journal*, 1974).

Quality of care has been measured by workload studies, prescribing patterns, morbidity, patient satisfaction, referral and consultation rates (Forsyth and Logan, 1962; Cartwright, 1967; Seiler, 1967; Korsch, Gozzi and Francis, 1968; Stolley and Lasagna, 1969; Drury and Kuenssberg, 1970; Pinsent, 1972; Honigsbaum, 1972). This is called external audit (figure 1) and consists of the assessments of the results of treatment as well as the environmental and functional aspects of the medical system providing care for the patient.

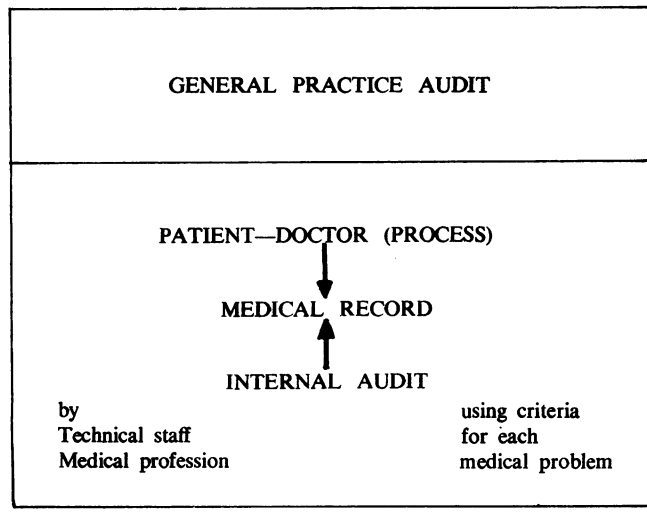
Another method of measurement is to look at the mechanism for determining care, the medical record. This is internal medical audit, which takes a more private look at the way the doctor deals with his patient. Of course, if the record is illegible or incomplete then the pathways of the patient's care reside in the doctor's memory. The doctor's standards or competence cannot then be measured, but this does not necessarily mean that they are bad.

A structured record with a defined collection of demographic, physical, and physiological data (database) is more easily assessed and so hospital records are usually easier to review than those in general practice.

The problem orientated medical record (POMR) lends itself well to medical audit (Weed, 1969; Bjorn and Cross, 1970) precisely because of the defined components of the database, the problem list, and progress notes (*Journal of the Royal College of General Practitioners*, 1973). The POMR is now widely known in Britain and descriptions of its use in general practice have already been published (Metcalfe, 1973; Tait and Stevens, 1973; McIntyre, 1973).

Techniques of audit

The object of reviewing a record is to examine its adequacy and the methods used by the doctor in diagnosis and management of the patient. Subsequently judgments are made on the doctor's ability to provide a reasonable standard of care. Who makes these


GENERAL PRACTICE AUDIT
PATIENT—DOCTOR (PROCESS)
MEDICAL RECORD
INTERNAL AUDIT
by
Technical staff
Medical profession
using criteria
for each
medical problem

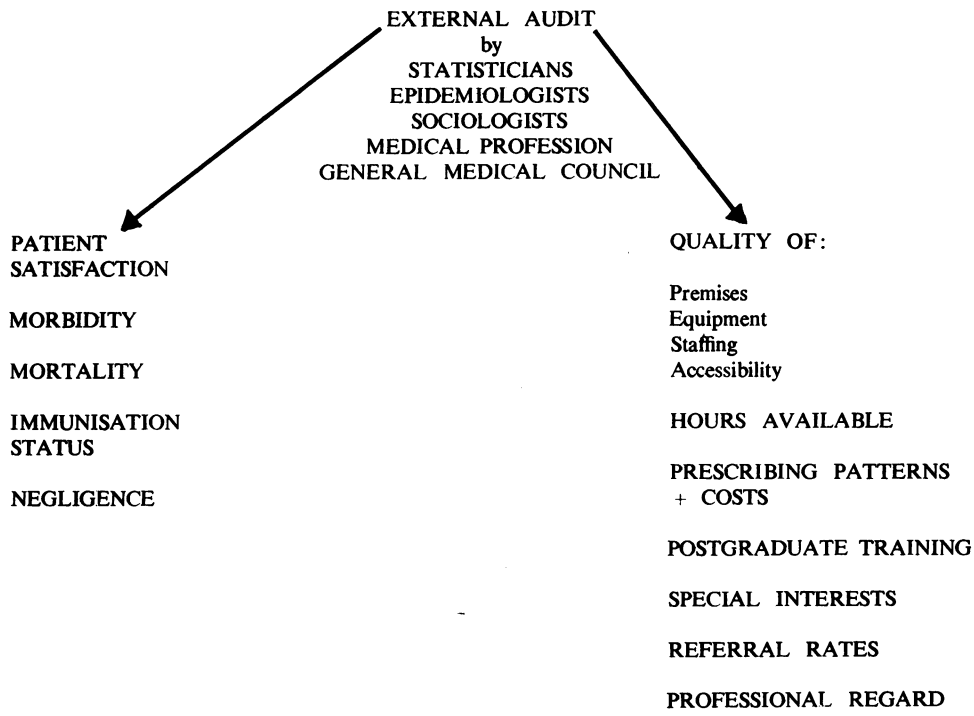

EXTERNAL AUDIT
by
STATISTICIANS
EPIDEMIOLOGISTS
SOCIOLOGISTS
MEDICAL PROFESSION
GENERAL MEDICAL COUNCIL
PATIENT SATISFACTION
MORBIDITY
MORTALITY
IMMUNISATION STATUS
NEGLIGENCE
QUALITY OF:
Premises
Equipment
Staffing
Accessibility
HOURS AVAILABLE
PRESCRIBING PATTERNS + COSTS
POSTGRADUATE TRAINING
SPECIAL INTERESTS
REFERRAL RATES
PROFESSIONAL REGARD

Figure 1

judgments? Who sets the standards? Who defines the diagnosis? These questions have not been answered.

The Americans have had to respond to them. The Congressional Legislature (1972) has set up Professional Standards Review Organisations (PSRO) which are to assess, by law, the care given to patients under governmental health programmes (Medicare and Medicaid) in hospitals and private practice.

A record can be audited in two ways (Brook and Appel, 1973). Firstly a technical assessment is made. This can be performed by non-medical personnel who check the adequacy of demographic data and completeness of the record. This follows specific guidelines. For instance, one could specify that an adequate record in general practice must contain the name, address, date of birth, sex, marital state, and occupation of the patient. Any secretary or clerk could perform this task. This is known as an *explicit* judgment which is based on strict criteria.

Secondly, a physician can give his subjective opinion about the record. He might think it was neat or that the doctor under scrutiny was probably doing a good job. This is a personal opinion relating to the auditor's attitude and experience and is an *implicit* judgment.

Selecting records for audit can be accomplished in a variety of ways (Lembcke, 1967; Brook, 1972) including random sampling and following tracer diseases such as hypertension and myocardial infarction (Rubin, 1973; Kessner *et al.*, 1973). Will it be possible to measure the quality of care in general practice? It is unlikely that this will occur in the near future. Firstly, there is no tradition of reviewing the general practitioner's work in Britain and there would be strong resistance to it. In general, medical audit is very threatening to physicians and is best taught to those with unformed medical habits—the medical students (Peterson, 1973).

Secondly, there is no convincing proof yet that the end results of care are improved by measuring professional competence (Fessel and Van Brunt, 1972; Marson *et al.*, 1972; Brook and Appel, 1973). Thirdly, the long-term aspects of disease and the problems of diagnosis in general practice make it difficult to set standards and criteria of care.

One can illustrate some of the problems which become apparent when an audit of, for instance, tonsillitis is undertaken in general practice. Let us assume that the general practitioner has written in his notes: " Tonsillitis—Rx Penicillin V." Does this tell us that he has performed adequately? What are the criteria for good care in such a case? They could be:

(1) Adequate history of sore throat,
(2) Evidence of examination by the doctor,
(3) Throat swab sent to the laboratory,
(4) Description of drug and dose given,

If so, the doctor under audit has failed to provide adequate care. Yet many an excellent doctor writes just such a note during a busy surgery. Perhaps if he had more time and training he might fulfil the above criteria.

More time means the introduction of paramedical personnel to take on many of the traditional tasks of the general practitioner. These tasks include the treatment of minor trauma and trivial disorders as well as the surveillance of chronic diseases. This trend is well established in the United States with the growing physician-assistant and family nurse-practitioner programmes.

The primary care physicians who use paramedical staff in this way therefore have more time to devote to accurate record keeping, patient management decisions, medical audit, and education. Many followers of Balint (1964) would argue that this trend represents a retreat by the doctor from patient contact with a consequent reduction in his effectiveness " as a drug ".

Problems of audit

Table 1 shows a simple record audit sheet in which section 1 (basic data) presents no auditing problems except that it is unlikely that many of our general-practice records would be thus regarded as adequate. Dawes (1972) in a survey of eight practices showed that ten per cent of the files examined had no age recorded, 99 per cent had no indication of marital status, while 60 per cent had no occupational status.

TABLE 1

SIMPLE N.H.S. RECORD AUDIT

Basic data	*Yes*	*No*
(1) Were the following obtained and recorded? a. Demographic data b. Past medical history c. Family history d. History of previous medication e. Menstrual history for females f. Present complaint		
Problems		
(2) a. Were all the problems recognised from the basic data and history? b. Are new problems added to the list when necessary?		
Plans (3) a. Were all the problems acted upon? b. Were all the problems acted upon suitably?		

In section 2 (problems) the main difficulty arises in the definition of a problem. The patient, his doctor, and the auditor may have differing views about the definition of, for instance, obesity. When does it become a problem in the records? Perhaps when the patient's weight is 20 per cent greater than the expected level. Maybe the patient just feels overweight or looks obese to the observing general practitioner. Can these differing viewpoints be audited?

Finally, in section 3 (plans) how can one suitably deal with the problems of obesity. Should one prescribe appetite suppressants, weight reduction, psychotherapy, anti-depressants, hypnotherapy, exercise, or group therapy? Unless there is a consensus of opinion on what is adequate therapy for this condition, accurate auditing is not possible.

It is obvious that the only way to audit records effectively is to define, fairly rigidly, the criteria of the diagnosis and treatment of each disease. Naturally as medical opinion changes these criteria will have to be altered on a regular basis. Unfortunately the content of general practice includes often indefinable symptoms as well as problems which have social, environmental, and psychological components. These are difficult to audit.

Dollery (1971) has proposed a statutory body, independent from the Department of Health and Social Security, which would undertake external audit in hospitals and general practice. For this to be effective there would have to be a great improvement in the collection of data in all areas of the National Health Service.

An internal audit could possibly be set up in this country through the network of postgraduate centres with both financial and educational incentives for the participants (Capstick 1974). This might involve random sampling of hospital and general-practice records with discussion, at a monthly meeting, of the problems raised by the audit. This should have an educational result rather than a punitive one. Alternatively, this task could be taken on by the general-practitioner committees.

The prospect of auditing the care of patients using the present National Health Service record would daunt most doctors. A redesigned record would offer some chance to examine the methods of care used by general practitioners (Royal College of General Practitioners, 1973). It seems likely that the process of medical audit will occur soon in Great Britain where medical services use a significant proportion of the national budget. The Government may well decide to start quality control for the taxpayers' money long before general practice begins to look at its own standards.

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