Quality and efficiency: enemies or partners?

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Introduction

THERE are few real watersheds in the development of a discipline. The founding of the National Health Service (NHS) was one for general practice, formalizing the division of doctors into specialists and generalists. This has shown particular foresight as, 50 years later, many countries of the world have now decided that having a skilled generalist as the first point of contact is the best way of providing a high-quality, affordable health service.

A second watershed was the formation of the Royal College of General Practitioners (RCGP), which has been enormously influential in raising the standards of general practice, partly through its advocacy and support for vocational training — again predating similar developments in other European countries by 20 or 30 years.

Although there have been others, the next watershed is upon us this year, with the advent of primary care groups and clinical governance. Clinical governance means that general practitioners (GPs) and other primary care staff will be responsible for providing high quality care, and for developing ways of monitoring and improving quality. It is the most radical of the current NHS reforms; never before have GPs been required to take a corporate interest in quality of care, or indeed have any real need to be concerned about what the practice next door was doing.

The proposals are, at the same time, exciting and threatening. On the one hand, GPs are being offered the opportunity to maintain the essential self-regulating role that has been one of the defining characteristics of a profession. On the other hand, many will be very concerned at an increase in external inspection, and will worry that available measures of quality will not reflect what GPs believe they are really trying to do.

An increased expectation of public accountability can be seen across all areas of public life. It is neither limited to medicine nor to general practice, and cannot be avoided. However, the medical profession is being given an opportunity to develop effective systems of quality assurance for itself. If we do not seize this opportunity, then doctors will find themselves under increasing external control, as do teachers, social workers, and probation officers.

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Quality and efficiency

At face value, quality and efficiency ought not to conflict — if one could improve quality without increasing resource use, then no-one would complain. The conflict lies in the increasing requirement to demonstrate efficiency by measuring and documenting the outputs of our care. It is this that can lead to serious problems and potential perverse effects.[1] This paper therefore focuses on the problems of measuring quality.

Some might argue that quality of care cannot be measured. However, I agree with James McCormick,[2] who wrote in 1981: 'There seems to be a deep-seated fear that techniques based on statistical measures would distort "truth", and are by definition unsuited to our examination of care. But surely if caring is of value, and if that value is real, then it must be demonstrable.'

However, even if quality is measurable, the measures may be inadequate or impracticable to apply, or the investment in measuring and improving quality may have to be so great to achieve real gain, that the costs of such a programme would not be worth the benefit. Furthermore, there is a major problem in that if only some parts of care are readily measurable, then this may lead to a perverse emphasis on those aspects of care that can be measured. Developing valid measures of those aspects of care that are valued most highly by GPs and their patients presents formidable challenges.

What is quality of care?

My model of quality in the individual encounter between doctor and patient is determined both by access and by effectiveness — can patients get to health care, and is it any good when they get to it? Within effectiveness, I distinguish the important twin elements of clinical effectiveness and effectiveness of interpersonal communication (Box 1).

At the population level, equity is important to ensure that some groups in the population are not specifically disadvantaged in the care they receive. Cost is also of great importance, however, I believe it is essential to keep quality and cost conceptually distinct. There is a tendency to muddle the two; so, for example, when looking at prescribing, it is important to distinguish whether the aim is to improve outcomes for patients or to make better use of available resources — both being legitimate and important activities.

Problems in measuring quality of care

Some problems in deciding how quality should be measured were demonstrated in a study, which we carried out to assess the face validity of indicators that health authorities in the United Kingdom (UK) were planning to use for primary care.[3] Two hundred and forty separate indicators were sent by health authorities. While a panel of managers and GPs was able to agree that a small number of these represented valid measures of quality, they by no means covered all aspects of general practice care.

Quality of care is determined by:

- timely access to care,
- high quality clinical care (e.g. diagnosis and clinical management), and
- high quality interpersonal care

Box 1. Quality of care for individual patient encounters.

- Availability and accessibility, including: availability of appointments, waiting times, physical access, and telephone access.
- Technical competence, including: the doctor's knowledge and skills, and the effectiveness of his or her treatments.
- Communication skills, including: providing time, exploring patients' needs, listening, explaining, giving information, and sharing decisions.
- Interpersonal attributes, including: humaneness, caring attitude, supportiveness, and trust.
- Organization of care, including continuity of care, co-ordination of care, and availability of on-site services.

Box 2. Aspects of general practice care most highly valued by patients.[4,5]

The indicators demonstrated a focus on particular types of care, especially those where relevant routine data were available. Many aspects of care that we know to be of great value to patients[4-5] (Box 2), were entirely absent from this health authority-derived list.

We know that good communication and high-quality interpersonal care are not only important to patients, but are also important quality issues, as they figure prominently in complaints about GPs[6] and in the reasons that people give for changing doctors.

If indicators are to be used to assess the quality of general practice care, it is also essential to choose measures that are under the control of those whose performance is being assessed. This is not always the case. In early 1998, the NHS Executive issued a consultation document, which suggested admission rates for asthma, diabetes, and epilepsy as performance indicators for primary care.[7] Admission rates for chronic diseases have been used in the United States (US) as markers of access to primary care.[8-10] We analysed these admission rates at health authority level, and were controlled for population characteristics that were available from the Census, including morbidity-related data, demographic and socio-economic variables, and also for measures of secondary care supply. We found that 45% of the variation in admission rates for asthma, 33% of that for diabetes, and 55% of that for epilepsy could be explained by factors that were essentially outside the control of the primary care practitioner.[11] This does not mean that variation in admission rates is irrelevant, but it does mean that the solution to the problem may lie beyond primary care and, indeed, beyond the NHS. They therefore represent poor performance indicators for primary care, unless it is possible to control for population and secondary care characteristics, that cannot be readily done at the individual practice or practitioner level. We must ensure that those elements being used as measures of quality are under the control of the people whose behaviour is supposed to change.

Health outcomes are another example of a class of indicators that is, in general, unsuited to the assessment of general practice care.[12] Outcomes are often too rare to yield stable measures; important changes may take years to develop (as in diabetic care), they may be insensitive to primary health care intervention and require adjustment for case-mix, which is usually not possible at practice level (as in the example above). In addition, a focus on health outcomes may promote 'cream-skimming' — a reluctance to take on patients who are complicated or have poor self-care — something from which British medicine has been mercifully free. General practice should, in general, be assessed using process measures rather than outcomes; ideally those that have a clear link to outcomes. Outcome measures themselves are probably best reserved in primary care for patients' evaluation of care; for example, satisfaction with communication, though it has yet to be shown that widespread use of these measures can be used to improve the quality of care.

The challenge for primary care groups

Primary care groups (PCGs) have to do something. The Government's published policy priorities include an intention to 'ensure that each PCG has a rolling annual programme of action ... so that by 2002, all PCGs are delivering measurable improvements against their locally-agreed milestones and targets'.[13] PCGs not only have to do something, they have to measure something.

Initially, some of the important things to demonstrate will relate to the start of the process; for example, a gradual increase in the number of GPs with personal development plans, an increase in the number of practices carrying out audit, and organized dissemination within a PCG of information on effectiveness. But PCGs will also be expected to demonstrate improvements in care, and just carrying out an audit of diabetes this year and one of asthma next year is unlikely to be sufficient. The Government intends that clinical governance should represent a greater cultural change than that. They are also more concerned with poor standards, and less concerned with the distinction between the good and the excellent. There is a clear threat of external controls if the profession is not itself able to demonstrate improvements in care.

Where should PCGs start? Their first job is one of hearts and minds, and trying to develop a shared agenda around quality improvement, especially among those doctors who tend not to go to meetings or to become involved in audit. Where PCGs decide to measure things, they will be wise to start somewhere where they think short-term improvement will be possible. PCGs could prioritize by selecting areas relating to local health improvement plans, or those likely to result in the greatest health gain.[14] They should consider using a range of measures set at a very basic level (but one that will assure the Government that the profession is taking the problem of poor practice seriously), and then use traditional methods of professional education, assisted by medical audit groups and enhanced by the new proposals for continuing medical education.[15] The National Primary Care Research and Development Centre has published a handbook designed to give PCG board members a framework to think about assessing quality of care.[16]

Measuring quality in real life

Our daily life acts as a reality check against any proposed set of indicators or standards. I had a surgery not long ago that was particularly disorganized: a drunk demanded antibiotics for his feet but refused to take his shoes off and then went to sleep on the waiting-room floor; two hours after I had seen a 12-day-old baby with a rash and reassured his mother, I decided that I had made a mistake, and telephoned the mother to arrange to admit the child — who subsequently turned out to have septicaemia; a drug addict, dissatisfied with the content of his repeat prescription, threatened to throw a chair at my receptionist. No set of measures will adequately capture that surgery, yet there are, a range of things that reflect the quality of care we gave on that afternoon that could be assessed. These are partly to do with whether or not we meet together as a clinical team, so that we have a forum in which to share problems and plan our approach to difficult patients. It is partly to do with paying attention to the training we give to our staff; and on this particular afternoon it was partly to do with improving our own availability and the way in which our appointment system works. So, I am not daunted by the task of

measuring things relevant to quality, even in the context of such a chaotic surgery. I do, however, firmly believe that those who deliver care must play a key role in deciding how its quality is determined.

Ownership of information: will data on quality be in the public domain?

One important new debate will be around the question of who owns information on quality of care. At present, the audits that Medical Audit Advisory Groups conduct are confidential, and no-one can tell who the successful and unsuccessful practices are. We need to face the possibility, and maybe the probability, that information on quality will be made publicly available. There will certainly be pressure from lay members of PCG boards to make information available. This will act as a very profound force for change. However, some of the pressure may come from doctors too. Already a number of practices are starting to publish their own audits on the World Wide Web, and some groups of GPs are publishing clinical guidelines on their web sites. Patients in these areas will know what their doctors are trying to achieve. Even if aggregated information on quality is published by PCGs, practices that are doing better than average may well wish to make that known, and the Internet will be a new and powerful means for doing so.

The College's position

The College has led on both defining and measuring quality over many years. Our membership examination has been a model for other Royal Colleges on how to develop reliable and valid medical examinations. Fellowship by Assessment is now a gold standard for good practice, with Membership by Assessment of Performance and Practice Accreditation coming along close behind.

I applaud the approach of the College to promote the highest standards, as it has done over many years, but I am not sure that this is where the battle is going to be. If we do not, as a profession, get clinical governance right over the next couple of years, I think we will face the inevitability of harsh external regulation. In the area where I practice, many doctors have neither the time nor the level of development where they could achieve Membership by Assessment of Performance. The College has successfully occupied the high ground. However, the government is more concerned about poor standards. The battle will not be for the high ground, it will be on the plains. The College, having led on defining high standards, could end up watching the profession lose control of the quality agenda. This has happened in the US where, over the past 10 years, doctors have largely lost control over how quality of care is assessed.

James MacKenzie

What would James MacKenzie have made of all this?

James MacKenzie was a remarkable man. He started as a GP in Burnley, and moved to London to become a famous and knighted cardiologist, and then went to Scotland to found a primary care research institute. In his time, he was most famous for his invention of the polygraph, which enabled the waves in the venous pulse to be recorded. The ability to simultaneously record what the ventricles and the atria for the heart were doing enabled clinicians to elucidate the mechanisms of a number of dysrrythmias.

The Times obituarist in 1925 recorded: 'Those members of the profession who love a toy may remember him for his discovery of the venous pulse, and his share in the evolution of the electrocardiograph. But deeper minds will recognise that these were small matters compared to the great principles that he elucidated, and the impetus which he gave to a new study of medicine and a new outlook.' For he remained committed to the problems of general practice, and he knew that a new research paradigm was needed. In the last year of his life he wrote: 'For years I had been gradually becoming convinced that the whole tendency of research was on the wrong lines ... it could not supply the kind of knowledge which would enable us to solve medical problems.'[17] So, at the age of 65, he moved to St Andrews to found a primary care research institute, the aims of which included understanding the natural history of disease, and understanding the impact of the patient's environment on presentation and prognosis of illness. He had a specific aim: to train the GPs of St Andrews in research methods.[17] These seem very modern agendae, even today.

James MacKenzie's writing shows that he was well aware of the issues of medical practice variation, and of ineffective but expensive treatments. As a researcher committed to measurement, yet understanding the complexities of general practice, he would have well understood the issues we are facing today, and he would certainly have supported promotion of the highest standards, and encouraged research to help us find solutions to some of these problems.

Quality and efficiency: enemies or partners?

The current political agenda offers us tremendous opportunities to define the future of our profession, but there are also real threats. Quality and efficiency should not be enemies — they should be partners. However, it is quite possible to visualize a scenario where the profession has failed to demonstrate that it can improve quality of care, where doctors come under increasing external control, and the measures that are used to assess the quality of our care fail to reflect what we are trying to achieve. How ironic it would be if there was widespread application of measures designed to assess and improve quality that could not be supported by the RCGP.

Are we seeing the last vestiges of professionalism as it has been known for the past 100 years — a loss of clinical control over clinical work, and an inexorable increase in control from those who do not share the values that we hold precious, or reflect the needs of the patients whom we serve? Or are we maybe looking towards a redefinition of the medical profession and its accountability to the public — a new role fit for a new millennium — and one in which we will be proud to play a leading part?

If we are to realize this last vision, then both quality and efficiency must be our partners. If we do not make them our partners, then they may both become our enemies, and the heavy burden of that responsibility lies largely with ourselves.

References

1. Sheldon T. Promoting health care quality: what role performance indicators? *Quality in Health Care* 1998; **7 (Suppl):** S45-50.
2. McCormick J. Effectiveness and efficiency. *J R Coll Gen Pract* 1981; **31:** 299-302.
3. Campbell SM, Roland MO, Quayle JA, *et al*. Quality Indicators for General Practice: which ones can general practitioners and health authority managers agree are important and how useful are they? *J Pub Health Med* 1998; **20:** 414-421.
4. Buetow S. What do general practitioners and their patients want from general practice, and are they receiving it? A framework. *Soc Sci Med* 1995; **40:** 213-221
5. Wensing M, Jung HP, Mainz J, *et al*. A systematic review of the literature on patient priorities for general practice. Part 1: Description of the research domain. *Soc Sci Med* 1998; **47:** 1573-1588.

6. Williams SJ, Calnan M. Key determinants of consumer satisfaction with general practice. *Fam Pract* 1991; **8:** 237-242.
7. NHS Executive. *The new NHS Modern and Dependable: A National Framework for Assessing Performance.* [Consultation Document.] London: Department of Health, 1998
8. Bindman AB, Grumbach K, Osmond D, *et al*. Preventable hospitalizations and access to health care. *JAMA* 1995; **274:** 305-311.
9. Billings J, Anderson GM, Newman LS. Recent findings on preventable hospitalizations. *Health Affairs (Millwood)* 1996; **15:** 239-249.
10. Weissman JS, Gatsonis C, Epstein AM. Rates of avoidable hospitalization by insurance status in Massachusetts and Maryland. *JAMA* 1992; **268:** 2388-2394.
11. Giuffrida A, Gravelle H, Roland M. *Performance Indicators for Primary Care Management in the NHS.* [Discussion Paper 160.] University of York: Centre for Health Economics, 1998.
12. Davies HTO, Crombie IK. Interpreting health outcomes. *J Eval Clin Pract* 1997; **3:** 187-199.
13. Department of Health. *Modernising Health and Social Services: National priorities guidance 1999/00-2001/02*. London: Department of Health, 1998.
14. McColl A, Roderick P, Gabbay J, *et al*. Performance indicators for primary care groups: an evidence based approach. *BMJ* 1998; **317:** 1354-1360.
15. Chief Medical Officer. *A review of continuing professional development in general practice.* London: Department of Health, 1998.
16. Roland MO, Holden J, Campbell S. *Quality Assessment for General Practice: Supporting Clinical Governance in PCGs*. Manchester: National Primary Care Research and Development Centre, 1998. (A summary of this is available at http://www.npcrdc.man.ac.uk)
17. Pinsent RJFH. James MacKenzie and research tomorrow. *J R Coll Gen Pract* 1963; **6:** 5-19.

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