Perspectives in NHS Management

Quality assessment in health

R J MAXWELL

Concern about the quality of care must be as old as medicine itself. But an honest concern about quality, however genuine, is not the same as methodical assessment based on reliable evidence. Still less is it quality control, which implies compliance with predetermined standards, as in an industrial process.

Among the pioneers of methodical assessment was Florence Nightingale, that scourge of those ultimately responsible for low standards of medical care in the army. Her devastating exposure of Crimean hospitals as death traps was based on showing that a key determinant of regimental mortality was distance from hospital. The least fortunate regiments were those with good access to hospital beds, because deaths depended less on casualties in battle than on acquiring an infection in hospital. She later developed her uniform system of hospital statistics, designed among other things to compare death rates and bed use by diagnostic category.

Another impressive figure in the annals of quality assessment is Dr E A Codman of Boston, who, in the early part of this century, instituted a one year follow up of all his surgical patients. Each patient was recalled a year after discharge and his health state assessed in terms of the original objectives of the operation. Codman sought to determine whether his diagnosis had been correct, whether the operation had been a technical success, whether the patient had benefited, and whether there had been harmful side effects. Perhaps not surprisingly, his colleagues at the Massachusetts General Hospital gave him little encouragement, so that eventually he left to found his own End Results Hospital.

Arguably, no major conceptual advance has been made since Codman. Brook and Avery pointed out that when—in about 1950 in the United States—attention again turned to quality assessment, the emphasis had shifted from end results to process, and from therapeutic outcome to utilisation and expenditure control.[1] Thus grew up the cumbrous American edifice of professional standards review organisations, now replaced in most hospitals by a unified quality assurance programme monitored by the Joint Commission on Accreditation of Hospitals.[2]

Paradoxically, American doctors are far more subject to systematic examination of their clinical work than are their British equivalents in our supposedly more bureaucratic health care system. Some of the reasons for this difference are to our credit, others less so. For example, since there are few incentives to overprovision of medical services in the National Health Service we do not need a compensating regulatory system designed to discourage abuse by providers. Similarly, there used to be greater problems in the United States than here with specialist procedures being carried out by doctors who had no advanced qualification in that specialty. Less creditably, the medical profession in Britain has seemed (at least until recently) collectively allergic to rational examination of the case for medical audit in any form.

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Arrangements in the United Kingdom

That does not mean that no mechanisms exist in the United Kingdom for independent assessment of the quality of medical care. On the contrary, there is a wide range of such mechanisms including:

Educational accreditation for training purposes. The royal colleges, the nursing regulatory bodies, and their equivalents in other professions, all inspect the relevant departments, institutions, and services to satisfy themselves that training arrangements in them meet the (generally rather shadowy) standards that they require.

The confidential inquiry into maternal deaths. Stemming back to the 1930s, the inquiry consists of a confidential report from the local obstetrician, through a regional assessor, to national assessors. The assessors comment on the causes of death, identifying those that were in their view avoidable. They do so to those concerned with the specific case and (preserving anonymity) they also make a public report. It seems probable that by calling attention to avoidable causes, such as toxaemia, and by suggesting remedial measures, the inquiry has contributed to the progressive reduction in maternal deaths and to the United Kingdom's relatively good international performance on this criterion. But that hypothesis cannot be proved. The confidential inquiry has been applauded as a method and has influenced the approach to (among other problems) perinatal deaths and anaesthetic deaths, though no other British audit is as thorough as this.

Clinical chemistry: United Kingdom national quality control scheme. The scheme began in 1969. Every two weeks a portion of material is sent to all participating laboratories for analysis. They return their results of several commonly performed tests, and the data from all the laboratories are compared. For each of the principal laboratory methods in use the mean value, the standard deviation, and a variance index are calculated. Thus each laboratory can compare its results with others, while confidentiality is respected. Those who administer the scheme have been able to show progressive reduction in the variance index, thus showing improvement in the consistency of results obtained by different laboratories. Similar schemes operate in haematology and bacteriology.

The Health Advisory Service and the National Development Team. Set up by Richard Crossman in 1969, the Hospital Advisory Service (as it then was) was intended to be his eyes and ears in the long stay sector. This was in the wake of a series of incidents and inquiries, such as that at Ely.[3] Multidisciplinary teams visit the major long stay institutions to examine standards of care, and recommend improvements when appropriate. The teams discuss their findings on the spot, and make a written report to the district health authority and to the Secretary of State. Opinions are mixed as to the success of the service

and the team. What is unusual, in international terms, is the concentration on quality assessment in the long stay sector.

Peer review in general practice. Until recently almost nothing was known about the quality of care in general practice. In 1980 the Royal College of General Practitioners set out to develop a framework for defining and auditing standards of care.[4] Four main facets of performance were identified—namely, professional values, accessibility, clinical competence, and ability to communicate. Within each of these facets several criteria have been chosen for differentiating good and bad performance. Pilot practice visits have shown that practices can be audited against these criteria, using a variety of methods, including the sampling of records, videotaped consultations, and interviews with the general practitioner and with ancillary staff. The process is voluntary.

Cluster analysis of performance indicators. Yates has developed the idea of cluster analysis, using statistical data from standard sources, such as the SH3 and Hospital Activity Analysis.[5] His hypothesis is that people make too little use of the information that they already have. In particular, analysis of a few key indicators—for example, the ratio of nurses to patients, the size of hospital, and the length of stay—can identify a relatively small number of mental handicap and mental illness hospitals that are seriously at risk, where the chances of a breakdown of patient care occurring are high. The argument is persuasive, at least in the long stay sector. Whether it can be transferred to the acute sector is less clear. He and his colleagues at Birmingham University's Health Services Management Centre have now developed the technique to the point where the standard data sets are available on request on disc for every health district for most specialties.[6]

The medical services study group of the Royal College of Physicians. The study group was set up in 1977 under the leadership of Sir Cyril Clarke to examine the efficiency and outcome of selected aspects of medical practice. It has undertaken over 20 investigations and has published a substantial number of articles.[7 8] The idea is to identify avoidable factors, as in the confidential inquiry into maternal deaths, and indicate measures that should improve performance.

These examples are not exhaustive. They do however, illustrate attempts to assess quality through external review. In addition, many medical departments have their own internal reviews as an integral part of their commitment to education and to the quality of care.

Where next?

No doubt the majority view among British doctors is that assessing and safeguarding the quality of medical care are matters best left to voluntary initiatives among consenting adults in private. Self audit is good: external audit is a threat.

This is a perfectly understandable point of view—correct at least in emphasising that individual aspiration to raise standards is a sine qua non of professional responsibility. Nevertheless, important as self assessment is, it is unlikely to be sufficient. There are several reasons for this. For example, as Donabedian has recognised in his recent work, the judgment of quality is not simply a technical, professional matter.[9] It also includes interpersonal aspects where consumer opinion is at least as important. Interestingly, this links up with the recent emphasis in the Griffiths report on lack of sensitivity to consumer views in the National Health Service.[10] Moreover, one of the worst aspects of recent initiatives by the Department of Health and Social Security is the persistently dreary emphasis on managerial efficiency, to the neglect of any discussion about what the NHS is actually trying to achieve. It is essential that discussion about the quality and effectiveness of care be reintroduced into the centre of the debate as they are, in the end, the more important dimensions of NHS performance. In the harsh world in which we live the Treasury is simply not going to be impressed by anecdotal evidence about health care quality based on self assessment. There has to be objective evidence.

The next necessary step in the argument is to recognise that the quality of care cannot be measured in a single dimension, comparable to the business analogy of return on investment. Donabedian's reference to the technical and interpersonal aspects of care has already been mentioned.[9] Beyond that, I suggest, are six dimensions of quality (box) that need to be recognised separately, each requiring different measures and different assessment skills.

Dimensions of health care quality

- Access to services
- Relevance to need (for the whole community)
- Effectiveness (for individual patients)
- Equity (fairness)
- Social acceptability
- Efficiency and economy

To take accident and emergency services as an example, it should be possible to assess access in terms of ambulance response times and waiting time in the casualty department. Relevance to need would require some review and analysis of the different roles played by the accident and emergency department —including major accidents, minor trauma, and (in some cases) primary care. These measures would be different from those about technical effectiveness, which might include the adequacy of equipment and staffing in the casualty department, the incidence of complications, and some form of follow up assessment. The social acceptability dimension could include conditions in the casualty department, privacy, and standards of communication—with the patient and the general practitioner. Efficiency and economy would require (among other things) workload and unit cost comparisons with other accident and emergency units. These are not necessarily the right indicators but they do suggest how recognition of different dimensions of quality may lead on to a more illuminating choice of indicators than the standard accident and emergency statistics.

There are undoubtedly some outstanding examples of quality assessment activities in health services in Britain, such as the confidential inquiry into maternal deaths or the national quality control scheme in clinical chemistry. Increasingly, however, these fragmented activities will not be enough, because their coverage is incomplete and somewhat arbitrary and they lack any common core of concepts or of data. In the end, quality must be seen whole, not in fragmented parts.

Nevertheless, the last thing that we need is the creation of some new Frankenstein's monster in the shape of a quality assurance or quality control scheme that is insensitive to the variation, autonomy, and trust implicit in health care. But it should not be beyond human wit to keep it simple, while providing a framework within which the quality of care may be studied, discussed, protected, and improved. That will require encouragement, experiment, and the sharing of ideas. It will call for a mixture of assessment methods—standard data analysis, sampling and follow up, professional peer review, consumer opinion—tailored to an understanding of the multidimensional nature of quality itself.

References

[1] Nuffield Provincial Hospitals Trust. *A question of quality*. London: Nuffield Provincial Hospitals Trust, 1976.
[2] Sanazaro P. *Quality assurance in medicine in world symposium for quality in health care*. Report on the proceedings of an international symposium

continued on page 1472

BMA annual general meeting

Notice is hereby given that the annual general meeting of the British Medical Association will be held at the Royal Northern College of Music, Manchester, on Wednesday 4 July 1984, at 12 50 pm, to transact the following business:

(1) Confirmation of the minutes of the last annual general meeting held on 29 June 1983.

(2) Approval of balance sheet and income and expenditure account for the year ended 31 December 1983.

(3) Appointment and remuneration of auditors.

(4) Special resolution to amend the Memorandum of Association and the Articles of Association, as follows:

Amendments to Memorandum of Association

Paragraph 6—Add the following sentence—"In all other respects the liability of Members and Associate Members is limited."

Paragraph 7—Insert after the word "Member" in line 1, the words "and Associate Member."

Amendments to Articles

Article 9—Delete and substitute:

"Save as otherwise provided by the Articles or Bylaws, every Member, Overseas Associate and Associate Member shall pay to the Association a subscription of such amount as may for the time being be prescribed in accordance with the Bylaws. Such subscription shall be considered due in advance on such date or dates in each year and be current for such period as the Council shall from time to time determine; and shall be of such amount or amounts as the Representative Body shall from time to time determine. Provided always that in the case of any person who shall have been a Member of the Association for a period of 50 years, no further subscription shall be payable as from the date when his next succeeding subscription would have become due."

Article 10—Delete and substitute:

"Each subscription shall during its currency entitle the Member to all privileges of membership of the Association, including that of receiving the Journal and to the ordinary privileges of membership of that Division and of that Branch of which he is an ordinary Member.

Each subscription shall during its currency entitle the Overseas Associate to the privileges (not being inconsistent with the provisions of the Articles and of the Bylaws) which may for the time being be conferred by or under the Bylaws on Overseas Associates of that Division and of that Branch of which he is an Overseas Associate.

Provided further that in the case of any person who shall have been a member of the Association for a period of 50 years such person shall without payment of any annual subscription as from the date when otherwise his subscription would have been renewable and during the continuance of his Membership be entitled to all the privileges aforesaid."

Article 12—Delete and substitute:

"Every Member, Overseas Associate or Associate Member shall remain a Member or Overseas Associate or Associate Member (as the case may be) until his membership or Overseas Associateship or Associateship (as the case may be) is terminated in accordance with the provisions hereafter contained."

Article 38—In line 7, delete the word "and"; in line 9, after the word "Divisions", insert the word "and (*iv*) Associate Members elected by the Associate Members Special Group."

Article 39 (2)—Insert in line 1 after the word "Association," the words "nor any Associate Member."

Article 44(i)—Delete the comma in line 3 and substitute a bracket, and delete the bracket in line 5.

J D J HAVARD
Secretary

Quality assessment in health—*continued from page 1471*

held at World Health Organisation, Geneva, 22-4 June 1983. Geneva: WHO, 1983.
[3] Committee of Inquiry into Allegations of Ill-Treatment of Patients and other irregularities at the Ely Hospital, Cardiff. *Report*. London: HMSO, 1969. (Cmnd 3975.)
[4] Board of Censors, Royal College of General Practitioners. What sort of doctor? *J R Coll Gen Pract* 1981;**31**:698-702.
[5] Yates J. *Hospital beds*. London: William Heinemann Medical Books, 1982.
[6] Yates JM, Davidge MG. How do we identify administrative problems? *Br Med J* (in press).
[7] Clarke CA, Whitfield G. Deaths under 50. *Br Med J* 1978;ii:1061-2.
[8] Clarke CA, Whitfield G. Deaths from chronic renal failure under the age of 50. *Br Med J* 1981;**283**: 283-6.
[9] Donabedian A. *The definition of quality and approaches to its assessment*. Ann Arbor, Michigan: Health Administration Press, 1980.
[10] NHS Management Inquiry. *Report*. London: DHSS, 1983. (Griffiths report.)

This is the third in a series of articles on NHS administration and management, which started on 28 April.

Preregistration house officer posts in Wales

In the annual report of council it was reported that the Welsh Office had instructed that graduates from the Welsh National School of Medicine should be given priority in filling preregistration house officer posts in Wales. The BMA in Wales made strong representations to the Welsh Office, which has now issued a revised policy statement withdrawing constraints on allocating posts.

"In common with other Health Departments in the United Kingdom, the Welsh Office is most anxious to ensure that there are sufficient preregistration house officer posts to ensure that all newly qualified doctors can meet the requirements for full registration set down by the General Medical Council. The Welsh Office contribution to the requisite United Kingdom pool of such posts is 165—that is, the expected output of the Welsh National School of Medicine plus 10% (the requisite moneys being provided by Departmental top slicing).

"You may know that in August 1983 (and February 1984) a small number of doctors were unable to obtain preregistration posts in spite of the existence of the United Kingdom 'safety net' mechanism. I am sure you would agree that this was a matter of concern and it was for this reason that certain contingency arrangements were set out in the Departmental letter of 13 December 1983.

"The provision of preregistration house officer posts has recently been reviewed both by the Department of Health and Social Security and the Welsh Office and I am therefore hopeful that the situation which existed in late 1983 and early 1984 will not recur.

"Consequently there will be no Departmental constraints on the existing practice of allocating preregistration house officer posts by the dean and director of postgraduate studies at the Welsh National School of Medicine."

Payment to DMT members

After consultation with the profession the Secretary of State for Social Services has agreed to advise health authorities that he considers that it is within their discretion to make payment of a financial loss allowance to a general medical practitioner member of a district management team if he incurs a financial loss in providing cover for his practice while he is attending a course connected with his team membership. This advice is set out in Health Notice HN(84)14.

BMA Oxford regional office

The BMA Oxford regional office is now in operation. The address is Cranbrook House, 287 Banbury Road, Summertown, Oxford OX2 7JF. Tel: 0865 59521/2.

CCHMS chairman reminds consultants on rules for treating private patients in the NHS

At a recent meeting of honorary secretaries and chairmen of regional committees for hospital medical services Dr Maurice Burrows, chairman of the CCHMS, drew attention to the following points that consultants should bear in mind when seeing or treating private patients in NHS hospitals.

- The hospital must be authorised to treat private inpatients.
- The hospital must be authorised to treat private outpatients.
- The patient must sign the appropriate forms agreeing to pay; this is how a private patient is defined in the NHS.
- Consultants who collect fees on behalf of diagnostic departments should arrange to pay them over promptly.
- Colleagues in other medical disciplines should be kept informed of the status of the private patient.

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