Audit activities in Australia

Brian T Collopy

Although for general practitioners there are many programmes of continuing education, mainly through the influence of the relevant college, and although some independent groups of general practitioners have been involved in audit activities in general practice, audit has mainly been concerned with the acute hospital setting. For its seventeen million people Australia has about 1100 acute hospitals, 30% of which are private. National health spending for over a decade has been at a relatively constant 7·5% of the gross domestic product although, as would be expected, health as a percentage of total Commonwealth government outlay has increased. It was this increase in spending that proved to be the stimulus for the development of formal audit programmes.

In answer to a question in federal parliament in 1976 about medical overservicing, the then Minister for Health, Mr Ralph Hunt, stated that if the medical profession did not "bite the bullet" and introduce some form of peer review the government would do so. Thus the concern was for "quantity assurance" and not quality assurance. Reacting to the challenge, the Australian Medical Association reviewed the American and European programmes then in place and in 1979, together with the Australian Council on Healthcare Standards (ACHS), formed the Peer Review Resource Centre to foster programmes of peer review within the medical profession and other health professions and to identify barriers to conducting peer review. The council (then the Australian Council on Hospital Standards) had been formed in 1974 to conduct a voluntary programme of accreditation of hospitals along the lines of the Joint Commission in the United States. Its chairman Dr Lionel Wilson, who was also concurrently president of the Australian Medical Association, was a leading figure in this initiative.

Up until that time the only formal programme of review had been through statutory committees such as the committee on perinatal mortality. Throughout the six years of its existence the Peer Review Resource Centre promoted quality assurance activities not only within the medical profession but also within the allied health professions, and it established a resource of audit activities. It held the first major meeting on quality assurance in Brisbane in 1985, at which more than 100 papers and posters were presented. A second joint activity of the association and the council was the publication of a journal entirely devoted to quality assurance (the term usually used in Australia for audit), *The Australian Clinical Review*, which has been published quarterly for over a decade.

The third and probably the most influential stimulus to formal audit activity in Australia was the decision of the Australian Council on Healthcare Standards that by 1983 the existence of a formal quality assurance programme within a health facility would be a mandatory standard for accreditation. Whereas Pickering in 1980 reported that most of the first 100 hospitals surveyed by the council (which included hospitals of over 350 beds) had no system of basic clinical review,[1] by 1988 Renwick and Harvey estimated that about half of Australian hospitals had formal quality assurance programmes.[2]

Audit programmes

The council did not recommend any particular form of audit, but a popular programme initially favoured by the Peer Review Resource Centre was that of criteria auditing, originally developed by Lembcke in the United States in 1956.[3] This was attractive to health authorities as it included concepts of justification for procedures and utilisation of resources and to practitioners as it spared their time, the system using non-medical staff to collect information. However, as in the United States, there was a tendency to audit for its own sake and not to concentrate on problems, and other systems were developed.

One of the most popular programmes for physicians was the "Austin Hospital method" developed by Dr D Legge, which consisted of a review of a series of medical discharge summaries presented to an audience of physicians, usually with a physician from another hospital present as the discussant or critic. The method certainly improved medical records and detected problems for studies by other methods. Modifications of the method are still in use currently. In surgery, although a surgical audit had been introduced in 1954 at the Royal Newcastle Hospital by its director of surgery, Dr John Smyth,[4] it was over 20 years before another formal audit programme including the whole hospital was developed.[5] Numerous computerised surgical audit programmes now exist in many hospitals, most developed for a particular unit but some extending across all surgical activities within a hospital.

Again in response to accusations of overservicing, the Peer Review Resource Centre assisted some of the royal colleges in conducting national surveys. One of the more successful was a study of appendicectomy by the Royal Australasian College of Surgeons and the resource centre in 1982. This study of 2000 appendicectomies disclosed a rate of negative histological findings of 23%; the rate was the same whether the patients were insured or not, indicating that the real problem was in diagnosis.[6]

Monitoring service fees

It was important to obtain such information because the Commonwealth government at that time had quickened its interest in the activities of the medical profession, which was by and large remunerated through fees for service. At a cost of $A8m the Fraud and Overservicing Detection System was established to compare the service profile of each practitioner against an average profile of his or her peers according to information obtained through billing practices. In rendering an account for a service given the practitioner had to list an item number for that particular service, obtained from a Commonwealth schedule of fees. However, the average profiles proved to be so inaccurate that the system was disbanded.

In 1984 the system of health insurance known as Medicare was introduced: a levy of 1·25% of income

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Aboriginal bark painting

entitles a person to a free public hospital bed and free medical care within that hospital. Before its introduction 60% of the population had private insurance. This has now fallen to 40%. Coupled with a reduction of Commonwealth payments to states for public hospitals, this fall has led to closure of beds and the development of long waiting lists for surgery. For example, in the state of Victoria, with a population of four million, 25 000 people are on the waiting list. This has forced attention on length of stay as part of the audit process, and interest in length of stay has been further heightened by the use of diagnostic related groups by health departments for health planning and possibly in future for prospective payment. Thus, with regard to audit, where the emphasis was initially on government concern about overservicing in the private sphere there is now interest in underutilisation of services—that is, a low throughput—on the public side.

Quality in health care

One of the few government moves that showed its interest in quality was that of the New South Wales Health Department in its policy "Health 2000," which provided $A750 000 a year for three years to establish quality assurance programmes in hospitals by employing quality assurance coordinators. Associations of quality assurance coordinators now exist in several states, and a national association is shortly to hold its second major conference. The coordinators come predominantly from nursing and from medical records departments, but some are medical practitioners.

Though the Australian Institute of Health survey found that by 1988 half the hospitals in Australia had quality assurance programmes,[2] only a quarter of these programmes were thought to be effective. Medical interest in many of them was low, for which there were several reasons. For example, medical review had existed for years in some hospitals but in general the best units produced the best results. Some of the early quality assurance or audit studies were ineffective, as already mentioned for criteria auditing, and medical practitioners were concerned about delineation of their privileges and a possible "restriction in trade" should their performance be considered unsatisfactory. There was further concern that litigation might result from their participation in programmes of review. This particular threat will shortly be overcome with the introduction of protective legislation for quality assurance documentation.[7] Victoria has been the first state to introduce this legislation in Section 139 of its Health Services Act 1988. This provides statutory immunity for formal quality assurance committees established in hospitals and protection for the members of the committee and its documentation. A further concern of clinicians with regard to taking part in formal review programmes is that the "worst" cases are referred to the "best" practitioners and if casemix and severity of illness are not taken into account then comparison may be unfair. Several formulas have been developed in the United States to make these assessments, but in general they are being used to predict the utilisation of resources rather than outcome. An Australian scale of patient factors influencing outcomes is currently being developed.

Clinical indicators

One of the most exciting ventures in relation to quality assurance is the council's care evaluation program, which is aimed at developing objective measures of management and outcome of patient care in hospitals.[8] In this programme the council is acting as the facilitator for the major medical colleges to develop these "clinical indicators." Already clinical indicators have been chosen in obstetrics and gynaecology, anaesthesia, psychiatry, internal medicine, and surgery. A set of hospitalwide medical indicators concerning the reception of trauma patients, hospital infection, drug use, readmissions, and hospital throughput have been field tested and are shortly to be piloted during the accreditation surveys. This project has been supported by the Commonwealth Department of Community Services and Health and private industry (in particular Baxter). It will significantly influence clinician involvement in quality assurance and in the accreditation programme as it introduces standards established by the medical colleges into hospitals and requires that the hospitals follow them. Clinical indicators are to be limited to as few as possible to avoid overburdening hospitals with collecting data. Most of the modern computer programs in the major hospitals will be able to cope with the program with some modification of their systems, but a specific software program may be developed when all the indicators have finally been established.

Resources for audit

Resources are undoubtedly necessary to obtain reliable data for audit. Also health service staff—for example, resident medical staff—find difficulty in maintaining continuity and completeness of audit because of their rotation through units and other hospitals and holidays, etc.

If resources are required for audit then a hospital administrator, and the participating clinicians, may well ask whether or not the audit will improve clinical practice and patient care. The answer is unequivocally yes. An analysis of the first 71 clinical quality assurance studies published in *Australian Clinical Review* between May 1981 and June 1987 (table) disclosed that 70% of the studies had the potential to identify problems and therefore to induce change and improvement. Improved outcome of care was noted in just under a tenth of the studies. That is not a dismal figure, for after all we are not practising at such a poor level that every study would result in improved outcome.

The three basic principles of any audit programme

*Results of first 71 clinical quality assurance studies reported in "Australian Clinical Review," 1981-7**

Category	No (%)
No change	21 (29·6)
Identified problem/made recommendations	13 (18·3)
Altered process of care	9 (12·7)
Improved process of care	22 (31)
Improved outcome of care (for example, decrease in morbidity)	6 (8·4)

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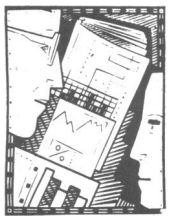

that aims at improving care are that there is documentation of the work performed, a forum for discussing that documentation, and a system for taking action as a result of the discussion. The system for taking action implies that there is a formal committee structure within the health facility to receive information on audit and to make recommendations. There is published evidence that feedback of information to a clinical group and reaudit of activities shows altered management and improved care.[9 10] This is particularly so for the "procedural" specialties such as surgery, obstetrics and gynaecology, and anaesthesia. It is less easily demonstrated in internal medicine but therein lies the challenge for that "cognitive" specialty.

Finally, a successful audit programme requires a commitment on the part of both clinicians and administrators in healthcare facilities, and that commitment must be continuous because audit is never ending.

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3 Lembcke P. Medical auditing by scientific methods. *JAMA* 1956;**162**:646.
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6 Collopy BT, May J, Morgan B, Torr S. The results of an audit of primary appendicectomy in two Australian states. *Aust Clin Rev* 1983;**10**:6-10.
7 Cass M, Brook CW. Quality assurance: a state perspective. *Aust Clin Rev* 1990;**10**:129-31.
8 Collopy BT. Developing clinical indicators. The ACHS Care Evaluation Program. *Aust Clin Rev* 1990;**10**:83-5.
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Interim guidelines on confidentiality and medical audit

Conference of Medical Royal Colleges and their Faculties in the United Kingdom

Medical audit is primarily an educational activity and will be professionally led (HC(91)2, para 3). It is designed to improve the standards of patient care. As part of the implementation of the National Health Service and Community Care Act 1990 all doctors working in the NHS are required to undertake medical audit and, while recognising the need for confidentiality, it is required that managers and health authorities are provided with regular reports (HC(91)2, para 4). Potential conflicts of interest, therefore, arise in relation to the data required for medical audit and the needs of patients and clinicians for confidentiality and the need of management for information.

The Data Protection Act 1984 already allows patient access to data held on computers and word processors. The Access to Health Records Act 1990 will allow such access to manual records by the end of 1991. It is possible that medical audit data will be considered part of the medical record. Such records are likely to be discoverable at law in relation to litigation conducted on behalf of patients' interests and also may be used by employing authorities for disciplinary purposes. The colleges have been advised that the only exception to discovery in relation to litigation would be that the disclosure of records was not in the public interest. Such protection seems to have been implied for large regional or national audits (for example, the confidential enquiries into maternal and perioperative deaths), but has never been tested in the courts. The audit records of individual clinicians and units are almost certainly discoverable. No record of an audit meeting should contain any information that could allow identification of patients or clinicians or other hospital staff.

There are particular problems relating to issues of medical audit and confidentiality for patients, clinicians, and management which need separate consideration.

Patients—The confidentiality of all personal health information has been recently emphasised (NHS/90) (GEN/22). Usually patient consent is implicit, or explicit consent is obtained before passing on such information to other health professionals. This will not generally apply to medical audit. The necessity to anonymise patient data related to audit meetings is, therefore, emphasised. Only aggregated data or general conclusions should be passed on to management or to health authorities, to ensure that individual patients cannot be identified (HC(91)2, para 6e). However, the Audit Commission has rights of access to such information as it thinks necessary for audit without consent of patients or clinicians.

Clinicians—To achieve the goals of improved patient care and professional education, open and frank discussion during peer review or medical audit meetings is essential. The likelihood of discoverability of the records of such meetings poses a difficult problem for clinicians. All records of audit meetings, written or computerised, must be anonymised. There is no need to retain working protocols or proformas used for recording data from patient records as they duplicate information already available in the primary medical record. Serious problems relating to patient care identified by medical audit should be dealt with within the established professional procedures.

Management—The primary educational aims of medical audit in improving the overall standard of patient care rather than attempting to identify "bad apples" should be emphasised. Management needs to ensure that adequate medical audit procedures are in place, involving all doctors, and that the activity is both efficient and effective. It is the responsibility of local managers to ensure that adequate resources are available to support the agreed audit programme, together with the associated educational and training programmes. Support staff and appropriate information systems will be necessary in all units (HC(91)2, para 14). The requirements of confidentiality for both patients and clinicians mean that regular reports of audit activities to management must be anonymised. The reports should cover the general areas of activity audited, the overall conclusions and recommendations made, and plans for action or procedural changes, the necessity for which has been revealed by the audit (HC(91)2, para 8). There should also be a record of when a review of the results of the changes should be made and the proposed methods of review. These reports will normally be submitted to management through the medical audit committee.

These interim guidelines have been endorsed by the chief medical officer of the Department of Health. The conference is grateful to Drs Peter Beck and Anthony Hopkins for their help in preparing this guidance.

Model minutes for medical audit meetings

Conference of Medical Royal Colleges and their Faculties in the United Kingdom

Anonymity: No record of any patient's name or other identifying information should be made. There is no need to retain working documents used in the audit process, as they duplicate material already in the medical records.

1 Date and place of meeting.
2 Names, health service grade, and specialty of those attending.
3 (*a*) Cases considered:
  (*i*) by diagnosis
  (*ii*) by ICD (ninth revision) code.
  (*b*) Specific problems considered:
  (*i*) clinical
  (*ii*) organisational.
4 Lessons arising from audit.
5 Plan of action.
6 Nominated individual to take action on this topic.
7 Review of progress on plans for action on earlier topics.
8 Date of next meeting.