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# Quality in Health Care

## **Organisational Change**

### **The Key to Quality Improvement**

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# QUALITY IN HEALTH CARE

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QUALITY  
IN HEALTH  
CARE

# **Organisational Change**

## **The Key to Quality Improvement**

Supplement editors: Sandra Dawson, Pam Garside, Fiona Moss

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# QUALITY IN HEALTH CARE

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## Editorial

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### Organisational change: the key to quality improvement

A patient with a probable lung cancer, one of the commonest malignancies, seen as an outpatient in a chest clinic for confirmation of diagnosis and assessment of the operability of the tumour, will have contact either directly or indirectly with about 20 people working in that hospital. The time spent with the consultant will be where the patient learns about the probable diagnosis and the treatment options. But the decisions about care cannot be made without the contributions from the 19 others. And it is the nurse practitioner in the clinic who is available for further consultation to reiterate information not quite understood, to provide much needed practical details about the investigations that are planned, and to respond to some further, difficult, questions.

The consultation between patient and clinician is a halloved space. It is a highly valued interaction. But for most episodes of care patients are seen by several people. Those involved include, of course, healthcare professionals but it is difficult to imagine the consultation taking place in a vacuum without administrative and managerial support. Good care depends on effective collaboration between many people. How those people work together is a crucial determinant of the quality of care. However, asking people to work harder or making one person work differently is unlikely to alter the experience or outcome of care for many patients.

Real improvement—the sort that will give many patients a better deal—requires changes not only to individual working practice but in the systems and organisation of care. That is, improvement will only happen if the sanctuary of the clinician-patient relationships is seen just as one part of a collaboration. The work of many people—clerks, managers, other clinicians, often from different departments and services—can influence the quality of the consultation. The motivation of all staff will directly or indirectly impact on the care received by the patient. Improving care often involves changing working practices. Yet challenging the way the people work together and questioning the status quo is threatening. Change is only likely to be successful if the change process involves those whose work is being examined. Such participation is particularly important in professions in which people are expected to exercise a great deal of independent judgement.

Berwick *et al* described four barriers to quality improvement—time, territory, tradition, and trust.<sup>1</sup> The time that is most valued by clinicians and their patients is time spent together. But the usefulness of this time will diminish unless we recognise the interdependencies in which we work and time is set aside to look after and to foster the people whose work relates even indirectly to the consultation and to assess the effectiveness of organisational mechanisms.

The professions guard their territory jealously. Quality improvement tackles those aspects of professional practice not included in standard textbooks—for example, acknowledging interdependency; emphasising the relation between collaborative work and good care; and the need to be able to change how we work together if care is to be improved. The old traditions of healthcare professions are very strong but those that are not relevant to modern health care should be discarded. There are many external forces—for example, innovations in healthcare technology and the growing influence of consumer groups that are forcing reviews of traditional roles and responsibilities. The contract that the healthcare professions have with society is being questioned and a new type of contract may need to be agreed. The clinical professions may have to accede to transparency in self regulation and to develop new partnerships with each other and the other caring professions.<sup>2</sup> This will require trust.

The papers published in this supplement to *Quality in Health Care* have been prepared for the conference *Organisational change: the key to quality improvement* organised by The Nuffield Trust, the *BMJ* Publishing Group and *Quality in Health Care*. One of the aims of this conference is to emphasise the links between good organisation and working practices and the quality of care. In a paper that discusses, and celebrates, teamworking, an essential skill necessary for quality management,<sup>1</sup> Firth Cozens writes about the importance of “coherent group work” for achieving improvement and also about the complexities of team functioning and the difficulties of getting teams to work well.<sup>3</sup> Another paper outlines some of the theories of change management, illustrates the difficulties, and relates them to health care,<sup>4</sup> while another explores the tensions, interactions, and potential synergy between managers and

professionals in their shared quest for better care for patients.<sup>5</sup>

The conference, on 10 November 1998, takes place in the year that the National Health Service (NHS) became 50 years old. Some aspects of the running of hospitals and practices and attitudes to quality improvement are influenced by policy and the macro-environment of the healthcare system. The context of the conference is a maturing NHS and the paper by Leatherman and Sutherland is an analysis of their assessment of the quality in the NHS today.<sup>6</sup> The experience of the NHS has relevance to other healthcare systems and as Buchan writes "variation between countries in values and concepts of quality is less important than the variation within systems that has evolved".<sup>7</sup> The most recent NHS document that relates to quality outlines the implementation of clinical governance—a concept that brings clinical decision making into a management and organisational framework. This is an approach to quality improvement that not only "offers an unrivalled opportunity for the NHS in Britain"<sup>8</sup> but also has relevance to health care in other countries.

The reality of the complexities of healthcare delivery can get lost in the many mantras of quality improvement. There are no easy solutions. The swampy lowground of routine practice described by Schon, where neither the problems nor solutions are straightforward, is the environment where the consultation takes place<sup>9</sup> and is where change is needed if patients are to get a better deal.

FIONA MOSS

Editor QHC

PAM GARSIDE

Management Consultant,  
Newhealth, 24 Milson Road, London W14 0LJ, UK

SANDRA DAWSON

Director,  
Management Studies, University of Cambridge, Trumpington Street,  
Cambridge CB2 1AJ, UK

- 1 Berwick DM, Enthoven A, Bunker J. Quality management in the NHS: the doctor's role-II. *BMJ* 1992;304:304–8.
- 2 Abelson J, Maxwell PH, Maxwell RJ. Do professions have a future? *BMJ* 1997;315:382.
- 3 Firth-Cozens J. Celebrating teamwork. *Quality in Health Care* 1998; 7(suppl):S3–S7.
- 4 Garside P. Organisational context for quality: lessons from the fields of organisational development and change management. *Quality in Health Care* 1998;7(suppl):S8–S15.
- 5 Sutherland K, Dawson S. Power and quality improvement in the new NHS: the roles of doctors and managers. *Quality in Health Care* 1998;7(suppl): S16–S23.
- 6 Leatherman S, Sutherland K. Evolving quality in the new NHS; policy, process, and pragmatic considerations. *Quality in Health Care* 1998; 7(suppl):S54–S61.
- 7 Buchan H. Different countries, different cultures: convergent or divergent evolution for health care quality? *Quality in Health Care* 1998;7(suppl): S62–S67.
- 8 Donaldson LJ, Muir Gray JA. Clinical governance: a quality duty for health organisations. *Quality in Health Care* 1998;7(suppl):S37–S44.
- 9 Schon DA. *Educating the reflective practitioner. Towards a new design for teaching and learning in the professions*. San Francisco, USA: Jossey-Bass, 1991.

# Celebrating teamwork

Jenny Firth-Cozens

"If we are to compete in today's world, we must begin to celebrate collective entrepreneurship, endeavors in which the whole of the effort is greater than the sum of individual contributions. We need to honor our teams more, our aggressive leaders and maverick geniuses less."<sup>1</sup> *R B Reich*

Major change continues to occur in all successful organisations. In health care it involves an increasing need for cost reduction, new forms of service delivery, a rise in patient expectations, staff shortages and a policy shift from secondary to primary care. Alongside these forces for change, and partly as a means of dealing with them, there is an increased emphasis on teamworking, in particular in multidisciplinary teams. Teamworking is seen as a way to tackle the potential fragmentation of care; a means to widen skills; an essential part of the need to consider the complexity of modern care; and a way to generally improve quality for the patient.

All teams are groups, but not all groups are teams. The difference comes primarily from the fact that a team of people are brought together to work towards a common purpose; so those working in the same primary care practice are potentially a team, whereas the patients sitting in the waiting room are a group. Beyond this most basic distinction come others—such as the interdependence of team members, the need for team members to communicate and work with one another to achieve their common purpose, and the fact that each of them has a defined role within the team designed to help achieve the team goal.

However, spelling out the criteria that makes a team does not always help the recognition of where a team begins and ends, who is a member and who is not, how much overlap between teams is useful and how much is divisive. For example, within the operating theatre team there might be a surgical team, an anaesthetic team, surgical nurses, and anaesthetic nurses. These in turn link directly to sterile services, to portering, laboratories, radiology, and to ward staff. Taking this one step further, for the sake of quality throughout the patient's journey, all those professionals involved along the pathway of care, including general practitioners, community nurses, and so on, could be considered as a team.<sup>2</sup> Drawing the boundary around the central team that needs to function well for good outcomes of care is not always easy, but is a useful exercise in itself.

## Effectiveness of teams

There is evidence from health care and beyond that working in teams enhances an organisation's effectiveness,<sup>3</sup> for example, by having a beneficial effect on financial change, turnover, and absence.<sup>4</sup> They have been found to produce better patient care both in terms of improving health delivery and staff motivation,<sup>5</sup> bringing about change despite

existing conflicts<sup>6</sup> and in superior patient outcomes.<sup>7</sup> Claims are made that multidisciplinary healthcare teams allow a more efficient use of staff and service planning.<sup>8</sup> In psychiatry an evaluation of the accuracy of diagnosis in elderly people by a range of personnel within the team showed that there were no significant differences between the performances of medical and non-medical team members, nor between the multidisciplinary team as a whole and research psychiatrists.<sup>9</sup> Most reports, however, involve case studies, particularly in psychiatry, surgery, or general practice, in which teamwork itself is improved by some intervention.

The potential effectiveness of teams may well be to do with the often reported finding that they are usually beneficial for the mental health of team members.<sup>10</sup> The trend from better mental health to improved performance reflects the finding from individual psychotherapy<sup>11</sup> that changes in symptoms seem to precede change in attitudes to work, and so it is not surprising that a group experience that enhances wellbeing goes on to enhance its outcomes as well. Carter and West<sup>12</sup> have reported considerably more symptoms of mental ill health in health service personnel who see themselves as not being part of a team compared with those who say they are in a team. However, they also divided the group who said they are in a team into real teams and pseudoteams, with real teams having to meet the following criteria:

- Is your team clearly defined?
- Does it have relatively clear objectives?
- Do you often work with other team members to achieve the objectives?
- Are there different roles for team members within the team?
- Is your team recognised by others in the trust as a clearly defined work team performing a specific function?

They found that those in real teams had 22% above the 3/4 threshold on the general health questionnaire,<sup>13</sup> compared with 30% in pseudoteams, and 35% in no teams. Such findings show that one of the ways that high stress is linked so closely with poor performance<sup>14</sup> is very likely to be through poor teamwork or no teamwork at all.

## Problems with teams

Despite their potential benefits, it is clear that not everyone wants to work in teams, that teams can cause some people within them real unhappiness, and that not all teams are effective.

Department of Clinical Psychology, Centre for Clinical Psychology Research, University of Northumbria at Newcastle, Newcastle upon Tyne, UK  
Jenny Firth-Cozens, chairperson

Correspondence to:  
Dr Jenny Firth-Cozens,  
Department of Clinical Psychology, Centre for Clinical Psychology Research, University of Northumbria at Newcastle, Newcastle upon Tyne, UK.

In a recent survey that I carried out asking clinical effectiveness leaders in trusts about their successes and failures and the reasons for them, and about the barriers that they saw to the promotion of clinical effectiveness, one message stood out loud and clear.<sup>15</sup> This was that the success of initiatives was primarily due to getting people to work together, and a lack of success was due to failing to achieve this. Similarly, the barrier to change most often given was once again the difficulty of getting people to sit down and work together in a team. This referred to every sort of potential partnership: managers and clinicians, various specialties or professional groups, primary and secondary care, academics, and service providers. Although such potential partnerships might not always be defined as real teams, this finding emphasises the importance of some form of coherent work group in achieving improvements in clinically effective care. So what goes wrong?

Firstly, people may refuse to work in teams for various reasons. For example, they may see it as politically, economically, or socially to their advantage to stay away; in which case the team leader needs to find a means, whether through a management route or by offering the person sight of a different advantage should he or she join. If they are particularly introverted (and this is not a pathology, merely a personality trait) they may equally find a particular team threatening in terms of being too noisy or rushing forward too quickly. They may genuinely have insufficient time to attend meetings or be too stressed to join in fully.

But below these individual characteristics, circumstances, and agendas, teamwork shows a fundamental human dilemma for all of us, the conflict between being in a relationship with others and being separated and alone. Teams mirror families and we can quickly behave within them as we might within our original family where dependence and independence are always issues. In a recent study of general practitioners, one of the main long term predictors of the levels of their current depressive symptoms was the level of sibling rivalry they had experienced and reported as students.<sup>16</sup> Such questions as who has the easiest patient; who does not do their share of out of hours working; who gets landed with audit are all issues that affect team working but reflect early family friction. Like families, a team's emotional life can at times be fraught and real enmities may arise, causing distress and stopping the team from functioning well. This can be from individual personality clashes or from group conflicts—such as those between doctors and nurses—present even in Florence Nightingale's time,<sup>17</sup> which can cause splits within the team and lead to differing advice to patients and organisational difficulties. Steep hierarchies may cause difficulties within teams, certainly where the gaps are large between individual members in status or rewards. Part of this is due to the fact that gaps of any size increase resentments and stifle communication; for example, Bond *et al*<sup>18</sup> found that general practitioners had a poor

understanding of health visitors' roles, and collaboration was low between them and community nurses. When compared with other teams—from an oil company, NHS management, community mental health, and social services—primary care teams are particularly low in team participation, support for innovation, and clarity of and commitment to team objectives.<sup>19</sup>

Beyond this, teams may perform poorly for several reasons concerned with the fact that they are groups. Risk may be increased as teams may reduce safeguards because of their social dynamics—for example, one member may presume another is checking. Moray<sup>20</sup> points out that even in strongly hierarchical teams when several levels need to sign off a procedure, the signing off can become a mere formality without sufficient checking taking place. Teams may make decisions that are better than the average performance of its members, but not always up to that of its most competent member,<sup>21</sup> showing how important it is that everyone has his or her say. Also, groups work more slowly than individual people<sup>22</sup>—sometimes it really is quicker to do it yourself, but it may not be better in terms of education, or producing a fuller picture of the problem, or a greater variety of solutions and innovation.

A well known team problem is “group think”<sup>22</sup> in which outside influence and communication is cut off, in which members don't want to be the doubting Thomas by suggesting that things might not be well, or by questioning each other's assumptions and suggestions: the Bay or Pigs fiasco and the Three Mile Island disaster are classic examples of this. Linked to this, there is a growing recognition that group decisions differ from individual decisions in health care, so—for example, even when the group signs up to a particular guideline, an individual doctor from that group faced with an individual patient may not follow that guideline.<sup>24</sup>

Finally, there is the question of diversity. Although diversity of skills is an essential way of tackling the complexity of a patient's needs, it is usually the case that, certainly in the short term, we are more comfortable mixing with those who are similar to ourselves. This is not just about nurses preferring to communicate with other nurses, or physicians with other physicians, it is also a matter of personality types making alliances with those similar and avoiding those who approach life differently. For example, those who prefer finishing a task and being very focused in the present may dislike working with those who like the process of a task better than its end and deal with what they can create from information, rather than the detail of what is in front of them (box 1, case study 1). People who make their decisions according to rational logical judgements (often doctors and managers) may easily upset those who make them according to values and people (often nurses and therapists). Introverts may find it fairly intolerable to be part of a team that has a majority of extrovert members: introverts like to think about things before making



decisions, while extroverts prefer to talk their way through the process, and this in itself can cause some major problems in group discussions and decision making.

### Team development

Real teams do not just happen; they need to be developed both as groups and through their leaders, and it is a welcomed feature of the white paper about the new NHS, that the development of team leaders is listed as an essential ingredient of clinical governance. The problems outlined above show some of the things that need regular attention, but we can also be directed in our team development by the ideal characteristics of teams that have been outlined by others. For example, Guzzo and Shea<sup>25</sup> have set down the following ingredients:

- The team must have a meaningful clearly defined task
  - There should be clear team objectives
  - Its members should have unique and meaningful tasks
  - Performance of individual members needs assessment and feedback
  - There should be regular feedback on the team's success in considering its objectives.

As well as these, there are two more fundamental requisites. One is reflexivity, or the ability to change, and the other is experiencing full participation. West<sup>26</sup> has emphasised the importance of reflexivity in achieving group tasks. He defines this as:

"...the extent to which group members overtly reflect upon the group's objectives, strategies and processes, and adapt them to current or anticipated endogenous or environmental circumstances."

Thus two essential aspects are required: reflection and adaptation. If you want to survive you need to be adaptable, but this is not an unthinking reaction so much as the result of the best use of information, discussion, and decision making.

The other essential ingredient is full participation. The experience of everyone putting their heads together to improve aspects of care has been shown to reduce stress, and once more, it may be this that leads to better care. Murphy<sup>6</sup> described several interventions with teams in which full participation brought about desired organisational change and also reduced stress levels in staff. Teams are mini organisations with the ability to organise themselves and look after their members in ways that are more difficult for larger organisational entities.<sup>32</sup>

To achieve these elements takes real leadership, but all of them are necessary. Getting the team to recognise its primary goal and objectives is an important first step and one that will help in building the team into a coherent body. Roles within the team often need to be negotiated, but ultimately may be a leadership decision. Objectives for teams and members need to be measurable so that everyone knows when a good job has been done. Measurement and feedback—such as occurs in clinical audit—can be a useful form of

The management team of an ambulance service planned to set it up as a trust, independent of the (then) regional office. I was called in by the consultant they had employed to help them develop their strategy to see if I could spot the dynamics which were stopping the changes. There were eight on the team, all intelligent and well experienced in their fields. However, their Myers Brigg type inventories showed that all but one was exactly the same type: they were introverts who preferred working alone at current projects, fond of data and detail and of speedily reaching goals. Their decisions were made according to the logic of the data rather than, for example, the way the staff might be reacting to the changes; and their decisions were made fast and with efficiency. When I asked them what they had done well they described their preparation for the Gulf War and all agreed enthusiastically that this was a real achievement. When I asked what they did badly, they talked about not being able to convince staff about the benefits of change, and not being able to plan their strategy for the future. The one member who was not of this type differed in every way and was clearly ignored within the team, thought to be chaotic and unfocused, and was thinking about giving in his notice. They began to see that the lack of diversity might be the cause of many of their problems. They could rise to crises but could not work for the future, nor understand the anxieties of their staff. As introverts and finishers, not enough time and consultation was being taken over decisions, and their attention to current issues was stopping them from taking a creative approach to the future. Convincing the general manager that she needed to do everything to retain the unappreciated member and actually to give him the task of developing the first blueprint for the future organisation was difficult. It is sometimes hard for team members to understand that they can appreciate a person's skills without particularly liking them, and giving space and attention to this man's suggestions needed to have a structured approach initially. As things began to move for them, she was able to see the benefit of replacing one of the members for someone who again could bring a different perspective to the team, while also encouraging other members to take on roles that they might not have sought out for themselves. In this form the team survived.

*Box 1 Case study 1 (some details changed for confidentiality).*

communication when team relationships become strained. Helmreich and Schaefer<sup>27</sup> describe how a structured observation of a theatre team in conflict can provide the evidence needed for real improvements in quality. You may not always have a researcher around to do this, or be able to afford a

The second case was a theatre team in which conflict was at a serious level. There was considerable sickness and absence and several incidents which the director thought would soon be a real threat to patient care. From interviews with all the staff, the main conflict seemed to be between surgeons on the one hand and anaesthetists and nurses on the other: surgeons were rushing through the list from very early to very late in the day. The rest of the theatre staff were exhausted and thought that patients were not being given the attention before and after surgery that they required. Also, sterile services had almost ceased to communicate with theatre staff and there had been a series of serious blockages in the system. We approached this crisis entirely through information and communication about it. The first task was an audit of outcomes in which the discussion was forced (by me) to take account of a much wider range of opinions about what constituted a good outcome, and extended the concept beyond conventional measures of throughput and wound infections to the patient's experience and satisfaction with total care. A student explored patients' views as a project to help staff understand better what mattered to patients, and the theatre team as a whole discussed and developed different scheduling to allow interaction time between staff and between staff and patients. Team leadership began to rotate every 3 months, passing first to an anaesthetist who instituted a regular review meeting. It was difficult to fully integrate sterile services, but this was again overcome by audit: involving them in the whole process of evaluation and change rather than simply monitoring them and presenting them with periodic negative data. The whole team worked out how this improved communication could be maintained with regular attention, rather than presuming that the increased integration would continue.

*Box 2 Case study 2 (some details changed for confidentiality).*

consultant, but providing a team member with the role of an independent observer (and they must keep in this role until they report back) can be enormously useful. When factions within the team have very different perceptions of what is happening, collecting data to provide accurate evidence about this can often break apparent deadlocks.

Communication by various means is the blood of any organisation and of all the teams within it. It is essential that communication is two way and flows across team boundaries, and sometimes it is useful for members to take turns at this boundary role to ensure it takes place. Teams need to be linked to management structures to be confident that they do not drift into their own group think, or that their objectives do not become inconsistent with those of the parent organisation.<sup>28</sup> Trying to get the team to behave in a way that is inclusive with-

out being a straight jacket is a task for all team leaders. They need to recognise that most teams drift gradually towards "escape" and need continually to be brought back to the team objectives and individual roles within it.

Conflict is an inevitable part of all relationships and it is by no means an indicator of a poor team. Conflict causes a team to function badly only when it is not dealt with so that it escalates,<sup>29</sup> and our second case study illustrates this (box 2). One way for a team leader to handle it is to recognise immediately that silence or stubbornness or sour looks are messages and need immediate acknowledgement. Certainly some clinical team members consider that their opinion is less valued by the team than by other professionals outside, and that doctors' opinions are more valued than their own.<sup>28</sup> With experience, a team leader can come to recognise his or her own involvement in this dynamic or in prolonged conflicts, and this may be a time when outside facilitation is helpful. The case study shows that use of a very structured means of bringing people together—such as clinical audit of outcomes—can be a useful way round difficulties in relationships. Alternatively, group decision making methods—such as the stepladder technique<sup>21</sup>—can be used to ensure that each member contributes as fully as possible. With this technique Rogelberg *et al* found that the groups' decisions surpassed the quality of their best individual members' decisions 56% of the time instead of only 13% with conventional groups.

However, the reality is that doctors' opinions are very differently rewarded from other members' opinions, and some would argue that real teamwork can never take place while such large inequalities of income, with merit awards for one group but not for others, occur. Bloor and Maynard<sup>31</sup> have recently suggested that rewards for good team performance should go to the team rather than one individual within it. The team would then distribute the rewards as its internally monitored performance suggests that it should. Making a team a functioning unit with real financial decision making power could lead to much more innovative practices—such as letting them bid for packages of care,<sup>31</sup> exploit skill mix possibilities, and design work patterns that share the load while also ensuring training needs are met.<sup>32</sup>

Diversity of skills is very apparent within the health service, but if different members are unaware of the particular skills and experience of their colleagues, as research suggests they are,<sup>18</sup> then they will not be used to the full. For this reason team events—such as those described in the first case study—can be used to spell out individual skills and strengths. Diversity of personality needs celebrating and I find no better way to do this than with the Myers Brigg type inventory<sup>33</sup> with its four jungian dimensions. This allows an existing team to see whether its diversity is sufficient; whether, for example, it is full of planners and so misses the implications of the here and now; whether it has people who dislike ending things or too many of those who tend to complete the task as

fast and as efficiently as possible; whether the extrovert team leader is taking the introvert's silence as agreement or sulking, when actually it is neither. It is not that one type is right and one wrong or that we are incapable of working in an opposite capacity; if we don't have the "right" people in place we need to set members the task of acting in that role. This encourages diversity of skills within the individual members and the team.

Beyond these points it needs to be remembered that teams are only a part of an organisation. To maintain and enhance quality care, they must be integrated within it, aligned in their aims towards the primary goal, and have clarity about accountability and authority.<sup>34</sup> If the desire is that real teamwork should occur—and the evidence is increasingly recognising that it has an essential part to play in the quality of care—then team leaders throughout the organisation need to be accountable for this. Finally, managers must realise that the creation and support of successful teams is not a one off act but a constant part of their jobs (box 3). Teams are the cogs of good health care and their ongoing maintenance and occasional replacement is essential.

- Clear team goal and objectives
- Clear accountability and authority
- Diversity of skills and personalities
- Clear individual roles for members
- Shared tasks
- Regular internal formal and informal communication
- Full participation by members
- Reflexivity
- Diversity
- The confronting of conflict
- Monitoring of team objectives
- Feedback to individuals
- Feedback on team performance
- Outside recognition of a team
- Two way external communication
- Team rewards

Box 3 Elements to encourage for good teamworking.

- 1 Reich RB. Entrepreneurship reconsidered: The team as hero. *Harvard Business Review* 1987;65:77-83.
- 2 Mitchell J, Cuthbert M, Porter M, et al. A quality partnership: closing the gaps between hospital and the community. *Australian Clinical Review* 1993;13:39-50.
- 3 Kallerberg AL, Moody JW. Human resource management and organizational performance. *American Behavioral Science* 1994;37:948-62.
- 4 Macy BA, Izumi H. Organizational change, design and work innovation: a meta-analysis of 131 North American field studies: 1961-91. In: Pasmore WA, Woodman RW, eds *Research in organizational change and development*. Vol 7. Greenwich, CT: JAI Press, 1993:235-313.

- 5 Wood N, Farrow S, Elliott B. A review of primary health care organisation. *Journal of Clinical Nursing*, 1994;3:243-50.
- 6 Murphy L. Organizational interventions to reduce stress in health care professionals. In: Firth-Cozens J, Payne R, eds *Stress in health professionals*. Chichester: Wiley (in press).
- 7 Adorian D, Silverberg DS, Tomer D, et al. Group discussions with the healthcare team: a method of improving care of hypertension in general practice. *J Hum Hypertens* 1990;4:265-8.
- 8 Ovretveit J. *Essentials of multidisciplinary team organisation*. Uxbridge: Brunel University, BIOS, 1988.
- 9 Collighan G, Macdonald A, Herzberg J, et al. An evaluation of the multidisciplinary approach to psychiatric diagnosis in elderly people. *BMJ* 1993;306:821-4.
- 10 Sonnentag S. Work group factors and individual well-being. In: West MA, ed. *Handbook of work group psychology*. Chichester: Wiley, 1996.
- 11 Firth-Cozens J. Why me? A case study of the process of perceived occupational stress. *Human Relations* 1992;45:131-41.
- 12 Carter AJ, West MA. Sharing the burden: teamwork in health care settings. In: Firth-Cozens J, Payne R, eds *Stress in health professionals*. Chichester: Wiley (in press).
- 13 Goldberg DP. *Manual of the general health questionnaire*. Windsor: NFER, 1978.
- 14 Firth-Cozens J. Stress, psychological problems, and clinical performance. In: C Vincent, M Ennis, RMJ Audley, eds. *Medical accidents*. Oxford: Oxford University Press, 1993.
- 15 Firth-Cozens J. *Clinical effectiveness in health authorities*. Durham: Report to NHS Executive, 1996.
- 16 Firth-Cozens J. Individual and organisational predictors of depression in general practitioners. *Br J Gen Pract* 1998 (in press).
- 17 Katzman EM, Roberts JL. Nurse-physician conflicts as barriers to the enactment of nursing roles. *West J Nurs Res* 1988;10:576-90.
- 18 Bond J, Cartilidge AM, Gregson BA, et al. *A study of interprofessional collaboration in primary healthcare organisations*. Vol 2. Newcastle-upon-Tyne, UK: Health Care Research Unit, University of Newcastle-upon-Tyne, 1985. (Report No 27.)
- 19 West MA, Poulton BC. A failure of function: teamwork in primary health care. *Journal of Interprofessional Care* 1997;11:205-16.
- 20 Moray N. Error reduction as a systems problem. In: MS Bogner, ed. *Human error in medicine*. Hove: Erlbaum, 1994.
- 21 Rogelberg SG, Barnes-Farrell J, Lowe CA. The step-ladder technique: an alternative group structure facilitating effective group decision-making. *J Appl Psychol* 1992;77:730-7.
- 22 Taylor DW, Faust WI. Twenty questions efficiency in problem solving as a function of group size. *Journal of Experimental Psychology* 1952:360-8.
- 23 Janis IL. *Groupthink: a study of foreign policy decisions and fiascos*, 2nd ed. Boston: Houghton Mifflin, 1982.
- 24 Kievit J. Decision analysis and clinical care. *Conference on the Scientific Basis of Health Services*. Amsterdam, 1997.
- 25 Guzzo RA, Shea GP. Group performance and intergroup relations in organizations. In: Dunnette MD, Hough LM, eds. *Handbook of industrial and organizational psychology*. Palo Alto, CA: Consulting Psychologists' Press, 1992.
- 26 West MA. Reflexivity and work group effectiveness: a conceptual integration. In: West MA, ed. *Handbook of work group psychology*. Chichester: Wiley, 1996.
- 27 Helmreich RL, Schaefer H. Team performance in the operating room. In: Bogner MS, ed. *Human error in medicine*. Hove: Erlbaum, 1994.
- 28 Firth-Cozens J. Building teams for effective audit. *Quality in Health Care* 1992;1:252-5.
- 29 Tjosvold D. *Teamwork: securing a competitive advantage*. Chichester: Wiley, 1991.
- 30 Donnelly P. Decision-making in a community mental health team. *Mental Health Nursing* 1996;16:12-15.
- 31 Bloor K, Maynard A. Rewarding healthcare teams: a way of aligning pay to performance and outcomes. *BMJ* 1998;316:569.
- 32 Firth-Cozens J, Moss F. For every complex problem [editorial]. *BMJ* (in press).
- 33 Quenk NL. *Beside ourselves: our hidden personality in everyday life*. Palo Alto: CPP Books, 1993.
- 34 Brittain B, Langill G. Structuring the design and implementation of leadership and teamwork for programme management. *Healthcare Management Forum* 1997;10:50-2.

# Organisational context for quality: lessons from the fields of organisational development and change management

Pam Garside

All improvement requires change, and improving quality in health care involves changing the way that things are done, changes in processes and in the behaviour of people and teams of people. Whether a quality improvement programme encompasses the whole organisation in "macro" change, or whether a team of people is reorganising a single clinic on a "micro" scale, the same principles of change management apply. The health sector should be able to learn a great deal from other industries and sectors and from the general literature on the management of change and organisational development. Much is said and written in the field of organisational behaviour which seems to have little or no connection with the efforts to improve patient care in hospitals or primary and community care settings, but the jargon is a barrier and the theory seems to be arcane. But there are lessons behind these barriers, as logic and common sense lie in the theory. This article takes the reader through the various accepted theories of organisational change, draws conclusions, and makes recommendations on how to use the lessons from these theories in achieving successful change and quality improvement in the healthcare setting.

The term "change management" has become devalued across sectors and industries as meaning everything and meaning nothing. Sound strategic thinking and development are being subsumed under the term as chief executives of publicly held companies receive their acclaim for organisationwide transformational achievements. In parts of the health sector, change management has come to mean downsizing and layoffs to many clinical and junior managerial staff. In this sense the terminology works against protagonists for change because of its negative connotations and inappropriate use. A pragmatic interpretation is to consider change management as the link between the vision of the organisation and its workings—the process by which strategy is actually implemented, and by which changes are actually made to happen.

## Organisational change and quality improvement in the NHS

At the level of the national and local health economy, change is underway in the health sector of many countries including the National Health Service (NHS)—for example, the development of managed care, organisational mergers, and the creation of new primary and community care organisations. The organisational change within NHS organisations associated with quality improvement processes has

It is important to define various terms at this point, as the field of organisational development, like many other areas of study and professional endeavours, is riven with terminology which can be impenetrable and offputting to those unfamiliar with the topic.

The first three definitions are taken from the Blackwell encyclopaedic dictionary of organisational behaviour<sup>1</sup>

### ORGANISATIONAL DEVELOPMENT

Organisational development is a field of applied behavioural science focused on understanding and managing organisational change.

### ORGANISATIONAL BEHAVIOUR

Organisational behaviour is the study of human agency in organisations of all types. This means an interest in the behaviour of organisations as well as behaviour *in* organisations.

### ORGANISATIONAL CHANGE

Organisational change is a difference in form, quality, or state over time in an organisational entity. (For the purposes of this article, organisational change is considered a subset of organisational development.)

Many further definitions can be found in the literature, but two are selected here for their clarity and scope:

### ORGANISATIONAL DEVELOPMENT

Organisational development is defined by Beckhard<sup>2</sup> as: "an effort, (1) planned, (2) organisation-wide, (3) managed from the top to (4) increase organisational effectiveness and health through (5) planned interventions in the organisation's processes using behavioural science knowledge"

### ORGANISATIONAL DEVELOPMENT

Dawson *et al*<sup>3</sup> state that organisational development includes decision making changes in: job descriptions; decision making processes and arenas; shape, size, and nature of groups and departments; managerial style; work organisation; quality programmes; mechanisms for reporting and exercising accountability; human resource management practices.

### Box 1 Definitions and terminology.

a developmental history including medical audit, clinical audit, and the "re-engineering" of systems and processes in departments and specialties. Total quality management and con-

Judge Institute of Management Studies, University of Cambridge, Cambridge, UK  
Pam Garside, senior associate, and management consultant Newhealth

Correspondence to:  
Miss P Garside, Newhealth,  
24 Milson Road, London  
W14 0LJ, UK.

tinuous quality improvement have been pursued variably, and with equally variable success. The Labour government elected in Britain in 1997 adopted quality as a major theme for health, and in its establishment of a National Institute for Clinical Excellence, a Commission for Health Improvement, and its requirements for clinical governance<sup>4</sup> is pushing "top down" for process change and the more widespread adoption of good practice in clinical settings. All of these types of change both up to the present and planned initiatives involve changing traditional clinical and non-clinical practices and behaviours. Requirements of new reporting mechanisms, processes, external scrutiny, and information collection will impose additional pressures for changing these processes within organisations.

Those involved in changing health care at the system level and in changing internal processes must recognise that change has to be both led and managed and that they can draw on the lessons from the field of organisational development and organisational change.

### Lessons from the field of organisational change

Researchers and managers who seek to draw on the stock of knowledge relating to organisational change in the healthcare sector often meet with two considerable difficulties. Firstly, although there is a large and diverse body of literature devoted to managing and implementing organisational change in general, relatively few publications consider issues and problems that are particular to change processes within healthcare organisations. Secondly, it has been difficult to develop models and learn from the experiences of practising health managers. Managers in the NHS in the United Kingdom in particular are continually forced to focus on immediate solutions to problems and have little opportunity for developing longer term organisational change strategies, let alone the time to write up the results. Moreover, the nature of the influence of the professions within health care produces constraints that differ from those experienced in industrial organisations.<sup>6</sup> Notwithstanding the lack of published literature in the health field, there is excellent work to draw on in the field of organisational change. The next section takes the reader through the commonly used models of organisational change proposed in the literature.

### Change management models

Two of the founders of the field of organisational development, Beckhard and Harris, stated in 1987 that "Change management is not a neat sequential process".<sup>7</sup> It may not be neat, but organisational change is typically modelled as a three part process that takes a flawed organisation, moves it through an arduous transitional stage, and deposits it at the end in the enriched, desired state.<sup>8</sup>

Lewin's force field analysis<sup>9</sup> remains a popular change management tool almost half a century after its initial development. It conceptual-

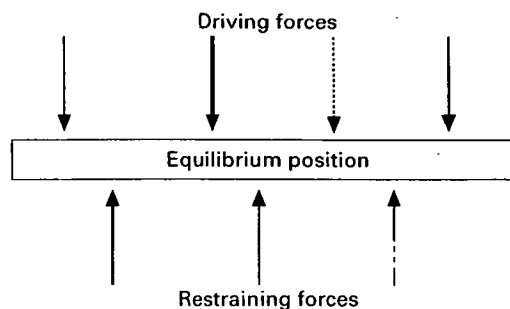


Figure 1 Lewin's forcefield analysis.

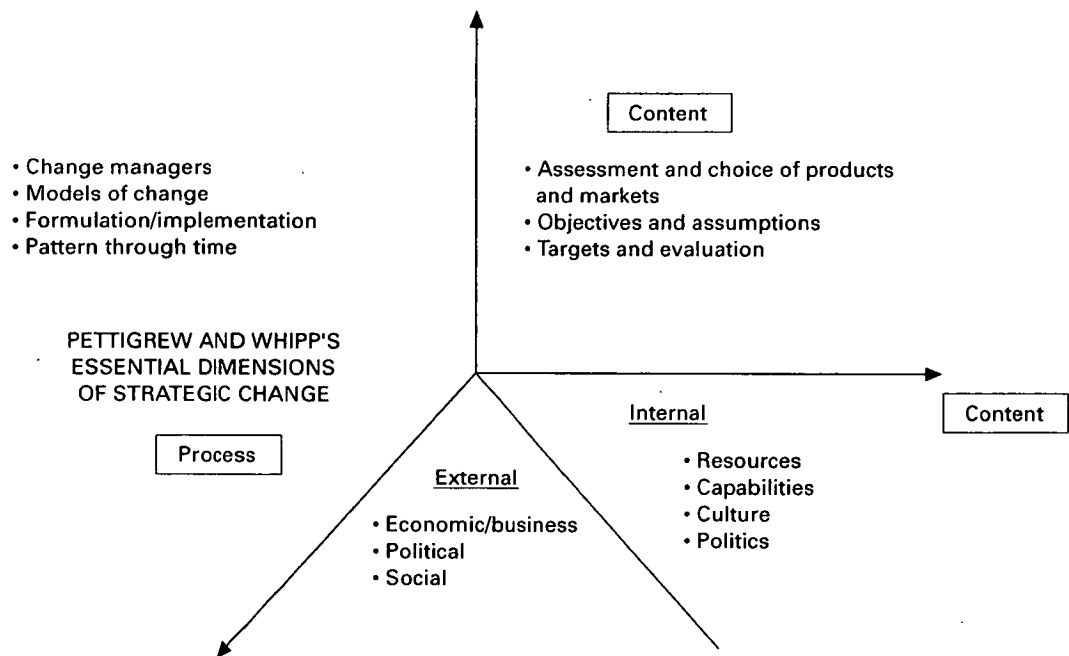
ises organisational change as a process shaped by the interaction of driving forces for change with restraining forces impeding change (fig 1).

According to Lewin, organisations are systems that are held in balance or equilibrium by equal and opposing forces. For the equilibrium position to be altered—that is, for organisational change to occur—there must be either a strengthening of the driving forces (legislation, economic imperatives, competitive pressures) or a weakening of the restraining forces (traditional practices, organisational culture, job insecurity). The forcefield model describes the process of organisational change as one consisting of three stages: *unfreezing* the current organisational equilibrium, *changing* to a new position, and *refreezing* in the new equilibrium position. Lewin argues that the better strategies for implementing change rest on reducing the restraining forces. He asserts that a unilateral increase in driving forces will meet with an equal and opposite increase in resisting forces.

There is a high degree of consensus on three phases of change—Beckhard and Harris<sup>7</sup> discuss the transition state between the current state to the future state. Kanter *et al*<sup>8</sup> also note the same main themes emerging during these phases. The company (or organisation) must be awakened to a new reality and must disengage from the past, recognising that the old way of doing things is no longer acceptable. Next, the organisation creates and embraces a new vision of the future, uniting behind the steps necessary to achieve that vision. Finally, as new attitudes, practices, and policies are put in place to change the corporation, these must be refrozen (as Lewin put it) or solidified.

Kanter *et al* also argue that change is successful only when the entire organisation participates in the effort. The people in the organisation can be divided into three broad change categories: change strategists, change implementors, and change recipients. In healthcare organisations, the strategists could be considered to be the board of senior managers and professional leadership, the implementors are the project coordinators for quality improvement or audit team, and the recipients most of the staff of the hospital or other health organisation.

Lewin's forcefield model and the subsequent work which has built on its foundations has much to teach practising managers. However, it does little to consider several issues central to the process of managing change. By contrast, the field of organisational development tends



*Essential dimensions of strategic change, adapted from Pettigrew and Whipp.<sup>11</sup>*

to focus on process issues and provides prescriptions for action.

Pettigrew<sup>10</sup> proposes that change should not be considered only in terms of the processes, but should also consider the historical, cultural, and political features of the organisation. Pettigrew and Whipp<sup>11</sup> took this proposal and developed a model of strategic change that involves:

“...continuous interplay between the ideas about the context of change, the process of change, and the content of change, together with skill in regulating the relations between the three. Formulating the content of strategic change crucially entails managing its context and process.”

Their model is shown in figure 2.

Pettigrew *et al*<sup>12</sup> define *context* as the “why and when” of change. They differentiate between the inner and outer context. Outer context refers to facts such as prevailing economic circumstances, and social and political environments whereas inner context is concerned with internal influences such as resources, capabilities, structure, culture, and politics. *Content* is defined as the “what” of change and is concerned with the areas of transformation. Finally, *process* is described as the “how” of change and refers to actions and interactions of the various stakeholders as they negotiate proposals for change. Pettigrew and Whipp’s model was developed in the context of managing strategic change in organisations. However, it is also useful for the implementation of smaller scale or more mundane change initiatives. It reminds those who seek to affect change that it is critically important to consider the complexities of organisational life, and to have regard for characteristics of the internal and external environment.

#### RESISTANCE TO CHANGE

Resistance to change by organisational stakeholders is a strong restraining force. Stakeholders (people with a “stake”, or interest in the organisation or activity), or “recipients”, as Kanter *et al* call them, resist change not purely on emotional grounds but for reasonable and predictable reasons. Numerous articles<sup>13-15</sup> cite reasons why stakeholders might resist change, most including the following factors.

#### PAROCHIAL SELF INTEREST

Parochial self interest is problematic in situations where stakeholders expect to lose something as a result of the change being implemented; it may include factors such as *loss of power, loss of face, additional workload, loss of income, job insecurity*.

#### RESENTMENT

Resentment develops either with particular people who are sponsoring change, with change in itself (often called change fatigue), or due to the increased presence of power and authority as a result of the number and range of instructions that almost inevitably flow from management in implementing change.

#### DIFFERENT PERCEPTIONS OF CHANGE

Different perceptions of change often depend on a person’s position within an organisation and their access to information.

#### MISUNDERSTANDING OR LACK OF TRUST

Misunderstanding or lack of trust is often a symptom of poor organisational communication.

#### LOW TOLERANCE FOR CHANGE

Low tolerance for change tends to be based on the fear of being unable to learn new skills or work behaviour.

*Characteristics of adoptive categories among farmers (adapted from Stocking<sup>20</sup>)*

<i>Adoptive category</i>	<i>Personal characteristics</i>
Innovators	Highest social status; largest and most specialised operations; wealthy; often young; well educated.
Early adopter	High social status; often large and specialised operations.
Early majority	Above average social status; average sized operations.
Late majority	Below average social status; small operations; little specialisation; relatively low income.
Laggards	Little specialisation; lowest social status; smallest operations; lowest income; often oldest.

These factors focus primarily on resistance to change at an individual level of analysis. It is, however, important to note that there may be resistance at group and organisational levels. Groups may, for example, resist change if their group structure, social norms, or power base is affected. At the organisational level, it has been suggested that a series of interrelated factors may contribute to resistance, including organisational structure, culture, and strategy.<sup>16-18</sup> More broadly, resistance to change has been characterised as cognitive blockages: the "don't need to change" blockage based on the inability or unwillingness to monitor the organisational environment for forces for change; the "can't change" blockage which often centres around the lack of resources or power; and the "won't change" blockage which is primarily linked to political issues in which people or groups think that the costs of change outweigh potential benefits.

#### **Individual receptivity to change**

Publications on innovation contain models widely used in the management of change. One in particular, that of Rogers,<sup>19</sup> is often cited and suggests that there are five categories of adopters of innovations, each with distinct personality traits: innovators (venturesome); early adopters (respectable); early majority (deliberate); late majority (sceptical); and laggards (traditional). It is claimed that the distribution of these groups in a given population corresponds to a bell shaped curve.

The categorisation of adopters has been used widely as a basis from which to explore personality characteristics of potential adopters. A typical example is shown in the table, which characterises the farmer population in terms of the five adopter categories. Stocking<sup>20</sup> suggests that this typography requires only minor amendments to be applicable to health practitioners. Taking people from across this range of characteristics through organisational change programmes requires differential techniques and strategies with each type, or category of person.

Dawson's<sup>15</sup> model of imperatives for change distils much of the work of contemporary commentators into four main key points (box 2).

Firstly, there is need for rationality and irrationality. Although rational approaches seem to be inherently appealing, particularly to people trained primarily in the science of medicine, we have seen repeatedly that strictly logical rational models may lead to unrealistic plans for action. It is virtually impossible to solve complex problems in a linear, preprogrammed way because of the number and variation of

demands from stakeholders, and the logistical problems of considering all possible solutions. However, some degree of rationality is essential in planning processes and to explain and justify change programmes to members of the organisation.

The second imperative highlights the importance of interaction between decision and action. It emphasises that planning and implementation should not be regarded as discrete sequential processes but should be linked though an incremental approach. This allows success stories early in the change process to contribute to the momentum in the change programme.

The third imperative reflects areas covered in our consideration of participation and decision making. The imperative asserts that distinctions between decision makers and implementers should be relaxed and that members of an organisation may at different times be involved in decision making, or implementation, or both.

Finally, the fourth imperative refers to the need to include processes of learning, creativity, and development in managing change thereby encouraging organisations to "learn to love change". All of Dawson's imperatives, therefore, espouse a flexible approach to the management of change. Those imperatives take us to the consideration of the learning organisation and systems thinking.

#### **Learning organisation and systems thinking**

Two dynamic concepts emerging from the field of organisational development which are particularly relevant to change and quality improvement in health organisations are the learning organisation and systems thinking. Learning and change processes are part of each other—*change* is a learning process and *learning* is a change process.<sup>21</sup> The management literature abounds with articles on the learning organisation; Argyris and Schön<sup>22</sup> have said that organisational learning involves the detection and correction of errors. Schein<sup>23</sup> thinks that for change to occur, the organisation must unlearn previous beliefs, be open to new inputs, and relearn new assumptions and behaviours. In "double loop learning", error is detected and corrected in ways that involve modification of an organisation's underlying norms, policies, and objectives. The model of the learning organisation is linked closely with the concepts of systems thinking. Thinking in systems terms means being aware of the web of interrelations that exist between the parts and

#### **Change programmes must:**

- Include elements of rationality and irrationality
- Include iteration between decision and action
- Include variable participation in decision and action from people from different positions in the structure
- Include processes of learning and activity.

Box 2 Dawson's imperatives for change.

being aware of the parts themselves. Senge<sup>24</sup> proposes that understanding of the system can only be reached by contemplating the whole and that people inside the system tend to focus on snapshots of isolated parts, thus rarely solving their deepest problems.

Beckhard and Pritchard<sup>21</sup> advocate that to move an organisation into the future in an increasingly complex operating environment, a process of *fundamental change* must be adopted. In considering the forces for change, the business decisions to be made, and their organisational consequences, leaders need to choose between treating the change in an incremental and linear way or in a fundamental, systems based and diagnostic way. If an incremental change strategy is chosen, it is likely to deal with first things first and to make the necessary changes in sequential order. If a fundamental change strategy is chosen, the implications for the organisation are that the organisation itself, its parts, and their relations, will simultaneously change. The same authors point out that an important characteristic of a true learning organisation is that its norms encourage innovation; also that the most important single instrument for ensuring that learning and change take place is the set of positive and negative rewards that are shown by management behaviour. If the stated values and priorities are not consistent with the behaviour of the leadership, the change will not stick.

#### **Why do programmes of change so often fail?**

Reading the theories of organisational change makes change look seductively easy. Then why do so many programmes of change fail? Change programmes in industry are often highly developed, visible, expensive processes that often do not result in successful change.<sup>25</sup> Despite the best efforts of senior management, the success rates of major change programmes in Fortune 1000 companies are estimated to be between 20% and 50%. The reason is simple—leaders and employees see change differently. To the leaders, change is an opportunity, a survival strategy, a chance to further their careers. To the employees it is disruptive and intrusive.<sup>26</sup> One of the paradoxes of change is that during a time of change trust is the most difficult to establish. If the organisation is in the middle of change effort, lack of trust automatically emerges as a serious barrier. Trust in time of change is based on two things: predictability and capability.<sup>27</sup> Staff want to know that a process which is about to begin has a predictable, known route, and that they will be treated fairly. They also want to think that those in charge are capable of delivering what they promise. In the widespread reorganisations and reviews of acute health services change in the United Kingdom and abroad, it has been shown repeatedly that carefully thought out macro plans for rearranging, merging, and closing services are extraordinary difficult to accomplish.<sup>28 29</sup> Equally, the micro or process change involved in quality improvement in clinical services is also difficult to

achieve. The implementation part of the process is one in which many organisations fail, or fail to complete.

Increasingly, managers and clinical professionals in health care are coming to terms with the need for carefully designed and implemented programmes for change, programmes which take into account the external world and its pressures—politicians, professional groups, and the public—and the internal world of the organisation—its culture, norms, and staff behaviours.

#### **Using the lessons from organisational development and change theory for quality improvement in health care**

Armed with an understanding of theories and models of change, we can be led to the following conclusions:

(1) Changes for quality improvement should be driven by a "vision" of what is to be accomplished. (*A context should be established—the why and when—and content—or what is to be achieved.....a fundamental change strategy should be adopted.*)

(2) The culture of the organisation needs to be receptive to change for change to be embraced and to actually occur. (*Perceptions and behaviours of individual stakeholders and recipients must be acknowledged, resistance overcome, and change must be supported organisation-wide in a learning organisation mode.*)

(3) Focused attention is needed on the process of implementation of change. Change does not happen because someone has a vision, it happens when there is a vision and the change is managed in a receptive culture. (*Taking into account individual styles, motivations, and readiness to adopt change, the rational and the emotional, the need for an iterative and involving process, and a flexible approach to managing the process.*)

#### **Making change and quality improvement happen**

The remainder of this article takes each of these three areas in turn, introduces additional experiences, and makes recommendations on how change can be managed as a process with the aim of improving the quality of health care.

##### **(1) "The vision thing"**

Berwick sets out six steps for continuous quality improvement in his seminal 1989 article.<sup>30</sup> The first is that leaders should take the lead in quality improvement—those who speak for the profession, for healthcare institutions, and for large scale purchasers—must establish and hold to a shared vision of a healthcare system undergoing continuous improvement. This exhortation is particularly relevant to health improvement plans being prepared today in the United Kingdom.

Articulating the vision for the "desired future state" and gaining commitment to that vision is essential to implementing change at micro and macro level. Each step in the process should be linked in a clear way to the end point of the vision. The people and groups within an



organisation must be motivated by a sense of vision, of a desired future state, and where they are heading, so that the intermediate steps make sense.

Resistance to change is potentially so strong that without consistent, unswerving commitment from leaders, programmes for change are unlikely to be successful. Countless change programmes have faltered despite well argued logic, rationale, and technical argument because people in positions of legitimate power and authority wavered in their support. The crescendo of opposition to change often reaches its peak immediately before implementation—it is at this time that leaders of change must critically be seen to stand firm to their vision of the future state. Leaders of change must also pay constant attention to building consensus with external organisations—such as professional and regulatory bodies and purchasers of care—to support the change process. These lessons for leadership are confirmed by work on the development of patient focused care in the NHS in England. A review of the original work on patient focused care in 1993<sup>31</sup> cited commitment and conviction for the project from the chief executive and senior clinicians and management as the most important factor for success of such a programme of change.

#### RECOMMENDATION

Articulate and commit to the desired end state, or vision, of the changed organisation or service—build alliances and support with important external organisations. Keep the vision through the difficult times of resistance to change which occur well into the process.

### **(2) Changing the culture of the organisation to be receptive to change**

Most people working in healthcare organisations do not wish to change their location, style, or mode of working. They not only do not embrace and engage with the plans for change, they actively resist. The culture of the organisation—its norms, values, behaviours, and policies as perceived by staff—must change for change to occur. The culture must support the direction of change by rewarding behaviours which support the change, and in some cases penalising those which do not.

If an organisation is to move to a learning mode, to one where innovation and even risk are rewarded and where problems are approached in an integrated way, then a culture of learning, supported by communication and training, needs to be developed. Berwick<sup>30</sup> thinks that as healthcare organisations pursue quality improvement, they have a tendency toward the “bad apple” approach—the view that problems of quality are caused by poor intentions—the cause of the problem being people and the implication being that people must be made to care. Identification of the “bad doctor” or “bad professional” and exposing them is an attractive concept to centralists with a preference for regulation and fear as incentives to improve quality. This approach may change the culture of the organisation, but

not to one where people or groups will take risks, have opportunities to learn, use data to improve processes and win the hearts and minds of staff for the change effort. Readers may wish to refer to another paper in this supplement by Ferlie *et al* (pp S24–S29) who, in their case study of HIV/AIDS services, describe the cultural change necessary to implement changes in the service, including the recognition that change is not all rational, linear decision making.

#### RECOMMENDATION

If a culture is to be changed, the leaders must constantly show both the desired direction of change, and that they mean what they say. Organisational policies and actions must reinforce what is communicated. Behaviour must match the rhetoric.

### **Important people issues**

An organisation in today's NHS may not be able to promise security, but it can promise to follow a considered process and to treat people fairly through that set of events. This process of dealing with people and how it is implemented is critical to overcoming staff resistance and to actively engaging them in implementing the change. One of the conclusions of the 1993 review of patient focused care<sup>31</sup> was that leaders of change significantly underestimated the need for investment in support from human resource (personnel) professionals in the technical aspects of changing people's jobs, recruitment, redundancy, training, and communications with staff.

#### RECOMMENDATIONS

In situations where reorganisation means changes to staff roles and positions, promote the individual over the structural—treat staff with maximum humanity and compassion, but at the same time be honest and empathise with the feelings of staff who will be at different stages of coming to terms with change.

#### *Involve staff in the process of change*

The involvement of a cross section of staff in change programmes takes sustained effort over time—far easier to tell people what to do. The ideal position is to develop an energised team of people who are hungry for change and learning, innovators with license to change things and the support of senior management.

#### *Train and develop individual people*

The key to supporting change is the development of people for their new roles and in new skills for the changed organisation or process, and also as people who may take their skills elsewhere in the health system—promoting their employability as a reward for becoming involved in change.

#### *Effective communication*

One of the keys to culture change and to unlocking resistance to change is effective communication. Really effective communication is extraordinarily difficult to achieve. Two American authors think that most advice given

to executives about communicating change is wrong.<sup>32</sup> In 1993 The Wyatt Company conducted research on 531 United States organisations undergoing major restructuring. In answer to the question "If you could go back and change one thing, what would it be?" the most frequent answer was "The way I communicated with my employees". This quote is echoed throughout health care by leaders of change. The recommendations of the authors cited above are included here. Communicate only facts, stop trying to communicate values (the only effective way to communicate a value is to act in accordance with it and give others the incentive to do the same). Do not rely on videos, publications, or large meetings. Do not let very senior managers introduce the change to frontline employees—use frontline supervisors. Acknowledge the critical importance of face to face communications. Consider rumours—the messages sent and received are usually inaccurate, but the transmission method is perfect. (Many NHS chief executives would give a great deal to have a communication mechanism or machine as effective as the hospital gossip line in reaching maximum numbers of employees in record time). Rumours illustrate the truism that the most effective way to communicate is informally, face to face, one to one with individual people. The paper in this supplement by Layton *et al* (pp S30–S36) on improving clinical practice through structured care protocols stresses the importance of communication early and often and also the importance of understanding the effect of change on individual people.

### (3) The process of implementation of change

We begin again with Berwick,<sup>30</sup> who noted that to improve quality, institutions must "organise for quality"—that is, invest in quality improvement, bring quality to centre stage in the managerial agenda, and create flexible project teams to tackle complex processes which cross departmental boundaries. Organisations and departments must invest in the process—action plans, project plans, and project management skills can be used to close the gap between where you are now—the current state—and where you want to be—the desired future state. A plan for managing the transition is needed.

Lack of momentum for the change process or project as it enters the middle phase of its projected lifespan is a common cause of failure to implement. Projects begin with much enthusiasm, momentum, and elaborate project management flow charts but if momentum is not maintained through the critical phase half or two thirds of the way through the process, then even with political and top support in place, the process can flounder.

Resistance to change in various forms will be encountered throughout the process. Examples would be clinical objection to a departmental move in a hospital or the impossibility of redeploying staff. It is important to anticipate these barriers and build in incentives to overcome them—the most common incentives or sweet-

eners being money, in the form of transitional funding or working capital. This funding acts as a lubricant for change. The private sector invests considerably more in financial support for change processes—the public sector and NHS would benefit from even small amounts invested for this purpose. Some employees become frozen into a position of opposition to change because they cannot see a viable way out of their situation without losing face. Organisational solutions can be put in place to act as levers for the process of managing people—such as outplacement counselling services, employment banks, and clearing systems—and funding for staff development with the end point of alternative employment inside or outside the organisation.

### RECOMMENDATIONS FOR THE IMPLEMENTATION PROCESS

As momentum naturally diminishes during the project life cycle, these things will help to assure completion. Remember to continually align the project with the vision of where you are going, and with the wider organisation's vision. Project manage the process effectively—hire a person who is dedicated to the task of overseeing the project on a day to day basis. Appoint a project team with membership from across different levels of the organisation to advise on the process. Show early and middle term successes—to maintain momentum, attempt to have one or two early and middle term successes of implemented change resulting in benefits for patients or staff. Allow time—make use of the maximum time available to you. People and organisations need time to listen, object, and adjust. Planning for individual futures also takes time. Have a source of transitional funding available—to provide incentives for change—from physical restructuring to redundancy or early retirement payment and development and training monies for staff. Anticipate the need for such investments rather than being reactive to events or barriers thrown up during the process.

### Conclusion

It could be said that much of change management really lies in the "motherhood and apple pie" domain—nice words, but how practical are they? This article has attempted to demystify some of the theory of organisational change, and to make it practical for users. The need for change and for the improvement of services to patients will always be with us. This change needs managing. A review of organisational change theory has shown that theory and common sense collide in the area of process, systems, and quality improvement and the management of change. Leaders intuitively practice what we have explored here. What is needed in addition to this intuitive wisdom is the recognition of the important behavioural aspects of change, and the rather pedantic process steps necessary to implement change successfully.

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- 1 Nicholson N. *The Blackwell encyclopaedic dictionary of organisational behaviour*. Oxford: Blackwell, 1995.
- 2 Beckhard, R. *Organisation development: strategies and models*. Reading, MA: Addison Wesley, 1969.
- 3 Dawson S, Winstanley D, Mole V, et al. *Managing in the NHS: A study of senior executives*. London: The Stationery Office, 1995.
- 4 Secretary of State for Health. *The new NHS: modern and dependable*. London: the Stationary Office, 1997.
- 5 Secretary of State for Health. *A first class service*. London: the Stationary Office, 1998.
- 6 Moss F, Garside P. The importance of quality-sharing responsibility for improving patient care. *BMJ* 1995;310: 996-9.
- 7 Beckhard R, Harris R. *Organisational transitions, 2nd ed.* Reading, MA: Addison Wesley, 1987.
- 8 Kanter RM, Stein B, Jick TD. The challenges of execution: roles and tasks in the change process. In: Kanter RM, Stein B, Jick TD, eds. *Managing change in organisations*. New York: Simon and Schuster, 1992.
- 9 Lewin K. Frontiers in group dynamics. *Human Relations* 1947;1:5-41.
- 10 Pettigrew AM. *The awakening giant*. London: Blackwell, 1985.
- 11 Pettigrew AM, Whipp R. *Managing change for competitive success*. Oxford: Blackwell, 1991.
- 12 Pettigrew A, Ferlie E, Mckee L. *Shaping strategic change*. London: Sage, 1992.
- 13 Kotter J, Schlesinger L. Choosing strategies for change. *Harvard Business Review* 1979;57:106-14.
- 14 Kanter RM. Managing the human side of change. *Management Review* 1985;5:56.
- 15 Dawson S. *Analysing organisations, 3rd ed.* London: Macmillan, 1996.
- 16 Miles R, Snow C. *Organisational strategy, structure, and process*. New York: McGraw-Hill, 1978.
- 17 Child J. *Organisation: a guide to problems and practice, 2nd ed.* London: Harper and Row, 1984.
- 18 King N, Anderson N. *Innovation and change in organisations*. London: Routledge, 1995.
- 19 Rogers E. *Diffusion of innovations*. New York: Free Press, 1983.
- 20 Stocking B. Promoting change in clinical care. *Quality in Health Care* 1992;1:56-60.
- 21 Beckhard D, Pritchard W. *Changing the essence: the art of creating and reading fundamental change in organisations*. San Francisco: Jossey-Bass, 1992.
- 22 Argyris C, Schön DA. *Organisational learning: a theory of action perspective*. Reading, MA: Addison Wesley, 1978.
- 23 Schein EH. *Organisational psychology*. Englewood Cliffs, NJ: Prentice-Hall, 1985.
- 24 Senge P. *The fifth discipline*. New York: Doubleday, 1990.
- 25 Beer M, Eisenstat RA, Spector B. Why change programs don't produce change. *Harvard Business Review* 1990;68: 158-66.
- 26 Strebel P. Why do employees resist change? *Harvard Business Review* 1996;74:95-101.
- 27 Duck JD. Managing change: the art of balancing. *Harvard Business Review* 1993;71:109-18.
- 28 Lampert PH. Heritage lives on after the doors close. *Minneapolis Med* 1991;74:17-22.
- 29 London Implementation Group. *Archival materials, 1994-5*. London: North Thames NHS Executive, 1995.
- 30 Berwick DM. Continuous Improvement as an ideal in health care. *N Engl J Med* 1989;320:53-6.
- 31 Garside P. *Patient-focused care. A review of seven sites in England*. London: NHS Management Executive, 1993.
- 32 Larkin TJ, Larkin S. Reaching and changing front line employees. *Harvard Business Review* 1996;74:86-90.

# Power and quality improvement in the new NHS: the roles of doctors and managers

Kim Sutherland, Sandra Dawson

## Introduction

In the complex set of organisations that comprise the National Health Service (NHS), all parties agree that improving quality is a desirable objective, but at the same time, different stakeholders assert different priorities in pursuit of that goal. Some regard research and development, and its subsequent implementation, as the key to improving the quality of patient care; others contend that investment in new services, or the strengthening of existing services is essential if quality standards are to be raised; some consider that radical changes in traditional approaches to education, training, or reward are critically important, and still others argue that considerable quality improvement will not be achieved until the voices of patients are heard and acted on. Approaches to quality improvement in the health service are shaped, to a large extent, by two key stakeholders: health service managers and clinical professionals. Their relative roles and relationships have been a dominant theme in, and exerted a powerful influence on, the development of the modern NHS. The interplay between managers and clinical professionals has been a subject for rhetoric, stereotypes, and for organisational innovation as structures have been introduced in an attempt to secure synergy between the two groups.

The paper examines the doctor-manager relationship through contemporary history, expressed views, and through the concepts of power, legitimacy, control, and autonomy. It explores how, in various guises, this relationship impacts on quality. The paper adopts a perspective that sees quality as inextricably linked with issues of control and power, and as embodying questions of knowledge, trust, and accountability, in terms of *who can judge and regulate performance*; and legitimacy, in terms of *who should decide what is to be done*, and *how should resources be allocated*. The paper explores the way that these issues have been played out in secondary care settings, where doctors and managers work closely together.

There are several distinct, and important, groups of clinical professionals in the NHS—for example, doctors, nurses, physiotherapists, occupational therapists, and pharmacists. However, this paper primarily focuses on the medical profession and their evolving relationship with managers. It draws on empirical data generated from projects conducted by our research group over the past 6 years and uses illustrative examples from interview transcripts generated in the course of three research projects.<sup>1-3</sup> The first is a study of key issues rel-

evant to personal and organisational development in the NHS.<sup>1</sup> Quotes drawn from interviews conducted as part of this study are referred to as study 1. The second study focuses on the social and organisational context in which research is translated into clinical practice.<sup>2</sup> Quotes drawn from interviews conducted as part of this study are referred to as study 2. The third study, published in this supplement, was funded by the Nuffield Trust, and is a policy review of quality initiatives in the NHS. Quotes drawn from interviews conducted as part of this study are referred to as study 3.<sup>3</sup>

## Doctors and managers: the stereotypes

There are several traits which have been used to draw stereotypical, stylised pictures of professionals and managers. In general, managers are seen to be accountable to a board of directors and identify themselves as belonging to the particular organisation in which they work. Professionals, on the other hand, are seen to identify themselves as associated with peer groups—such as professional or collegial membership. (This stereotypical dichotomy reflects Gouldner's distinction between local people and cosmopolitans and their respective allegiances to their employing company in the case of local people, and to their professional group in the case of cosmopolitans.<sup>4</sup>) Working with members of the two groups, we found evidence to suggest that these stereotypes, if not always thought to reflect reality, are often called on to strengthen claims for power and control. For example, managers might be characterised as superficial, and concerned only with administrative issues which have little impact on patient care.

"Managers are more likely to be yes men, lacking a detailed understanding, interested only in meeting deadlines. Clinical professionals are more careful in their deliberations and have their eyes on what's best for the patient." (Clinical director, study 1.)

Managers are seen, particularly by the professionals, to have an overriding concern with costs and the efficiency of services whereas professionals regard themselves as being the guardians of clinical and professional standards. According to some clinicians, quality can only be delivered by clinical professionals, who can both act as the patients' agent and have the intellectual prowess necessary to make judicious decisions. An alternative view sees managers as the rational, level headed "engines" of the health service, ensuring that there

**The Judge Institute of Management Studies, University of Cambridge, UK**  
Kim Sutherland, research associate  
Sandra Dawson, director and professor of management studies

Correspondence to:  
Dr Kim Sutherland, The Judge Institute of Management Studies, University of Cambridge, Trumpington Street, Cambridge CB2 1AG, UK.  
Telephone 0044 1223 339700; fax 0044 1223 339701.

are sufficient resources to keep clinical services operating.

“On the whole, clinicians are not good managers. They are ‘needs’ led not ‘resource’ led. They see only what people should have not how they are going to be paid for giving it.” (Executive director, study 1.)

With the development of commentaries on new public management, the role of managers was emphasised as pivotal to the smooth functioning of the NHS.

“(Managers)...do the right things: that is, they are able to make judgements, decide priorities and use resources flexibly and wisely to achieve an end result.”<sup>5</sup>

For many clinicians, their lack of interest in financial matters is seen as a virtue, issues surrounding costs are seen as a distraction from the *raison d’être* of the health service.

“Financial considerations don’t exist in ITU or shouldn’t exist in ITU.” (ITU consultant, study 2.)

Furthermore, doctors are seen to be concerned to secure the best for their particular patient, whereas managers are concerned to obtain the “greatest good for the greatest number”.

However, if we move beyond stereotype and superficial description, we find that neither group is homogenous. The medical profession has long been characterised by intraprofessional competition for resources and kudos—for example, cardiac services versus intensive care versus paediatrics. Managers too, reflect the diversity of their training and occupational background and are shaped by variation in mission, objectives, and tradition of the organisation to which they belong. Despite the costs in terms of loss of accuracy and richness incurred by the use of generalisation, some level of abstraction is useful if we are to undertake meaningful analysis. Important insights often flow from identification of patterns in attitudes, and behaviour in particular social groups. In the context of this paper, a key observation is that by Freidson,<sup>6</sup> who asserts that professions are distinguished from other occupational groups by their autonomy, defined as a position of legitimate control over work. The importance of self regulation and associated freedom from external control, in the case of the medical profession, is founded on and justified by reference to several special qualities. It is the basis of, and limits to, professional autonomy to which we now turn.

### **Basis and limits of professional autonomy**

“Essentially what doctors do still in this country, they decide themselves, if they’re a consultant or a general practitioner (GP), and they’re free in a sense either to be extremely good or to be really rather bad.” (Journalist, study 3.)

The founding basis of professional autonomy relates to claims about the nature of medical knowledge. Professionals describe their work as characterised by highly specialised knowledge and skills that are impossible for the laity to

comprehend or evaluate. The myths and mysteries of clinical practice are often held in the form of tacit knowledge,<sup>7 8</sup> and are to a considerable extent transferred to new members of the profession through apprenticeship models of clinical training which dominate medical education. Tacit knowledge creates a context in which the medical profession can protect their domain from outside interference. If all information could be coded, it would be much easier to transfer, share, and demystify the mysteries. Our understanding of medical science is such that full coding is not possible. However, we can see resistance to such coding as may be possible at any given time, to protect autonomy.

The second basis of professional autonomy centres on the promulgation of, and adherence to, strong value systems. These values systems are the basis on which professionals assert that they can be trusted to act responsibly without supervision. A deeply embedded sense of professional ethics is sometimes claimed as sufficient control on individual performance.

“Quality lies in the individual practice and attitudes, skills and knowledge and personalities of the people who practise medicine. The most powerful thing in their lives is their sense of being a professional. It’s about image and pride and being able to look at yourself in the mirror in the morning—that’s really what quality is about.” (Senior civil servant, study 3.)

“I think there is a very strong role for self regulation (at an individual level). It’s a powerful mechanism, people feel involved, it’s their responsibility.” (Senior civil servant, study 3.)

The notion of strong value systems as a means of ensuring quality in professional services resonates with the recognition, in organisational theory, of the role of commitment and socialisation as powerful mechanisms of control.<sup>9</sup> Commitment processes are known to have a profound effect on a person’s perceptions and attitudes, and exert an internal psychological control over that person, lessening the need for systematic surveillance and reward. Socialisation processes similarly exert implicit controls on people, bringing new organisational members into a particular culture through a series of interwoven processes including recruitment and selection; induction into the organisation (often through experiences that induce humility); training and education; discussion of objectives and indicators of performance, and propagation of folklore legends and organisational myths.<sup>10</sup> Having experienced these processes, people adopt the values and accepted behaviours of the group, and they become part of the ways of operating that are taken for granted, exerting powerful covert mechanisms of control. Quality may, in this way, be inculcated into norms of behaviour, and be embedded into the organisational landscape.

There are, however, several difficulties with the use of commitment and socialisation processes either as a means of control, or as a lever

to improve quality. Once committed to a particular set of values, or a given course of action, or a certain way of doing things, people may be blind or blinkered to different ways of interpreting and acting on cues. There is a tendency to explain away aberrant outcomes, or warning signs of impending disaster, and to embark on a process referred to as "escalation of commitment"<sup>11</sup> whereby people are reluctant to deviate from a chosen course of action, given their investment of time and energy and resources into their original choice. Thus commitment and socialisation can simultaneously be seen to be a good thing, an unobtrusive means of organisational control, enhancing quality through capitalising on people's motivation to excel; and a bad thing, promulgating resistance to change, possibly encouraging people, groups, and organisations to cling to doomed courses of action. In terms of the clinical professions in the NHS, it is important to note that conforming to social values and commitment to a particular way of doing things can often make people who are receiving and interpreting cues very resistant to change; their commitment tends not to be to the particular organisation in which they work, rather it is to the profession, or the specialty therein, to which they belong. This focus on and commitment to the profession has a tendency to make clinicians less receptive to change emanating from the managerial camp.

The third founding justification for professional autonomy is the assertion that in the rare case when a person underperforms or behaves unethically, the profession can be trusted to recognise, regulate, and rectify the aberrant behaviour.

"The profession is the sole source of competence to recognise deviant performance, and it is also ethical enough to control deviant performance and to regulate itself in general. Its autonomy is justified by its self-regulation."<sup>5</sup>

The General Medical Council acts as the official regulator of the profession; however, as Smith notes,<sup>12</sup> it represents only part of the regulatory framework. Influence and covert control are also exerted by Royal colleges, postgraduate deans, teachers, and colleagues. Notably, although the General Medical Council does not necessarily constitute the only regulation on the profession, the other organisations, institutions, and sources of influence on individual practitioners are drawn almost exclusively from within the profession itself.

Historically, there has been widespread acceptance of the legitimacy of the underlying bases for clinical autonomy, and this was seen as:

"...part of the bargain made with the profession at the outset of the NHS. In return for accepting service in a system that covered the nation as a whole, doctors were given as much clinical freedom as funding would allow."<sup>13</sup>

The power of the professions has traditionally been embedded in their intellectual unique-

ness, and their inherent trustworthiness which flows from their strongly held beliefs and professional ethics. Ensuring quality in health-care provision has rested on the proper functioning of these same implicit control mechanisms.

We are currently witnessing a growing disquiet with the legitimacy of the medical profession's claims to complete autonomy. Doctors in the course of discussions note the growth of the phenomenon of the "informed consumer". Increasingly, patients are accessing previously unavailable information through the internet and are supported by a growing number of self help groups which disseminate advice and encourage assertive behaviour. Having accessed the coded knowledge base, patients are demanding greater participation in the clinical decision making processes. These changes have far reaching implications for the autonomy of the professions as clinical roles undergo transition from one of agent or paternal figure to one of a partner, sharing decision making with other professionals and with patients.<sup>14 15</sup>

Further challenge to professional autonomy is represented in the questioning of the appropriateness of allowing the profession to regulate itself. Once trainees have been socialised into the profession; learnt the specialised knowledge which sets the profession apart; internalised the norms of behaviour; and embraced the ethics and values which underpin practice; there is little in the way of overt or explicit controls on clinical decision making. Poor performance at an individual level has proved difficult for the profession to deal with.

"Formal criteria of profession thus establish a framework within which the behaviour of all professional individuals takes place. But they are not able to specify whether or not individuals differ in their work performance, whether or not there are systematic differences, and if so, what is the nature and source of systematic difference. On the formal level, all individuals are the same in that they have met minimal standards in being recruited and trained, and so in being allowed to practice protected from some kinds of competition, and from the direction and evaluation of others."<sup>5</sup>

The General Medical Council has recently been hit by a barrage of media attention, criticising its inability to monitor properly and regulate performance of individual clinicians largely as a result of high profile failures—such as those seen in Bristol and Kent and Canterbury.<sup>16</sup>

Despite these recent erosions into the legitimacy of professional autonomy, it remains a powerful force and is one of the defining issues in the relationship between managers and professionals. For doctors, quality has traditionally been linked inextricably with professional autonomy, the profession secures the trust of lay people (and politicians) in their capability and willingness to monitor and regulate quality. However, increasingly the government and managers are seeing quality and autonomy

as separate issues. Autonomy is no longer seen to be a sufficiently rigorous mechanism to deliver quality in health care. These changes in attitudes of lay people, managers, politicians, and policy makers can be traced through the cumulative changes in health policy over the last 20 years.<sup>17-19</sup>

### Managers and professions: changing roles?

Klein, writing in 1990,<sup>20</sup> asserted that the relation between state and professions had changed little since the inception of the NHS; the government sets an overall budget for the health service and, in turn:

“...the NHS provides a setting where doctors can exercise their skills with almost complete autonomy”

Sitting (at times precariously, and often uncomfortably) between the state and the profession are the managers, whose role has undergone considerable change in the past 20 years.<sup>21</sup> Traditionally seen as administrators, or support staff, the managers' role was to concern themselves with the bureaucracy of the state and within (expandable) financial limits, give clinicians freedom to deal with the real business of the health service, practising medicine. Reflecting this, social and political literatures historically have tended to characterise the NHS as an archetype of professional dominance.<sup>6</sup> Essentially, the concept of professional dominance refers to the collective leverage the medical profession has over other professions and over patients. This dominance has empowered doctors to fight off or reject unwanted changes<sup>22</sup> and has legitimated the notion of professional autonomy as the foundation on which clinical practice is built.

“In the health service of 15–20 years ago it was very hard to raise issues of quality in any kind of management sense because the role of management wasn't a general management function it was one of administering a machine.” (Senior civil servant, study 3.)

Although clinical quality was generally seen to be part of the clinician's domain, changes in policy meant that cost control, efficiency, and patient satisfaction became important performance targets of NHS management. This manifested itself firstly in a concern with non-clinical measures of quality such as waiting times. Furthermore, as clinical decision making had serious implications for spending and resourcing, power and control became central issues between managers and doctors in the NHS. Managers could use resource constraints to try and limit the autonomy of the clinicians, although the clinicians could use clinical judgement as a shield to protect their autonomy from outside interference.

Generally speaking, power may be embodied in the ability of a person or group to influence the distribution of resources or to determine recruitment, selection, and dismissal of staff. Power may be held by virtue of specialised knowledge and expertise; in the perceived legitimacy of rights to control; and according to

particular personal attributes such as charisma or persuasiveness.<sup>23-25</sup> Within the context of the health service each of these bases of power play an important part; however, in the relation between doctors and managers, two of them have assumed critical importance: the control of resources, and the sanctity of the clinicians' judgement and expertise.

### Seeking improved performance: some policy initiatives

The 1983 Griffiths report<sup>26</sup> sought to instil greater financial control throughout the various organisations that constitute the health service, recommending the adoption of a general management model that would vest in one person the overall responsibility for planning, implementing, and controlling organisational performance at each level of the NHS. It would move away from the old model of consensus management, in which the medical profession dominated, and instead would draw on private sector practices and corporate techniques, seeking to improve efficiency, provide leadership, and motivate the workforce. The Griffiths report therefore marked a significant step in moving the managerial role from one of administrator, servicing the professionals, towards creating an adversarial relationship between managers and professionals.

The Griffiths reforms however failed to secure sufficient change and costs continued to escalate.<sup>27</sup> In 1989, a different tactic was adopted: rather than seeking to impose managerial and fiscal discipline on clinicians through external influences of the new managerial positions in the NHS hierarchy, there was an attempt to involve doctors in management, inculcating them with managerial values. This approach seemed to circumvent the difficulties of the professional-manager power struggle; it posed no external threat to the professionals, rather it was simply an extension of the usual jockeying for power and position within the profession. This “moving the mountain to Mohammed” approach was embodied in the resource management initiative which sought to encourage doctors to take a greater interest in and responsibility for the resource implications of their clinical activities. A tangible outcome from the implementation of this policy was the establishment of the position of clinical director.

Shortly thereafter, concerns with efficiency also formed one of the focal points of *Working for Patients*,<sup>28</sup> which introduced the idea of an internal market. The introduction of the so called quasimarket meant that, through the lever which determined distribution of contracts and funds, professionals were forced to take some account of purchaser or client demands; and to be accountable to boards of directors. It also, through establishing competition between units and trusts, may have eroded the collective cohesion of the professional group<sup>22</sup> although this claim must be weighed against the rivalry which is a characteristic of the medical profession. One discernible by-product of the reforms was a shift in doctors' perceptions about managers. Managers were

no longer regarded as subservient supporters or administrators of the medical profession, rather they were increasingly eyed suspiciously as agents of the government and usurpers of professional power and dominance.<sup>21 29</sup> Illustrative of this attitude, although not necessarily representative of professional opinion, is a polemical attack published in the *Health Service Journal* in 1997:

"...managers are agents of government, given structural power to control the power of professional expertise. They derive leadership not from stature, intellectual achievement or professional attributes, but from surrogacy to politicians."<sup>30</sup>

Symbolic of the changing status of managers was the conversion of top management posts within the NHS Executive to civil service positions in 1997.

We have found that few doctors, in interviews about influences on their professional practice, volunteer that financial or managerial issues affect their practice in any meaningful way<sup>2</sup> despite serial reform of the NHS. Self-perceptions of professional autonomy, although increasingly challenged externally, remain largely intact, particularly when considered in terms of individual practice. Clinical directors and medical directors identify themselves as professionals rather than managers. In fact, they remain professionals, but with increased power as a result of many of the reforms.<sup>1</sup>

That is not to say that there has been no notable change in the management of the NHS. The structural change which has dominated reform has, however, been rather a blunt instrument to change clinical practice or secure greater cost control. Through the lever of purchasing, money has shifted between institutions and units, although instances in which organisational inefficiencies led to bankruptcy or the demise of poorly performing institutions have been few and far between. Through the mechanism of GP fundholding, contracts have been shifted around in the purchaser-provider split.<sup>31</sup>

These changes have affected clinicians' freedom to refer or practise in a particular clinical area but they have not facilitated the examination of, or differentiation between, good and bad practice at a micro level. Purchasing does not encapsulate any regulatory function on the individual doctor-patient encounter. Furthermore, purchasing mechanisms offered a means of rationing some services, such as tattoo removal and in vitro fertilisation treatments; but again these are blanket regulations and do not differentiate between, nor give any insight into, satisfactory and unsatisfactory performance by a clinician. Judgements about performance of an individual clinician, or the appropriateness of individual decision have remained until now firmly in the clinicians' domain and to a large extent policymakers and managers have been reluctant to encroach on these bastions of professionalism. Audit represents an interesting case, particularly in the light of

our earlier discussion of autonomy, as it was a mechanism of control which maintained the notion of a professional "closed shop", it relied on peer review, was often done on a local and unsystematic basis, and results were often not shared or disseminated.<sup>32</sup>

"There was considerable speculation that medical audit would represent one of the means of extending managerial controls over clinical activity. Our experience is that, as yet, this has not proved to be the case. As a form of evaluation, medical audit appears restricted in both its membership and its focus. ... medical audit is a formative type of evaluation, focused around the objectives of the participants for their work and aiming to induce change through education and argument. As such it is increasingly out of step with other forms of evaluation in the health service, which are summative in their character, "top down" strategies, delivering authoritative judgements which will be backed by managerial sanctions."<sup>33</sup>

Furthermore, there are widely circulating but perhaps apocryphal stories about medical audit being conducted by doctors, for doctors, with the results being locked in filing cabinets accessible only to the doctors who were the subject and object of the audit process.

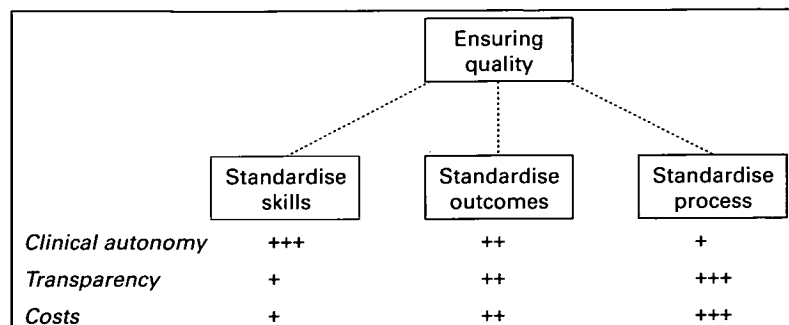
#### **Quality improvement: a professional or managerial issue?**

Organisational theory has long sought to explore different mechanisms through which organisational effectiveness can be enhanced, and improved performance and quality secured. Before applying some of this work to health, it is worth considering what is meant when we speak of improving quality in health care.

The recent white paper *The New NHS: Modern, Dependable*<sup>34</sup> declares that:

"The new NHS will have quality at its heart." Yet quality is a term which defies precise definition. It may mean not waiting for operations, or for attention in accident and emergency<sup>35</sup>; it may mean reducing variation in clinical practice, eliminating errors or poor practice; it may mean the use of up to date technology or scientific advances in clinical practice; it may mean the experience of the personal interactions which shape healthcare provision<sup>36</sup>; or it may mean improvements in the health of the population. Some people equate quality with efficiency; or with unrestricted access to expensive treatments and procedures; some equate it with a service which links seamlessly with community care and social services; and still others consider a quality health service to be embodied in a stimulating and challenging place to work. Does a quality service encompass all of these things? Should it strive to provide all of them? Which ones take priority? Is it a dynamic or a absolute concept? Whose voices should be heard? These issues resonate with the notion of organisational effectiveness, a topic that has attracted considerable attention in the field of organisation studies.<sup>37 38</sup>





Alternative means of securing performance.

*The New NHS: Modern, Dependable*<sup>34</sup> defines quality as:

"...doing the right things to the right people at the right time, and doing things right—first time."

an interpretation that embodies the difficulties inherent in establishing consensus about the meaning of quality; our earlier questions are simply modified to ask "right" according to whom; and so on.

Quality is a contested concept, and is defined by individual actors according to their particular experiences, value systems, and deeply held assumptions. If we are to move beyond definitional arguments, we must accept that quality is multifaceted and recognise that when we speak of quality, we touch different meanings in different audiences.

Accepting the inherent contestability of quality, we can begin to discern trends in the "ownership" and conceptualisation of quality in health. We have seen that before the 1980s, the term quality referred to clinical aspects of health care, it was positioned firmly within the doctor's domain and was assured by their specialised training and professional values. With the serial structural reforms seen in the 1980s and 1990s, quality moved towards a more non-clinical perspective, focusing on waiting times and hotel or service aspects of care. Simultaneously with the shift in focus, it moved into the manager's domain. Currently, we are witnessing a new position whereby both non-clinical and clinical aspects of care are seen to be important and quality has a legitimate place in the domains of both managers and the doctors.

### Securing quality improvement

Drawing on work done by Mintzberg,<sup>39</sup> we can identify three ways in which managers can exert control of work processes and secure quality (figure). The first is through controlling the skills of the workforce, ensuring that particular standards are met and through socialisation into particular modes of acceptable behaviour, inculcating new organisational members with a sense of "the way we do things here". The second means of control is through the definition of outcomes, managers can fix standards, quantities, and time scales of the outputs to be delivered and leave it to individual people to determine how they will achieve these targets. The third means of control rests on the definition, monitoring, and regulation of work processes.

Applying this model to health, as we move from left to right, across the figure, each mechanism of control encroaches more on clinical autonomy. At the same time, transparency about the subject of control increases and regulation and monitoring become more costly both in financial terms and in terms of motivation within the professional groups.

In the NHS, control of quality has traditionally relied on standardising skills, with a managerial imperative to ensure an adequate skill base, and the provision of extensive education, training, and assessment of entrants to the professions. There has, however, in recent years, been a growing emphasis on standardisation of outcomes as a means of control through mechanisms such as the *Health of the Nation*<sup>40</sup> targets, waiting lists, and more recently, mortality statistics. The use of these types of outcome controls are open to criticism as crude indicators of quality, nevertheless, statistics such as mortalities, begin to shed light on issues of clinical quality, and open up areas of clinical decision making to outside, non-professional scrutiny.

The third type of control, that of standardising process is currently attracting a great deal of interest, particularly through the development and use of guidelines and protocols.<sup>41</sup> These are often seen to be something of a threat to professionals, harbingers of the dreaded "cookbook medicine". Considerable disillusionment and resentment of the evidence-based medicine movement is founded on concerns about the devaluation of professional autonomy.

"I'm not keen on it (evidence-based medicine), having to justify everything you do by some scientific basis that is shown to work. It loses a bit of the idiosyncrasy of the doctor-patient relationship and there are lots of things that we do that we can't justify scientifically that work and they are perfectly safe and the patient is more than happy with. It would be nice to think that people trusted doctors to be able to get on with their job without interfering all the time." (General practitioner, study 2.)

### Shifting the balance of power?

Several recent high profile failures of professional controls—for example, the unacceptably high mortalities in the paediatric cardiac unit in Bristol; or anomalies in cervical screening services at Kent and Canterbury—have led the media, the public, politicians, and policy makers to re-examine the appropriateness of relying on professional values and self regulated skills as a means of ensuring quality in health care. *The New NHS: Modern, Dependable*<sup>37</sup> outlined some initiatives which are germane to a consideration of quality in the NHS. The National Institute for Clinical Excellence and Commission for Health Improvement, although not yet clearly defined will probably encompass considerable professional representation and therefore may not have notable ramifications for manager-professional relations. These bodies do seem

however, to signal a shift towards the right hand side of the figure, in that they will pursue quality and clinical effectiveness through the coding, recommendation, and dissemination of best practice for processes of clinical care, and then subsequently monitor clinical performance with such mechanisms as performance indicators, benchmarking, and league tables.

A third important innovation for quality contained in the new NHS is the notion of clinical governance. This concept has the potential to affect profoundly the relationship between managers and clinicians. In placing statutory responsibilities on managers for quality of care delivered by their organisation, clinical governance will begin to open the black box\* of clinical decision making which historically has been used by professionals to protect their autonomy, influence and power. The view that the introduction of clinical governance will mean an increase in the power of managers is not universally accepted. Indeed, in a series of discussions with senior representatives of a range of professional and managerial groups, it became apparent that clinical governance has been interpreted by different groups in different ways.

“Doctors will assume much greater leadership roles.” (Politician, study 3.)

“Clinical governance will make connections between general management areas—strategic planning, strategic positioning, business planning and so on with clinical practice. Wow, what a big agenda for management.” (Commentator, study 3.)

Clinical governance gives legitimacy to managers as monitors of quality in clinical services. Further transparency is provided by the introduction of systematic and wide ranging performance management initiatives. The collection, collation, and distribution of meaningful, and timely, measures of clinical and organisational performance has the potential to be a powerful force in the drive to change for quality.

### Different worlds

Elsewhere, we have argued that managers and professionals inhabit different assumptive worlds; their values, allegiances, mindsets, and the boundaries defining appropriate behaviour within each world, are distinct.<sup>43</sup> There are however several overlaps in their worlds. Each group espouses improved patient care as a key objective; both must operate within environments characterised by finite resources and infinite demand; both exist in a social and organisational context in which political considerations are normal yet at the same time offer sufficient flexibility to accommodate the cooperation and links between disciplines which allows individual and organisational performance to flourish. This flexibility is not

widely capitalised on. Previous work done by our group has shown that organisational issues have a profound effect on patient care, but clinicians rarely recognise the important influence an organisation has on clinical practice.<sup>2</sup> Simultaneously, managers, occupied with urgent, day to day issues often fail to recognise the potential gains to quality which would flow from effective organisational arrangements in the provision of services.

Quality in health care would be ill served by uniform homogeneity or an absence of debate. Power disputes and conflict are inevitable in an organisation that necessarily encompasses various professional traditions and standpoints, and employs more than 1 million people. Managers and clinical professionals have distinct purposes and roles, as do many other groups that together make up the NHS. Each group has different, equally legitimate, although sometimes conflicting, objectives. In the case of managers and professionals, it is beneficial for the NHS to encompass both advocates for the population, those arguing for the greatest good for the greatest number; and advocates for individual patient care. Far from calling for a bland conformity in the NHS, we seek to emphasise the importance of mutual understanding and respect for the legitimacy of other worlds in the collective pursuit of quality in health.

Mutual understanding requires greater transparency. It seems entirely legitimate and proper for the professions to take the lead in the delivery and regulation of the quality of clinical care. What is required is greater openness about the processes of standard setting, monitoring, and evaluation being used to ensure quality and scrutinise performance. Managers do not need clinical knowledge to run their organisations effectively, but they do need to be assured that clinical services are appropriate and effectively delivered.

Quality is little advanced by adversarial notions of professionals versus managers; cost versus quality, and so on. We seek to move away from the hitherto dominant rhetoric of opposition towards the concepts of distinct and legitimate roles which function together on the basis of mutual understanding. To deliver quality in the NHS, an integrated approach is needed in which concerns for individual patient care are tempered by concerns for the “bigger picture” of population health; in which costs and effectiveness are considered together in terms of value for money; and multifunctional approaches to health capitalise on the diversity and richness of the health service’s human resources. Together, clinicians and managers have the potential to create synergy from difference, which could be an effective driver for change in the new NHS.

1 Dawson SJN, Winstanley D, Mole V, et al. *Managing in the NHS: a study of senior executives*. London: The Stationary Office, 1995.

2 Dawson SJN, Sutherland K, Dopson S, et al. *The relationship between R and D and clinical practice in primary and secondary care: cases of adult asthma and glue ear in children*. London: Report to North Thames NHSE R and D Committee (from whom copies may be obtained), 1998.

\*A “black box” is a symbol used by engineers to represent a piece of machinery which, for the purposes in hand, needs only to be considered in terms of inputs and outputs and not its internal workings.<sup>42</sup>

- 3 Leatherman S, Sutherland K. Evolving quality in the new NHS; policy, process, and pragmatic considerations. *Quality in Health Care* 1998;7(suppl):S54-S61.
- 4 Gouldner AW. Cosmopolitans and locals: towards an analysis of latent social roles. *Administrative Science Quarterly* 1957;2:281-306.
- 5 Newman J, Clarke J. Going about our business: The managerialisation of public services. In: Clarke J, Cochrane A, McLaughlin E, eds. *Managing Social Policy* London: Sage, 1994:23.
- 6 Freidson E. *Profession of medicine*. London: University of Chicago Press, 1970.
- 7 Polanyi M. Sense-giving and sense-reading. In: Polanyi M, ed. *Knowing and being: essays*. London: Routledge and Kegan Paul, 1969.
- 8 Dawson SJN. Never mind solutions, what are the issues? The lessons of industrial technology transfer for quality in health care. *Quality in Health Care* 1995;3:197-203.
- 9 Pfeffer J. *New directions for organisation theory: problems and prospects* Oxford: Oxford University Press, 1997.
- 10 Pascale R. The paradox of corporate culture: reconciling ourselves to socialisation. *California Management Review* 1985;27:26-41.
- 11 Staw B. Rationality and justification in organisational life. In: Staw B, Cummings L, eds. *Research in Organisational Behaviour* 1980;2:45-80.
- 12 Smith R. All changed, changed utterly. *BMJ* 1998;316:1917-8.
- 13 Honigsbaum F. How the health service evolved. *NHS Handbook* 1994;29-34.
- 14 Coulter A. Partnerships with patients: the pros and cons of shared clinical decision-making. *Journal of Health Service Research Policy* 1997;2:112-21.
- 15 Toop L. Patient centred primary care. *BMJ* 1998;316:1882-3.
- 16 Dyer C. British doctors found guilty of serious professional misconduct. *BMJ* 1998;316:1924.
- 17 Pollitt C. The struggle for quality: the case of the National Health Service. *Policy and Politics* 1993;21:161-70.
- 18 Pollitt C. The politics of medical quality: auditing doctors in the UK and the USA. *Health Services Management Research* 1993;6:24-34.
- 19 Le Grand J. Evaluating the NHS reforms. In: Robinson R, Le Grand J, eds. *Evaluating the NHS reforms* 1993:243-260. London: Kings Fund Institute.
- 20 Klein R. The state and the profession: the politics of the double bed. *BMJ* 1990;301:700.
- 21 Dawson SJN. Changes in the distance: professionals reappraise the meaning of management. *Journal of General Management* 1994;20:1-21.
- 22 Ferlie E, Ashburner L, Fitzgerald L, et al. *The new public management in action*. Oxford: Oxford University Press, 1996.
- 23 French J, Raven B. The bases of social power. In: Cartwright D, ed. *Studies in social power*. Ann Arbor: University of Michigan Press, 1959.
- 24 Pfeffer J. *Power in organisations*. London: Pitman, 1981.
- 25 Dawson SJN. *Analysing organisations*, 3rd ed. Chapter 7. London: Macmillan, 1996.
- 26 NHS management enquiry (Griffiths Report). London: Department of Health and Social Security, 1983.
- 27 Packwood T, Keen J, Buxton M. *Hospitals in transition: the resource management experiment*. Milton Keynes: Open University Press, 1991.
- 28 Department of Health. *Working for patients*. London: The Stationary Office, 1989. (Cm 555.)
- 29 Harrison S. *Managing the National Health Service: shifting the frontier?* London: Chapman and Hall, 1988.
- 30 Oni O. Managers: who needs them? *Health Service Journal* 1997;107:20.
- 31 Glennester H, Matsaganis M, Owens P, et al. GP fundholding: wild card or winning hand? In: Robinson R, Le Grand J, eds. *Evaluating the NHS reforms*. London: Kings Fund Institute, 1993:74-108.
- 32 Le Grand J. Evaluating the NHS reforms. In: Robinson R, Le Grand J, eds. *Evaluating the NHS reforms*. London: Kings Fund Institute, 1993:155-78.
- 33 Kerrison S, Packwood T, Buxton M. Monitoring medical audit. In: Robinson R, Le Grand J, eds. *Evaluating the NHS reforms*. London: Kings Fund Institute, 1993:155-78.
- 34 Department of Health. *The New NHS: modern, dependable*. London: The Stationary Office, 1997.
- 35 Petrie J, Cox J, Teskey R, et al. Preliminary assessment of patients' opinions of queuing for coronary bypass graft surgery at one Canadian centre. *Quality in Health Care* 1996;5:166-71.
- 36 Scolte op Reimer W, Haan R, Limburg M, et al. Patients' satisfaction with care after stroke: relation with characteristics of patients and care. *Quality in Health Care* 1996;5:144-55.
- 37 Cameron K. Effectiveness as paradox: consensus and conflict in conceptions of organisational effectiveness. *Management Science* 1986;32:539-53.
- 38 Quinn R, Cameron K. *Paradox and transformation: towards a theory of change in organisation and management*. Cambridge, MA: Ballinger, 1988.
- 39 Mintzberg H. *The structuring of organisations*. Englewood Cliffs, NJ: Prentice Hall, 1979.
- 40 Department of Health. *The health of the nation*. London: HMSO 1992. (Cm 1986.)
- 41 Grimshaw J, Russell I. Effect of clinical guidelines on medical practice: a systematic review of rigorous guidelines. *Lancet* 1993;342:1317-22.
- 42 Bijker W, Hughes T, Pinch T. *The social construction of technological systems*. Cambridge, MA: MIT Press, 1987.
- 43 Dawson SJN. Inhabiting different worlds. *Quality in Health Care* 1998;7:177-8.

# Assuring high quality and evidence-based health care: a case study from HIV/AIDS services

Ewan Ferlie, D E Simon Barton, David Highton

## Introduction

### THE PUSH FOR HIGH QUALITY AND EVIDENCE-BASED HEALTH CARE

With increased attention being paid to clinical effectiveness and more recently to the development of clinical governance systems, there is a pressure to show that health care delivered to patients is as far as possible based on good evidence, that the care is effective and thus in at least one of the dimensions of quality, is good quality care. There is plenty of evidence both in the published literature and as local data that suggests that some patients who would benefit from effective treatments do not get them. This in turn raises questions of individual and organisational change, as even apparently minor changes to clinical interventions that would improve quality sit in complex organisational settings. The evidence based-medicine movement is one potentially powerful source of practice change, with its emphasis on the use of treatment that is founded on the best evidence. Assuring evidence based practice is an important aspect of quality improvement and assurance for managers and clinicians alike.

This article explores an attempt to ensure that newly emerging high quality and evidence based treatments are offered to patients, drawing on the experience of a case study in a major clinical setting. Moving to more evidence-based forms of practice was dependent on a favourable local history and the earlier development of clinical managerial capacity, and did not happen just because of a "science push". It was also associated with some important role changes within the unit concerned—for example, prescribing decisions. The case study also suggests that much evidence is of a provisional, fluid, and fast developing nature and that therefore implementation of evidence-based medicine is much more of an interactive process than the linear model often portrayed.

How should we view the emergence of policy initiatives such as evidence-based medicine, which attempt to rationalise more informal and tacit approaches to the practice of medicine? We have seen increasing stress on the use of formal evidence in deciding which medical technologies should be implemented in health care. Based on Cochrane's early work,<sup>1</sup> it is now increasingly argued that health care interventions should be tested against explicit evidence of effectiveness and also efficiency. In this account, investment in new technologies represents a visible decision point which should be influenced by information such as evidence-based medicine.

These ideas call for clinical practice and healthcare policy making to be based on "a

formal and explicit mode of rationality"—such as (ideally) data derived from randomised control trials often perceived as the most reliable and valid category of data. This perspective is very different from the "political mode of rationality"<sup>2</sup> often shown in the past to dominate the making of healthcare policy or indeed notions of "tacit or implicit clinical or policy knowledge"<sup>3</sup> whereby medicine can be seen as much as a craft as a science. The language of a linear and rationalistic approach to decision making is often used (there are similar ideas within the assessment of health technology<sup>4</sup>) as healthcare organisations are enjoined to implement change at a corporate level. All this is dependent on the achievement of radical cultural change at collective and also individual levels and should be seen as highly problematic.

### ACHIEVING ORGANISATIONAL CHANGE: SOME CORE IDEAS

What theoretical and empirical light can the discipline of organisational behaviour shed on this field? It is instinctively sceptical of formal and hyperrational approaches to decision making, although its scepticism needs to be subjected to empirical tests. Indeed, recent empirical work<sup>5</sup> has traced organisational and behavioural—as well as formally scientific—factors which affect clinical decision making. The perspective as seen through organisational behaviour allows for widespread difficulties in implementation, as there is much more emphasis on the role of the informal organisation, and the way in which work practices emerge locally through negotiation between different stakeholders.

Professional organisations—such as healthcare organisations—have a distinctive form which requires a particular management style. Medicine has been seen as a supremely successful example of a self regulating profession,<sup>6</sup> although there is a current debate about whether this is now breaking down. As Bucher and Stelling<sup>7</sup> argue, professionals typically build their own work roles rather than fit into preset ones. There is the spontaneous emergence of autonomous segments reflecting the growth of new fields, which guard their own work practices with care. Typically there is collegial control by a body of senior professionals. Interventions from external agents such as general management will often be rejected by key professional power groups under these conditions. The question is rather whether a group of senior professionals can progressively be engaged with a more managerial agenda, through the construction of hybrid roles—such as clinical director.

**Department of Public Services Management, Imperial College Management School, Princes Gate, London, UK**

Ewan Ferlie, professor

**HIV/GUM Services**  
D E Simon Barton,  
consultant physician and  
clinical director

**Chelsea and Westminster Hospital, Fulham Road, London SW10, UK**

David Highton, chief executive

Correspondence to:  
Professor E Ferlie,  
Department of Public Services Management, Imperial College Management School, 53 Prince's Gate, London SW7 2PG, UK.

Secondly, the perspective of organisational behaviour also conceives of the knowledge power of the professionals as a key dimension which helps ensure their continuing dominance. This knowledge based perspective complements Friedson's<sup>6</sup> emphasis on their special legislative position as a source of control. As professionals typically have more knowledge than their clients (or purchasers, in the health-care context), they are difficult to control through standard contractual arrangements.<sup>8</sup> Such professional bodies of knowledge are often abstract in nature and difficult for lay personnel to comprehend. They evolve in a more specialised and also dynamic manner, again excluding lay personnel. Certainly we see an explosion of research and development both within biomedicine and more recently within health services research. These developments are of particular importance in teaching hospitals which are in essence engaged in the production of novel clinical knowledge.

This knowledge may also include strongly tacit elements<sup>3</sup> strongly embedded within the professional community. Professionals take a private view of colleagues' work based on years of social interaction. Key pieces of information are exchanged along informal networks—such as the very early results of trials which may be discussed with research colleagues well before they reach the public domain. So whereas non-professionals may well be able to acquire information through improved data systems, such tacit knowledge is retained within the profession and remains elusive.

There is a need to develop a theory of organisational change—such as the example of a move to evidence-based medicine—within such professional organisations. Much of the profession's literature assumes continuity, but what are the circumstances under which change might take place? In a study of the processes of strategic changes in healthcare services, Pettigrew *et al*<sup>9</sup> developed the metaphor of "receptive and non-receptive contexts for change". Healthcare organisations showed different levels of background receptivity for change depending, for example, on the degree to which a multidisciplinary leadership team had been established or the level of conflict between managerial and clinical groups. Although these factors were fixed in the short term, they were capable of being shaped in the long term. For example, hospitals which have focused on the development of a cadre of clinical directors may now find that they are producing more effective bridging mechanisms between managerial and clinical communities. Hinings *et al*<sup>10</sup> also suggest that the level of commitment of the key professional power holders is the key to the success of any proposed agenda for change. In successful change, at least a critical mass of professional staff need to consent and better still lead the change. The degree to which there is sustained strategic leadership from the top of the organisation from a mixed team which includes senior professional figures may also be important<sup>11</sup> in empowering change.

#### PLAN OF THE PAPER

This paper presents an analytical case description of recent important investment decisions taken by a major hospital in the United Kingdom. It is jointly written by a general manager and a clinical manager and an outside academic with a special interest in organisational and management research in health care. The case describes a series of decisions in which a succession of new technologies (here new drugs and laboratory tests of their effectiveness) were formally adopted by the hospital. The case history is succeeded by a case analysis which draws out some general learning points about the use of evidence and the reshaping of organisational systems that make decisions.

The paper is not, however, the product of formal research and it is recognised that other people may provide different interpretations of the same events. It is not of course, possible to generalise from one case study, although it would be interesting to discover whether further case studies would establish a pattern. Case study methods do more successfully uncover how decisions were really made and the meaning people gave to their actions than do more quantitative methods.

#### Service background

##### NATIONAL CONTEXT

The rapid development of HIV/AIDS services was a marked feature of the United Kingdom healthcare system of the 1980s, especially in inner London where a major case load emerged.<sup>12 13</sup> This process of service expansion was largely unplanned in the first instance, often led by key clinicians acting as "product champions"<sup>14</sup> and also well organised patient advocacy groups. Ring fenced resources were made available by the Department of Health which was in crisis mode, fearing that the situation could escalate into a major epidemic. The pattern of service development was noticeably bottom up, with a premium placed on local creativity rather than a formal top down planning framework.

By the early 1990s, it was clear that the United Kingdom epidemic was not increasing at the rate originally feared, although pockets of heavy demand emerged, especially in inner London. The AIDS issue lost some of its high political profile and cutbacks in ring fenced HIV funding in the mid-1990s forced a reconfiguration in the sector, especially as resources were shifted from community based facilities to help pay for the new generation of drugs becoming available. These new drugs held out the promise of important therapeutic advance. As a result of improved patient outcome, the number of hospital beds needed also started to decline (figs 1 and 2). Key strategic issues facing policy makers are: which of the new drugs should be seen as evidence based? If they are introduced, how should the National Health Service (NHS) pay for them?

##### LOCAL HOSPITAL CONTEXT

For the hospital as a whole, these developments within HIV/AIDS services were of a

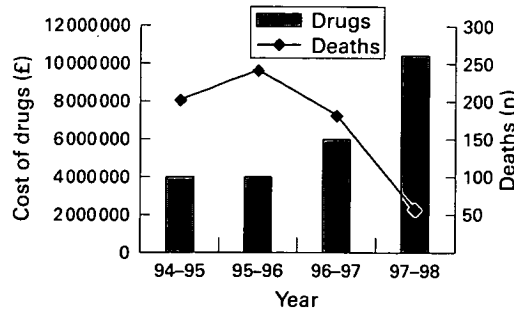


Figure 1 Changes in drug expenditure and death rate.

truly strategic importance and scale involving some important investment decisions. Services for HIV/AIDS represent a very major service block within the hospital concerned. The hospital is located in an affluent area of inner west London with a large demanding middle class community. Many of the patients with HIV/AIDS are from the homosexual community, with a tradition of active fund raising and also lobbying. Its original base was in the old St Stephen's hospital, which was a service oriented hospital with crumbling fabric. The hospital has gone through a major and high quality redevelopment programme in the past decade, and has merged with a neighbouring teaching hospital. It is now known as the Chelsea and Westminster Hospital. This merger has also strengthened its academic and research base, as well as its traditional service orientation.

The hospital became a self governing NHS trust in the early 1990s, with its own chief executive, trust board, and senior management team. It has also built up clinical directorates, with a generally positive pattern of relations between clinicians and managers.

DIRECTORATE CONTEXT

The GUM/HIV directorate is one of five clinical directorates in the hospital, with a present annual budget of £28 million. The services concerned are of an open access nature, which means they need to respond to changing patterns of patient demand. The services have the largest single patient load of any in the country, with a large homosexual clientele. The

patients are located in a purpose built centre, which provides a separate building and in some ways a separate culture from the rest of the hospital. An impressive clinical research programme has been build up, with a tradition of publication. The voluntary sector has been highly active in fund raising and in providing support for clinical services.

The HIV/AIDS services are seen broadly within the hospital as of real importance to it as a whole. They are well known nationally and have helped raise the profile of the hospital. They have attracted very considerable ring fenced funding from the NHS. They are also responding to a major healthcare need in the locality. The founding clinical director stood down in 1996 to further his research interests as research director and a successor was then appointed from the existing consultants.

Case analysis and discussion

The case study is characterised by an inter-linked series of at least three major decisions for the hospital and directorate to invest in drugs. Such investment decisions are processes rather than discrete events, as they are of an emergent and developmental nature and proceed over several years. They are then more fluid and iterative than the conventional adoption of a decision based on fixed technology. At the same time, a consistent clinical logic governed the move from single, to double, and then to triple therapy.

MULTIPLE STAKEHOLDERS WITH DIFFERENT LOGICAL VIEWS OF ACTION

Firstly, the decision making process proceeded through a multiple stakeholder system in which randomised controlled trials based on science represented only one logical reason for action. There was also a strong role for patients—in what are open access services based on self referral—and activist groups as well as scientists in shaping the clinical trials. Patients have been given a much greater role in influencing the HIV trials than has been traditional. Informed patients might indeed refuse to continue to participate in trials, once encouraging preliminary results were available and it was

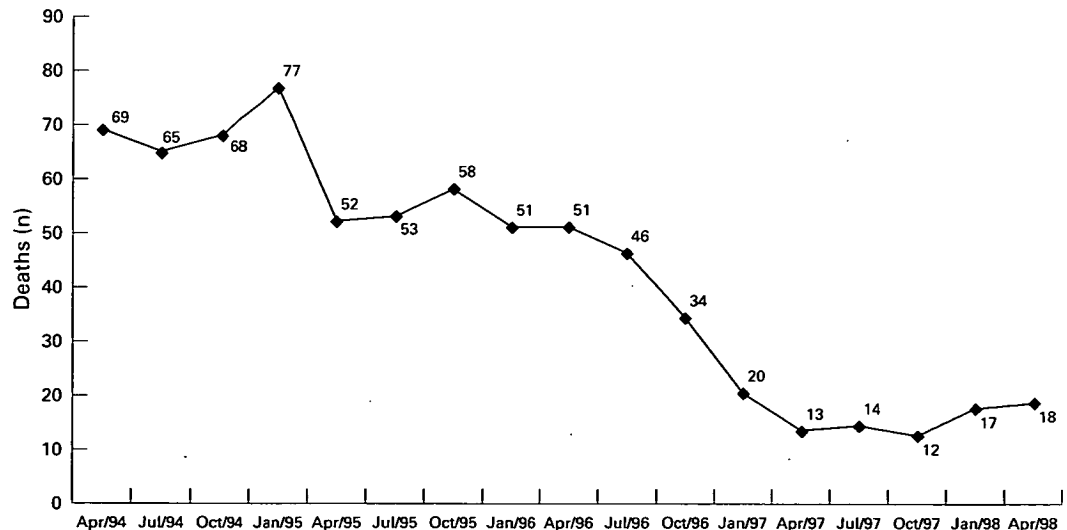


Figure 2 HIV deaths per quarter at the Chelsea and Westminster Hospital April 1994–June 1998.

**Case history**

**1972:** First consultant in genitourinary medicine appointed to St Stephen's Hospital, on a part time basis and with no junior staff.

**1980:** Redeveloped clinic for sexually transmitted diseases opens at St Stephen's Hospital, based on founding principles of a high quality, non-judgemental service offering continuity of care, and in practice an alternative system of primary care as many patients were unwilling to approach their general practitioners (GPs). A substantial homosexual patient load begins to emerge on an open access basis. This patient cohort also begins to attract an interest from drug companies from the point of view of running trials and a research interest begins to develop within the clinic. A collaboration within the hospital emerges with a gastroenterologist interested in stomach infections, describing the then new entity of "gay bowel syndrome". This interest then moved into the emerging HIV field.

**Early 1980s:** First AIDS cases emerge locally, stimulating the early development of AIDS services from a temporary base in the clinic for sexually transmitted diseases and initially as a research clinic. Some hospital beds identified in the medicine unit. The gastroenterologist emerges as a key clinical leader and formed a research group on the basis of soft money—for example, first research fellow appointed in 1983. Traditions of self financing, of trials research, of early access to new drugs, and of substantial operational autonomy are all established at this point.

**Mid-1980s:** Rapid escalation of patient numbers locally as the hospital emerges as a major service provider; government begins to make ring fenced resources available to support service development; such development is backed by new general managers; the number of consultants staffing the service begins to increase;

**Late 1987:** Introduction of azothiaprime (AZT) as the first drug for HIV/AIDS patients nationally and locally, coming in on a clinical trial and outside the remit of the hospital drugs committee; AZT was licensed on the basis of early trial data, partly reflecting activist pressure; later research data did not confirm its early promise.

**Late 1980s:** New purpose designed centre for HIV/AIDS planned and built locally with strong voluntary sector and NHS support; strong emphasis in the new centre on a new way of working (multidisciplinary working and user and volunteer involvement); more new consultant appointments but from within existing junior staff, leading to strong cultural replication.

**Early 1990s:** Comprehensive redevelopment of the rest of the hospital; only the HIV/AIDS centre continued on site. Now provided care to the largest group of HIV positive people in the United Kingdom. The hospital becomes an NHS trust with its own board and chief executive officer, relating to its healthcare purchaser through the contract. Clinical directorate structure set up with the key gastroenterologist/HIV clinician becoming the first clinical director for HIV/GUM services (1990). Operational management posts also strengthened within the directorate.

The HIV workload continues to increase. Continued expansion of the number of specialist clinics. The research base consolidates with the production of many papers. The centre is now marked by an active research consciousness.

**1992:** MRC study of single treatment (the Concorde study) reports, indicating no benefits from early AZT. Stimulates the search for new drugs and leads to a requirement for clinical trials.

**1995:** Publication of the Delta trial on double treatment, indicating benefits. Experimental group enrolled locally, but some of those not enrolled received the drug anyway as part of compassionate release schemes. Begins to exert considerable upward pressure on the directorate's drug budget (£4.4 million in 1995/6). But prescribing was seen locally to be as evidence-based as was possible, and practice had already changed substantially in advance of formal publication. Clinical opinion leaders and the interpretation of early data had both been important factors in change. On the basis of what is known about the behaviour of other viruses, it seemed highly plausible that a shift to double treatment would prove to be of clinical benefit.

**1996:** Emergence on a trial basis of a new generation of expensive but seemingly effective drugs—such as protease inhibitors. Move to triple treatments on the basis of early data and professional discussion rather than final publications at this stage. First randomised controlled trial data emerge and are encouraging; hospital is known for its aggressive treatment and active use of new drugs—welcomed by its patient group. New drugs are heavily marketed by the drug companies, circumventing formal NHS procedures to assess technology. Same conceptual logic governs the shift from double to triple treatment as from single to double treatment.

First treatment guidelines formulated by coalition of national providers (PACT), but of a loose and permissive character. Patient death rates start to decline markedly. Drug company research drives forward, sometimes marginalising the decision making role of NHS purchasers who are, however, generally supportive locally.

**1996:** Second clinical director appointed on the retirement of the first, from within existing staff; Vancouver HIV/AIDS conference is seen as marking the public scientific endorsement of double treatment; rapid increases in drugs budget in the directorate (up to £6 million in 1996–7); host specialist purchaser takes a sympathetic attitude with little explicit questioning; also few national guidelines.

Expert guidance from a national scientific society (BHIVA)—chaired by the first clinical director—tries to adopt a systematic review style, but evidence is still patchy and rapidly developing; cautiously backs a move from double to triple treatment. Early comparative cost data suggest that triple treatment would reduce demands on beds in hospital, and that "such potential savings represent a very attractive return on investment".

However, overall AIDS funding nationally is cut by 7%—hits community care providers particularly severely. £2.2 million extra needed for local pressures on the HIV drugs budget: half picked up by the host purchaser; but half by the hospital. Clinical director presents at the hospital board to win support. The hospital drugs committee and research and development committee both continue to play (as before) a relatively passive role in control of expenditure or overall strategy as many of the decisions are contained within the directorate, negotiating with the corporate centre for support when needs be.

**1997:** First published evidence as to the effectiveness of a new generation of protease inhibitors as part of combination treatment; few peer reviewed papers as yet; expert guidance recognises that trial information is still incomplete but recommends use of protease inhibitors as backed by expert opinion.

London providers lobby upwards—in coalition with their purchasers—to secure more ring fenced finance from the centre to help relieve pressure on the HIV drugs budget (£20 million announced nationally in September 1997 of which £3 million was allocated locally, but allocated on a district of residence basis rather than a district of treatment basis, potentially putting pressure on specialist centres of excellence).

Host purchaser locally drew on contingency funding to meet upwards pressure on the HIV drugs budget within the hospital. However, the directorate also had to deliver an ambitious internal savings programme. This included reduction of hospital beds; lowering of staff levels; and the introduction of a more evidence-based prescribing structure.

A new gatekeeping system for access to new drugs was introduced within the directorate. Prescription was to be through one of three senior clinicians in the directorate, rather than through research fellows or clinical assistants, as had been the case. This had to be negotiated and agreed with the wider consultant body. The HIV drugs budget in 1997–8 was £10 million.

**1998:** Projected HIV drugs budget in the hospital for 1998–99 is £11.7 million. A national HIV/AIDS stocktake considers the long term funding regime, the role of specialist centres and whether services should be moved to a more local basis. Locally, there are plans for a drug development unit to be funded through a mix of internal and external funding.

indeed a common pattern for trials in this clinical field to end early. Early information on the first results of trials was diffused rapidly through self help groups and now the internet. In open access services, healthcare providers need to be sensitive to shifts in patient opinion, if only to ensure patient retention, and have to negotiate around how trials should proceed with outside groups.

So resources are here not allocated solely on the basis of scientific data as healthcare policy making continues to show a political as well as a scientific basis. Thus, securing more ring fenced funding by management was an important skill. Budgetary constraints were softer than they initially appeared, so that the task was to secure additional resources as well as to secure value for money out of existing budgets. Drug companies also emerged as major stakeholders, as funders for much of the basic research which was driving the development of new drugs. They are of course private corporations outside direct NHS or regulatory control and were active in pressing for the early adoption of new drugs.

#### LOCAL PRODUCTION OF KNOWLEDGE

Secondly, the case study indicated that there has been as yet little place for formal or corporate systems of evidence-based medicine. Guidelines on prescribing and monitoring retroviral disease developed naturally, driven by leading edge providers. There was no real guidance from purchasers or in clinical effectiveness bulletins and such guidance as is available tends both to be provider driven and relatively permissive, reflecting the still provisional nature of much knowledge. These seminal advances already described occurred quickly and necessitated thinking while doing so that while the directorate was busy assessing the impact of the drug costs of patients receiving two nucleoside analogues by reading the Medical Research Council Delta trial, so protease inhibitors were licenced, with a consequent radical change of focus. So formal, hospitalwide structures, systems, or interventions were by themselves only of relatively modest importance, and key prescribing decisions were contained within the clinical directorate.

#### MOVING TO (PROVISIONAL) EVIDENCE-BASED PRACTICE

Thirdly, there is by no means a cavalier disregard for science but rather a keen sense that scientific evidence is important—yet often provisional—in clinical decision making.

There is a search for robust evidence and randomised controlled trial data are awaited keenly, reflecting the strong research culture in the directorate. However, such knowledge based on randomised controlled trials remains provisional so that initial judgements may have to be revised in the light of later data. Nor is this a picture of uncertainty confined to the years of the epidemic, with the eventual emergence of a mature and uncontested science. Fifteen years into the HIV epidemic, the pace of drug development remains fluid and there is

still little long term information as to patient prognosis. Clinicians cope by interpreting such early data as are available, talking about possible implications with others in the professional and indeed patient networks and using them to make what are hopefully incremental therapeutic advances.

The case study produces examples of explicit role changes designed to reinforce the role of evidence in practice. So it is possible to move to more evidence-based forms of clinical decision making, despite political constraints and the provisional nature of much knowledge. We specifically see the insertion of new prescribing gatekeeping roles and some centralisation of clinical decision making as part of the deal to win extra support from purchasers. Also, the rapid development of information technology systems makes it easier to identify and challenge prescribing outliers. However, this renegotiation of clinical work practices is held locally and largely contained within the directorate. The critical role of the clinical director and directorate in fusing clinical and managerial principles into a coherent whole at a local level is apparent. The analysis of Montgomery *et al*<sup>15</sup> of clinical decision making in relation to HIV/AIDS which found an important contradiction between espoused corporate hospital policy and actual clinical practice was not confirmed in this case study.

#### PROFESSIONAL DOMINANCE AND CONTROL OVER KNOWLEDGE

Fourthly, the case study confirms that clinical knowledge is a powerful resource and still largely concentrated in the hands of certain professional groups, especially where they are involved in active research. This could explain the marginal role of purchaser driven change and the lack of effective questioning of practice by clinicians outside the directorate: the directorate retains an effective monopoly of expertise in its own field. This monopoly of knowledge includes both formal components (a comprehensive knowledge of the results of randomised controlled trials) and informal components (participation in national and international research networks which give early access to emerging results and to shifts of expert opinion, an ability to conceptualise on the basis of early data).

As other work has indicated,<sup>5 16 17</sup> different forms of evidence may be acceptable to different groups. In this case study, patient groups were pressing for the adoption of new drugs which showed promise, even if data were not complete. Meta-analysis and healthcare purchasers were likely to take a cooler view, asking how robust the evidence really was to support the prescribing of a host of expensive new drugs. In the middle sat the practicing clinicians anxious to respond to the possibility of therapeutic advance, on the basis of good if not perfect data. The argument was made on the basis of “biological plausibility” given the behaviour of other viruses as well as final data from primary trials. Indeed, trials might be stopped early because of problems of patient



retention, or modification of the original protocols in the light of later data.

#### A NEW MODEL OF IMPLEMENTATION OF EVIDENCE-BASED MEDICINE

The overall conclusion of the case study is that there is much more to the implementation of evidence-based medicine than the one off adoption of a formal structure or set of decision rules. Such structural interventions are likely to have no more than a marginal impact. It is also highly misleading to talk of the board of a healthcare organisation deciding to "implement" evidence-based medicine in any real sense, given that local work practices within the hospital may need to be reshaped on a much more bottom up basis. Many of the decisions about the use of evidence may be contained within specific clinical groups rather than lying at a corporate level. A research culture receptive to notions of evidence is only built up over a long period of time. Different people and groups also have different ideas about what indeed constitutes good evidence, and formal evidence from trials is only one aspect. Clinical leadership within these settings may be crucial to the overall impact of ideas on evidence-based medicine, and a key role of board members—such as the medical director—may be to grow these clinicomanagerial hybrids.

This is not to say that the evidence-base of healthcare is unimportant and the case study itself shows that the reverse is the case. A conscious search for new evidence and its translation into clinical practice may well be a hallmark of a high quality service, where there is a real commitment to rapid reflection, learning, and change. Such processes of change in evidence-based research and practice may well be more tacit, provisional, locally based, or dependent on clinical insight (as well as empirical data) than is conventionally por-

trayed in linear models of implementation of evidence-based medicine. This is after all consistent with much of what we know about change in professional organisations. It is to be hoped that those currently designing clinical governance systems to assure high quality and evidence-based services will learn from the information relevant to policy and practice now available from research conducted on organisational change within health care.

- 1 Cochrane A. *Effectiveness and efficiency: random reflections on health services*. London: Nuffield Provincial Hospitals Trust, 1972.
- 2 Alford R. *Health care politics*. London: University of Chicago Press, 1975.
- 3 Polanyi M. *The tacit dimension*. London: Routledge and Kegan Paul, 1966.
- 4 Banta HD, Behney C. Policy formulation and technology assessment. *Milbank Memorial Fund Quarterly Health and Society* 1981;59:445-79.
- 5 Wood M, Ferlie E, FitzGerald L. *Achieving change in clinical practice: scientific, organisational and behavioural processes*. University of Warwick: Centre for Corporate Strategy and Change, 1998.
- 6 Friedson E. *Professionalism reborn*. Cambridge: Polity Press, 1994.
- 7 Bucher R, Stelling J. Characteristics of professional organisations. *J Health Soc Behav* 1969;10:3-15.
- 8 Sharma A. Professional as agent: knowledge asymmetry in agency exchange. *Academy of Management Review* 1997;22:758-98.
- 9 Pettigrew A, Ferlie E, McKee L. *Shaping strategic change*. London: Sage, 1992.
- 10 Hinings C, Brown JL, Greenwood R. Change in an autonomous professional organisation. *Journal of Management Studies* 1991;28:375-94.
- 11 Denis JC, Langley A, Cazale L. Leadership and strategic change under ambiguity. *Organisational Studies* 1996;17:673-99.
- 12 Berridge V, Strong P. *AIDS and contemporary history*. Cambridge: Cambridge University Press, 1993.
- 13 Berridge V. *AIDS in the UK*. Oxford: Oxford University Press, 1996.
- 14 Bennett C, Ferlie E. *Managing crisis and change in health care*. Buckingham: Open University Press, 1994.
- 15 Montgomery K, Oliver A. Responses by professional organisations to multiple and ambiguous institutional environments: the case of AIDS. *Organisational Studies* 1996;17:649-71.
- 16 Dawson S. Inhabiting different worlds—how can research relate to practice? *Quality in Health Care* 1997;6:177-8.
- 17 Rosen R, Mays N. The impact of the UK NHS purchaser-provider split on the rational introduction of new medical technologies. *Health Policy* 1998;43:103-23.

# Mapping out the patient's journey: experiences of developing pathways of care

Amanda Layton, Fiona Moss, Graham Morgan

## Introduction

A patient's experience of an episode of care is sometimes likened to a journey. But the patient as traveller may feel more like an intrepid explorer continually coming up against the unknown rather than a modern traveller whose journey has been planned with a travel agent and who has possession of a detailed written itinerary. Planned journeys carry less risk than unplanned ones, and knowledge of the journey's steps and stages reduces anxiety and fear. Our patients should expect at least the same amount of planning for and information about their health care as they get from travel agents about their travel plans.

Much health care, even that which is elective and a routine part of the function of a department within a hospital is delivered as a series of unwritten steps, shared only partly within the clinical team, and often dependent on memory. With the inevitable turnover of professional staff, checks on the process of care may get left out. For example, the routine use of prophylactic antibiotics in bowel surgery may be forgotten.<sup>1</sup> And as a patient's care may often extend beyond one clinical department and include other teams—for example, radiology and anaesthetics—there is a clear potential for the breakdown in the process of care. Examples of such lapses include patients admitted for a routine operation, which has to be cancelled because the anaesthetist did not know in advance of a medical problem—such as hypertension. Furthermore there are many published and local data that show that many people who would benefit from effective and appropriate interventions simply do not get them. Aspirins and  $\beta$  blockers, for example, have been shown to improve survival after myocardial infarction, but studies show that many of those eligible do not get these drugs.<sup>2</sup>

We describe in this paper the experience of one hospital in developing care plans (sometimes referred to as care pathways or care protocols) for many groups of patients and incorporating these within a multiprofessional single record of patient care. These protocols describe explicitly all the expected processes of care,<sup>3-5</sup> and are tools that determine predictable good quality patient care.<sup>6</sup> Professional staff were involved in these changes from the outset as they had to explain and agree the pathways that for years had been unwritten. The process of doing this was not straightforward and many staff found the process difficult. But now almost 8 years on, experienced and new staff alike not only accept the new approach to patient care but would find it difficult to go back to the old ways. We are able to show clear

benefits in patient care; in saving staff time, and in attitudes to team work.

## Setting out care plans

The prospect of setting out a multidisciplinary plan of care for each person may seem daunting. Ideally for each patient an outline of their expected treatment pathway should include details of best practice described in the context of the organisational structures of the individual hospital. An episode of care for any individual patient is a complex series of interactions that make up the *processes of care*. These often involve many people—for example, over 20 people may have a role in the outpatient care and investigation of a patient with lung cancer that occurs *before* referral to a surgeon for consideration of surgery. But for many conditions, the stages of care are predictable. This is particularly evident for those undergoing elective surgery for whom a well defined series of inputs achieves a desired outcome. Medical conditions have a rather lower predictability, but usually follow a common pattern and even for those admitted as medical emergencies the course of care will be largely predictable.

## Mapping out a protocol

The process of mapping out the plan of care begins with agreeing the condition type, such as cardiac chest pain. This is to set a boundary around an episode of care. High volume conditions are preferable, because if you are wanting to make a change in managing care you need a critical mass. And it is helpful to start with a relatively easy and straightforward condition, with a high degree of predictability, and which is likely to be a success, so at the Central Middlesex Hospital we began with total hip replacement. At the outset the scientific literature is always reviewed and evidence sought. A group meeting is set up with a representative selection of staff to talk through the process, facilitated by a member of the quality or audit department. This meeting is the key to setting and planning the process. It highlights all the steps in the process for the team, in which traditionally professionals see only their part of the process. Despite the fact that individual people meet and talk to each other often about the patient's progress. In the normal case of clinical work, doctors, nurses, and professions allied to medicine seldom meet to agree, or even discuss a common plan for patients with particular conditions in which they relate what it is they do and how this impacts on the overall plan. Surprising as this would seem to the thousands of patients entering hospitals each day few organisations will have agreed a common plan with all the contributing members of the team.

Central Middlesex  
Hospital NHS Trust,  
London, UK  
A Layton, head of quality  
F Moss, consultant  
physician  
G Morgan, executive  
director of nursing and  
quality

Correspondence to:  
Ms A Layton, Head of  
Quality, Central Middlesex  
Hospital NHS Trust, Acton  
Lane, London NW10 7NS,  
UK.

In these meetings key milestones for the protocol are identified. They include evidence-based standards—such as discharging postmyocardial patients on aspirin and  $\beta$  blockers unless contraindicated—areas of great variation, critical steps in the process, and priorities for the organisation such as duration of stay (box 1).

The process of mapping out such details often shows activities that either do not contribute to care, or are wasteful repetitions of tasks done by others. Duplication of tasks is a common feature—such as varying degrees of dietary advice provided by dietitians, nursing staff, and the specialist rehabilitation nurse. The role of the quality or audit department in this process is to challenge the status quo, a role with which most audit departments would feel distinctly uncomfortable. During the discussion on the mapping out process the question often posed is: “what is the most appropriate activity, when is the most appropriate time for it to be carried out, and who is the most appropriate person?” Should consensus not be achieved before implementation, the outcomes are audited and the process reviewed at a later date.

#### Designing protocols to suit individual needs

Care may be predictable but alterations to a prescribed pathway will be needed for some people. This should not be seen as an argument against protocols but rather as an indication of the need for flexibility to account for different needs of patients and also of how they should be used—as templates to guide care. Clinical judgement and decision making are required even when the processes of care are written down and shared with all those concerned. Protocols should incorporate branches in the pathways for care that describe possible pathways for care. A successful protocol will include these branching points that leave discretion about decision making to the clinician. Examples of the need for flexibility include indications for alternative drugs for those persons allergic to standard prophylactic antibiotics and the need to alter the care pathway for those who do not respond to treatment as predicted.

When patient progress or any aspect of patient care does not match the pathway set out in the protocol this is described as a “variance”. Variances may simply be because a patient responds slowly or does not respond to treatment. Other variances, however, may reflect difficulties in delivering care. For example, 8 years ago when we developed the first protocol in our urology wards we found that a proportion of patients undergoing prostatectomy were being discharged home on average two days later than their predicted date of discharge. On investigation we found that for some patients in this group, the urinary catheters were scheduled to be removed on a weekend, and when their doctor was off duty this was deferred until Monday. Setting out the process of care in a protocol identified a situation which had probably been happening for years. Once noticed the problem was resolved by agreeing criteria for removal and giving

nurses the authority to decide about removal of catheters within prescribed parameters agreed by the consultant surgeon.

#### The patient record

If care is to be planned, made explicit, and shared, then the details of care need to be easily accessible as a written record. The ideal place for this is the patient record. Traditionally the *medical notes* are the main record of patient care and nurses and therapists usually keep their notes as a separate record. Unstructured medical notes normally include a retrospective record of what happens to a patient but even so cannot be guaranteed to contain all the information necessary for quality assessment and may include much redundant detail.<sup>7</sup>

A structured patient record includes not only the space for detailing the retrospective story of patient care but also a forward plan of expected treatment and includes prompts and reminders. Such plans are not simply a record of actions of the different professions<sup>8</sup> but are written so that the whole team work to a shared plan that is available also to the patient. Duplication of activity and documentation is minimised. All healthcare professionals record their notes in the single record that is the only record of patient care. In the complex environment, the use of the multiprofessional record of care encouraged the close team working that is essential for good patient care.

#### Using the protocols

The predicted plan is designed in such a way as to provide clarity and reduce time in documentation. Staff indicate simply by documenting on the protocol whether an activity or milestone has been met and the reason if not, providing a basis for audit data. Space for free text adjacent to the plan is provided for additional details or information. The problem with a structured paper document is getting the amount of free space just right. Inevitably it is too much or too little and this process is helped when staff write on each line and not across the whole page. As a multidisciplinary record is used by all staff, notes made, for example, during a ward round are only needed to be documented once.

In accident and emergency departments the protocols are symptom based—such as “painful hip”, they follow the same structure and are designed for use as the record of care. They are placed on the computer system, and are printed out for use after triage.

Throughout the hospital, where a patient's diagnosis does not fall within a written protocol, then staff use multidisciplinary notes that mirror an empty protocol.

One key hurdle to overcome was the location of the unitary record. This may sound relatively unimportant, but it can prove to be one of the most difficult problems to put right. Many factors influence this, mainly professional differences and preferences in recording care. A natural concern expressed by clinicians surrounded the issue of confidentiality. To resolve this issue, we have chosen to keep most records in a central

**TOTAL ABDOMINAL HYSTERECTOMY PROTOCOL**

POST-OP DAY 2 Date: \_\_\_\_\_ NAME: \_\_\_\_\_ HOSPITAL NUMBER: \_\_\_\_\_

MILESTONES:		REASONS IF NOT MET at 4 00pm
■ Apyrexial	Y / N	
■ HB > 10.5 g/dl and no clinical symptoms of anaemia	Y / N	
■ Passing urine normally	Y / N	
■ Bowels open	Y / N	
■ Evidence of wound healing	Y / N	
■ Pain free with or without analgesia	Y / N	
■ Independently mobile	Y / N	

ASSESSMENT	
■ Vital signs; fluid balance; pain; bowels	
INVESTIGATIONS	
■ FBC Y / N Result: _____ Remove venflon (If blood transfusion not required). Removed Y / N	
■ Is patient pyrexial? (2-3 <sup>o</sup> rise above baseline recorded presurgery) If YES Y / N Review blood count, wound and chest. Consider blood cultures (Ideally 3 separate samples NOT taken through the IV line) Y / N Consider urine sample (Infection unlikely to be caused by a catheter if only in situ for 24 hours especially if the patient has received prophylactic antibiotics) Y / N	
DRUGS	
■ Obtain TTOs Y / N ■ Sodium heparin 5000 iu sc twice daily ■ If additional antibiotics are required the PR route for flagyl is recommended until oral doses are tolerated	
MANAGEMENT	
■ Walk to washroom to carry out ADLs Y / N ■ Check TEDs used correctly and heels not discoloured Y / N ■ Normal diet Y / N ■ Wound: Abdominal: Dressing checked and satisfactory Y / N Vaginal: Check PV loss not excessive Y / N ■ Confirm patient for CCT + commence discharge checklist Y / N	

am	pm	Night
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Box 1 Examples of protocols.

notes trolley, although in some areas—such as short stay elective surgery and orthopaedics, the records are held at the end of the bed.

**Progress so far**

About 85% of surgery is now managed according to protocol, 40% of medicine and 70% in accident and emergency, which includes both specific and general protocols.

The focus to date has been on the inpatient episode of care (box 2). The emphasis now needs to move to the outpatient arena, and engage our primary care partners in agreeing a common plan which crosses the primary and secondary care interface.

**Difficulties and barriers to development of protocols**

The process of introducing these changes was not straightforward and initially each protocol was developed through several months of discussion. Concerns and anxieties were expressed by some throughout the development. Eight years after we started this project the use of care protocols within structured notes are now fully embedded in the routine process of care delivery, and the improvements in patient care are tangible. However, there remain a few who would be like to return to the plain history sheet, or traditional nursing or paramedic model.

**ADULT ASTHMA PROTOCOL**

Patient name: \_\_\_\_\_ DAY 2 \_\_\_\_\_ Ward \_\_\_\_\_

<b>MILESTONES/OUTCOMES</b>	<b>MET</b>	If no please give reason
<ul style="list-style-type: none"> <li>■ Inhaled steroids commenced <input type="checkbox"/></li> </ul>		

<b>ASSESSMENT</b>	<b>Better</b>	<b>Same</b>	<b>Worse</b>
<ul style="list-style-type: none"> <li>■ Nocturnal breathlessness <input type="checkbox"/></li> <li>■ Able to speak full sentences <input type="checkbox"/></li> <li>■ Wheeze <input type="checkbox"/></li> </ul>			
<ul style="list-style-type: none"> <li>■ Observations: TPR and BP 6 hourly Peak flow pre and postnebuliser Daily urinalysis for glucose _____</li> </ul>			

<b>INVESTIGATIONS</b>	<b>Yes</b>	<b>No</b>	<b>Comments:</b>
<ul style="list-style-type: none"> <li>■ U + Es for K<sup>+</sup> <input type="checkbox"/></li> <li><i>If not already taken or low admission</i></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

<b>DRUGS</b>	<b>Yes</b>	<b>No</b>
<ul style="list-style-type: none"> <li>■ Commence inhaled steroids (with device most suited to patient)</li> <li>■ Continue with oral steroids</li> <li>■ Commence inhaled B<sub>2</sub> agonists and discontinue nebulisers IF PF plateaued AND MD &lt; 20% of highest PEFR AND O<sub>2</sub> saturation on air normal</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Commenced		

<b>MANAGEMENT</b>	<b>Yes</b>	<b>No</b>
<ul style="list-style-type: none"> <li>■ Care plan discussed and explained to patient by: _____ (sign)</li> <li>■ <b>Disease management:</b> Discuss management of disease, check understanding and suggest coping skills</li> <li>Asthma leaflets given <input type="checkbox"/></li> <li>■ <b>Inhaler technique:</b> Check technique and record: Type: _____ Device: _____ Competent: <input type="checkbox"/></li> <li>■ <b>Smoking:</b> If patient smokes discuss ways/help to give up. Advice leaflet given <input type="checkbox"/></li> </ul>		

<b>ADDITIONAL INFORMATION</b>

RGN: am _____ pm _____ Night _____
------------------------------------

Box 1 Examples of protocols.

Although the arguments for making the processes of care explicit were very strong, many healthcare professionals found this a difficult process that was met with anxiety and some scepticism. Mapping out care in this way confronts both the nature of the clinical team and perhaps unstated power struggles within it. For doctors a particular concern was the potential threat to individual autonomy.<sup>9</sup> Protocols were described by some as "cook book medicine" and were initially regarded as inferior structured notes despite evidence that it may be better to follow a guideline than to improvise.<sup>10</sup> An extreme example was one consultant who instructed the medical team

when on call at night to remove medical notes from the multidisciplinary protocol thus recreating separate nursing and medical records.

A concern expressed by nurses was that protocols may detract from their opportunities to communicate directly with patients. Nursing, traditionally and importantly, incorporates nurturing, caring, and advocacy as defining functions. The quality of interpersonal communication is not a function of the model of care, but reflects a basic respect for people. In any interaction between clinician and patient the presence of protocols does not exclude the necessity to engage in a meaningful dialogue.

Medicine:
Asthma
Cardiac chest pain
Acute sickle cell crisis
Diabetic ketoacidosis
Chronic obstructive pulmonary disease
Stroke
Surgery:
Fractured neck of femur
Total joint replacements: hips and knees
Transurethral resection of the prostate
Hysterectomy: vaginal and abdominal
Miscarriage or ectopic pregnancy <18 weeks
Ear, nose, and throat: short stay protocol (grommets / submucosal diathermy / tonsillectomy / myringotomy / bilateral atrium washout / adenotonsillectomy / dewaxing / EUA postnasal space)
Accident and emergency:
Postcoital contraception
Nasal injury and epistaxis
Ankle injury

Box 2 Examples of protocols in use.

### Benefits of structured protocols

Organisational changes—such as the introduction of care plans—are not subjected to the same sort of proof of effectiveness as new clinical interventions. Yet showing whether such changes produce benefit and if so how much and at what cost is important if we are to develop and refine them and if others are to adopt them. But evaluation is difficult. The changes we describe were necessarily introduced incrementally and over the 8 years of this project there have been other factors, both internal and external, that could effect expert changes. Thus it is impossible to prove beyond reasonable doubt the benefits of these changes. But we do have data about some aspects of care and about duration of stay that suggest—perhaps on the balance of possibilities—that these protocols have benefited patient care. Explicit planning of care incorporated in the protocol provides a tool for the assessment of the quality of care and it is easier to assure the

use of effective interventions. Other benefits include reduction in duplication of tasks; reduction in duration of hospital stay for some patients; and better team functioning. These benefits are discussed later.

### QUALITY ASSESSMENT AND BETTER USE OF EVIDENCED-BASED CARE

Staff from the quality department coordinate the development of the protocols. This involvement in a process, now considered to be integral to patient care, has resulted in the quality department being viewed as working with the clinical team and not as a separate external group uninvolved in patient care. As clinicians use protocols and structured notes as part of their daily involvement in patient care, they are also continuously recording the basic data required for audit by charting variance as and when it occurs—a process simplified by the design of the record.

The collection and analysis of data for audit is also regarded as part of the care process. Staff—for example the gynaecology sister—collect the data as they oversee the process of care. Ward staff are involved in its analysis with the quality department, looking for trends, or areas requiring more detailed focused audit, and consider themselves “part owners” of the data because of their direct involvement in the process. The role and impact of audit has thus been extended by the decentralisation of the audit process. Several staff have commented that this method of audit provides a helpful framework on which to oversee or case manage their care delivery.

Clinical teams are now more able to respond to problems highlighted by suggesting and implementing change. Audit data collected retrospectively from unstructured notes were often incomplete; lacked some of the richness of this form of concurrent data as they can include details that are not always routinely documented; were always at least 6 months out of date, and seemed to have less impact on clinical staff.

For example, after confirmation of an acute myocardial infarction, information on time from admission to hospital, to receiving thrombolytic therapy—door to needle time—has been available for all patients admitted with myocardial infarction since concurrent audit for acute myocardial infarction was introduced 3 years ago. It is collected by and owned by the staff involved. They have undertaken detailed analysis of the process from the allocation of the triage category to the time seen and the initiation of treatment by the medical registrar. Their input has helped streamline a difficult and complex process (box 3).

### REDUCTION IN DURATION OF HOSPITAL STAY

We have also noted many other improvements in care that clearly benefit patients and improve the efficiency of the hospital. For example, using protocols for the care of women admitted because of threatened miscarriage of pregnancy has resulted in most women who need a procedure now waiting less than 24 hours. The average duration of hospital stay for many groups of

Milestone targets met	1995 n(%)	1996 n (%)	1997 n (%)
Postmyocardial infarction (unless contraindicated):			
Aspirin on discharge†	124/126 (98)	79/80 (99)	72/73 (99)
β Blockers on discharge†	68/73 (93)	53/56 (95)	42/44 (95)
Cardiac rehabilitation†	40/48 (83)	83/87 (95)	72/75 (96)
Acute adult sickle cell crisis:			
Intramuscular analgesia within 15 minutes of arrival at accident and emergency	2/20 (10)	8/12 (67)	15/24 (63)
Primigravida mothers received Anti-D:			
28 Weeks		31/48 (65)*	26/27 (96)
36 Weeks		37/48 (77)*	25/25 (100)
Postnatal		94/136 (69)*	58/58 (100)
Abdominal hysterectomy:			
Operated on day of admission	4/118 (3)	91/109 (83)	47/50 (94)
Miscarriage:			
Operated on within 24 hours of confirmation of miscarriage	20/50 (40)	181/189 (96)	50/56 (89)
* Before implementation of protocol.			
† Protocol implemented in 1993—limited data available.			

Box 3 Example of protocol milestone targets met.

	1995	1996	1997
Total knee replacement:			
Target duration of stay (nights)	12	11	7
Met target (n (%))	27/57 (47)	43/57 (75)	16/31 (52)
Abdominal hysterectomy:			
Target duration of stay (nights)	6	5	3
Met target (n (%))	32/116 (28)	83/111 (75)	22/36 (61)

Box 4 Protocol duration of stay targets met.

patients has fallen by up to 4 days. In orthopaedics for example, over the past 5 years, the predicted duration of stay for total knee replacement has been reduced from 13 days after operation to 7 days. This has been met, in part by improved, more coordinated working and by providing continuing support for patients at home through the setting up of a collaborative care team.<sup>11 12</sup>

Miscarriage, although not a clinical emergency, is for the patient one of the most traumatic experiences. Prompted by complaints from patients, the current process was reviewed to look at where the problems or blocks lay, a protocol was developed, and specific theatre slots were allocated on a daily basis, the need for which was identified in the review.

Priorities for the organisation have been to reduce duration of stay while improving quality. Detailed analysis of process highlighted that in many respects duration of stay was prolonged due to poor management of process. Commonly held assumptions—such as not discharging patients with a catheter in to a home care team service—need to be and continue to be challenged.

#### SAVING STAFF TIME

The introduction of protocols have resulted in a notable reduction in the time spent recording information. During a routine day the total time spent by all of the nursing staff planning and documenting care was on average 16 hours. The introduction of protocols has reduced this by half, freeing up precious time for "direct patient care".<sup>6</sup>

#### STAFF ATTITUDES

Making explicit and accessible the roles and inputs of all professions has had a positive impact on the way in which individual clinicians work together in a team. This having been said, no one should underestimate the strong pull exerted by individual people and professional groups to a more individualistic approach to care management.

Nursing staff have readily adopted protocols and are happy to acknowledge that the previous nursing models used were both functionally restrictive and difficult to follow.

Doctors, particularly those new to the hospital, found the protocols a very accessible way of getting to know agreed practice—for example, the management of acute sickle crisis. They were not so happy to follow a protocol for a condition which they thought they were competent in. Asthma is a good example of this, whereas the junior doctor thought that the correct treatment protocol or guideline was carried out, audits often suggested otherwise.

#### RISK MANAGEMENT

Involvement in developing protocols was a powerful stimulus to thinking about risk management. This was particularly true in accident and emergency where the nurse's role was being extended in such a way as to incorporate the traditional doctor's role. The protocol set clear and defined boundaries for practice. Examples include ordering x ray films and prescribing medications, initiating treatment, and discharging patients.

#### FINANCIAL PLANNING

Optimum clinical and financial performance often go together, and if a protocol is well designed its exact operation should deliver both. Structured protocols can be used as a management tool in planning healthcare delivery and provide a rational method of examining costs which is perhaps more effective than traditional methods of assessing the costs of clinical practice. Protocols can also be used to control costs through managing duration of stay, reducing duplication of staffing activities, and promoting the use of agreed drug treatments.

#### Costs of introducing protocols

The start up costs were initially much greater than they are currently. Initially one project worker was identified and funded to facilitate the implementation of protocols. This person needed to have clinical credibility and be senior enough to challenge the status quo. This role is now absorbed within the audit and quality department. There are the obvious additional costs of clinical staff time to attend meetings; however, these are far outweighed by the clear benefits of improved team awareness and working and the financial benefits of reductions in duration of stay.

#### Discussion

The changes that we have made to the delivery of care through the process of developing protocols has had an enormous impact both on the quality of care and staff attitudes and approach to practice. Teams work much better when they share the same goals.<sup>13</sup> By incorporating the work of all those who contribute to care as one protocol in one set of notes, people can understand their role in patient care relative to contributions of others. Patients too can see their pathway of care and can link together and make sense of the separate interventions and interactions from different healthcare professionals.

Those who have been involved in any change process, particularly one which involved clinicians, will not be surprised to read that the effort involved in bringing about such change has been monumental.

In one sense the changes have not been that great—after all we only asked clinicians to describe and make explicit care pathways used by their own teams, to re-evaluate that process, and in the light of that, where required, to change the way they looked after patients. There has been little change in *intended* patterns of clinical care. The improvements are because of changes to the organisation of care and to the way people work together. The twin

processes of collating details of care pathways and including these in a single patient record changed the system of delivery of care, a prerequisite for real improvement.<sup>14</sup>

The protocols that we have introduced are not a new idea. We did not invent them. Work on the implementation of clinical guidelines, which are similar in some respects to the protocols, shows that clinical practice guidelines can have an impact on clinical practice. Two conditions that increase the likelihood of clinical guidelines influencing clinical practice—taking account of local circumstances and operating directly on the patient-professional interaction—for example, through restructuring medical records—are both key parts of this project. Our experience is in line with this evidence. But we emphasise that implementation in this way requires the stamina for major change.

Now that we are seeing clear benefits from this project it is easy to forget the problems that we encountered. We underestimated the time that it would take to embed this new approach to care delivery as part of routine practice. And looking back there are many things that we would do differently. For example, one complaint voiced by clinicians was that they did not know what was going on. Although we involved everyone—or so we thought—we clearly did not communicate enough. The process of agreeing care protocols was in itself beneficial as clinicians realised that processes they had assumed were taking place were only happening haphazardly, and the endemic duplication of work became apparent. But many of these discussions were difficult and although in the end these could be described positively as being cathartic we certainly did not predict some of the resistance. There is no doubt that developing care protocols challenged professional boundaries—perhaps crucial for cementing future working partnerships.<sup>15</sup> The need for the changes we have described may seem obvious but we should not underestimate the difficulties; and for some the process of change was painful.

The measured improvements in the use of effective interventions contrast markedly with the much more limited changes that we were able to promote through clinical audit. Some of the changes to care identified through audit seemed to focus simply on the role of one person—for example the person responsible for prescribing preoperative prophylactic antibiotics. But even when the input of an individual clinician is the key contribution, it will only be one of many inputs into patient care. Changes to any one of the many inputs to care may affect the work of others, and conversely, for quality improvement to be effective the whole process of care needs to be shared within the team.

Nevertheless the audit programme did have an influence on this project. Until the introduction of audit clinicians did not have access to aggregated data about the quality of care. The data collected through audit enabled clinicians to see that there were problems with the delivery of care and that new approaches to care

were needed. And the development of the protocols has been led by the hospital's quality department, formerly the audit department.

It was crucial for eventual success that we had the support of senior clinicians—both doctors and nurses—who understood the importance of keeping going through initial difficulties. It meant accepting the need to take risks and learn both from our success and mistakes, and keeping committees to an absolute minimum; there is no more effective mechanism than committees to block change.

The work described here represents the beginning of a process that started 8 years ago. The project is a long term one and there is no predicted completion date. Making these sorts of changes is not a quick fix. More work needs to be done within the hospital and also in developing links with the community so that the hospital care can be seen in the wider context of overall care. The project has not yet been extended to outpatient care. There is a need for continuing development of protocols as care pathways will need to change in response to new demands and pressures—for example, to new advances in anaesthesia and less invasive technologies. But having made the major step of introducing a system in which processes of care are explicit we should be able to respond to the challenges of incorporating new clinical interventions. Berwick has long argued for an approach to quality improvement that is not just about dealing with the problems and deficiencies in health care but is rather about finding systems that work better, which allow readjustments and improvement to take place continuously.<sup>16</sup> At the Central Middlesex Hospital, we may have just taken the first step towards that ideal.

We acknowledge and thank all the people involved in protocols at the Central Middlesex Hospital.

- 1 Moss FM, McNicol MW, McSwiggan DA, *et al.* Survey of antibiotic prescribing in a district general hospital 1. Pattern of use. *Lancet* 1981;ii:349-52.
- 2 Eccles M, Bradshaw C. Use of secondary prophylaxis against myocardial infarction in the north of England. *BMJ* 1991;302:91-2.
- 3 Zander K. Critical pathways. In: Melum MM, Sinioris MK, eds. *Total quality management: the health care pioneers*. American Hospital Publishing, 1992.
- 4 Riches T, Stead L, Espie C. Introducing anticipated recovery pathways: a teaching hospital experience. *International Journal of Health Care Quality Assurance* 1994;5: 21-4.
- 5 Currie L, Harvey. *The origins and the use of care pathways in the USA, Australia, and the United Kingdom*. Oxford: RCN Institute, Oxford Centre, 1997.
- 6 Layton AJ, Morgan G. *The nuts and bolts of patient focused care. Clinical Protocols, book 2*. Nottingham: The Centre for Health Service Management, University of Nottingham, 1995.
- 7 Gabbay J, Layton A. Evaluation of audit of medical records in a district general hospital. *Quality in Health Care* 1992;1: 43-7.
- 8 Layton AJ, Morgan G. Clear winners. *Health Service Journal* 1996;106:27.
- 9 Delamothe T. Wanted guidelines that doctors follow. *BMJ* 1993;307:218.
- 10 Implementing clinical practice guidelines. *Effective Health Care* 1994;8.
- 11 Brindle D. Home comforting. *The Guardian* 8 October 1997.
- 12 Craig K. Hearts and flowers. *Nursing Times* 1997;93:35,12.
- 13 Firth Cozens J. Building teams for effective audit. *Quality in Health Care* 1992;1:252-5.
- 14 Berwick DM. A primer on leading the improvement of systems. *BMJ* 1996;312:619-22.
- 15 Abelson J, Maxwell PH, Maxwell RJ. Do professions have a future. Perhaps if they are not defensive or complacent. *BMJ* 1997;315:382.
- 16 Berwick DM. Continuous improvement as an ideal in health care. *N Engl J Med* 1989;320:53-6.



# Clinical governance: a quality duty for health organisations

Liam J Donaldson, J A Muir Gray

## Introduction

In the first three decades of its existence, the National Health Service (NHS) was administered rather than managed. Change and development occurred by a predominantly "command and control" system of planning. Delivery of services to patients was governed through a mixture of statutory regulations, guidance, operating instructions, and local freedoms. Quality was seen as inherent in the system, sustained by the ethos and skills of the health professionals working within it.

By the 1980s, it was widely recognised that the NHS, like many other healthcare systems of the world, had become demand led with the largest share of resources being drawn into meeting the pressures on the acute hospital sector. Growth and development generally escaped an orderly approach to planning change. Cost containment had become an increasing problem. Various administrative reorganisations of the NHS had failed to make a major impact on these underlying trends. In 1983, an inquiry into the administration of the NHS found a lack of clarity in the overall accountability for service performance at local level. Thus, the Griffiths Report<sup>1</sup> led to the introduction of general management throughout the service. A senior manager was appointed to the head of each hospital and health authority and became responsible for all aspects of its performance. Over time, management was introduced throughout health organisations, notably with doctors being drawn into the management process through the establishment of clinical directorates and clinical budgeting. These changes certainly led to a heightened awareness on the part of those running the service as to their accountability for performance. The emphasis of the accountability rested, however, on financial duties and meeting workload targets. Quality of care remained a declared part of the corporate role but in reality responsibility still rested solely at clinical rather than managerial level.

Soon after the NHS became a managed service, the then Conservative Government introduced a major change to the system of care itself.<sup>2</sup> An internal market was created in 1990 in which responsibilities for purchasing and providing services were separated. Thus, health authorities and general practice fundholders (the purchaser of care) negotiated with NHS trusts (the providers of hospital and community health services) to fund services to meet the needs of their local populations. The supposed benefits of this system were to create incentives to increase efficiency and improve quality. In theory, three potential forces for quality im-

provement were to be released. Firstly, purchasers of service would have a choice as to where to buy services—good hospitals would be rewarded by additional income and bad hospitals would flounder. Secondly, hospitals and other providers of service would vie with each other to offer better and more innovative services and thereby win a bigger share of purchasing budgets. Thirdly, for the first time, contracts for services were to be struck between purchasers and providers and this would offer a way of making explicit expectations about the quality of services to be delivered.

It is doubtful if these forces for quality improvement actually operated in the way intended. For example, a study of the use of contracting to address quality issues found little evidence of a systematic approach to quality improvement being used when contracts were being formulated.<sup>3</sup> The internal market remained controversial throughout its whole period of operation particularly because professional staff and the public remained uncomfortable about notions of competition within a publicly funded service. The costs needed to sustain its transactions also aroused concern. So too did the general air of rivalry and confrontation which pervaded the service. However, other policies introduced around this time also sought to address quality. A responsibility was placed on all hospital doctors and general practitioners to participate in medical audit<sup>4</sup> (peer review) and a set of rights and guarantees on standards of care were established for patients (with particular emphasis on service response times).<sup>5</sup>

The Labour Government which came to power in the Spring of 1997, abandoned the internal market and in a White Paper for the NHS<sup>6</sup> sought to re-engage a spirit of collaboration, openness, and fairness. This new policy also introduced for the first time a statutory duty for quality improvement at local level—clinical governance. Accountability was made clear and the status of quality increased so that one person would be in charge, there would be regular reports to board meetings, and an annual accountability report would be produced.

## Clinical governance: an emerging concept

A frequent criticism by healthcare professionals of the organisations in which they work is that they pay only lip service to quality improvement. It is argued that although corporate plans espouse a commitment to quality, board agendas and management team meetings are predominantly about financial control and meeting activity targets.

Department of  
Epidemiology and  
Public Health,  
University of  
Newcastle upon Tyne  
Liam J Donaldson,  
professor

Research and  
Development, NHS  
Executive: Anglia and  
Oxford  
J A Muir Gray, regional  
director

Correspondence to:  
Professor L J Donaldson,  
NHS Executive: Northern  
and Yorkshire, John Snow  
House, Durham University  
Science Park, Durham DH1  
3YG, UK. Telephone 0044  
191 301 1334; fax 0044 191  
301 1403.

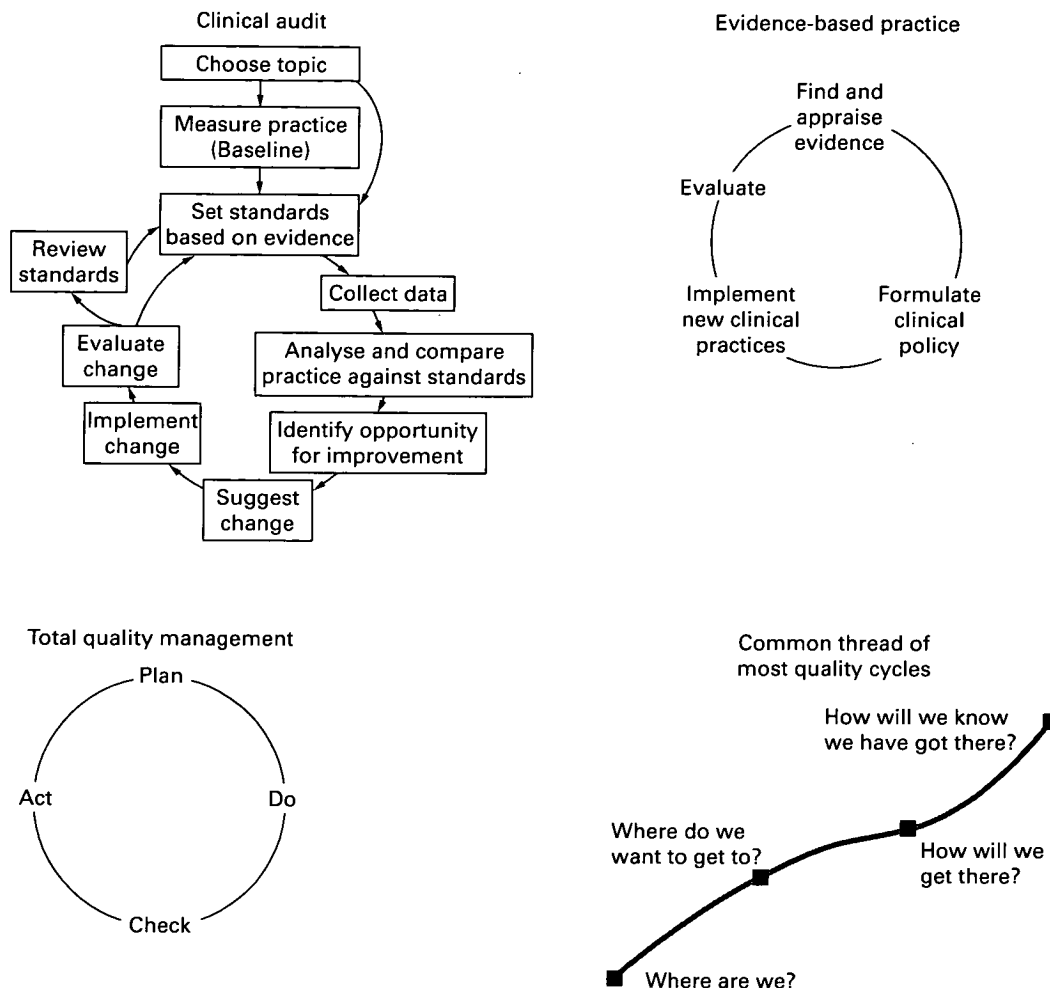


Figure 1 Cycles of quality improvement.

Financial issues feature so prominently not only because of the pressures of service demand on budgets but also because the financial health of hospitals, health authorities, and other organisations in the NHS is a matter of statutory responsibility. A duty of corporate governance was placed on public sector organisations, including those in the NHS, after a series of highly publicised misdemeanours in the business and financial world which were the subject of an influential report<sup>7</sup> which set out guidelines about how organisations should be directed and controlled. Effectiveness, accountability, openness, checks, and balances were all features of this code of good practice for the management of organisations. The extension of the concept of good governance to quality and in particular the clinical aspects of quality is a further important step.

The term clinical governance resonates with that of corporate governance and is intended to have the same elements of rigour and accountability. Clinical governance can be defined as: "a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish".<sup>8</sup>

Quality improvement in health organisations is short currently of the ideal captured in this definition. It has tended to be viewed in

separate strands, with clinical and managerial perspectives and responsibilities being differently perceived and differently managed.

**A new modern definition of quality**

The importance of the concept of clinical governance is that it brings clinical decision making into a management and organisational framework. This is absolutely essential for the new approach to quality improvement. In the 1980s and 1990s quality improvement focused on the process of care and quality improvement initiatives—such as clinical audit—were designed to improve productivity or clinical practice or the patient's experience of care. Important though this approach has been, it is insufficiently comprehensive for the 21st century.

There is an old management proverb which says that management, whether resource or clinical management, consists of two interrelated tasks—doing the right things and doing things right. Hitherto quality improvement has focused on doing things right but it is now clear that healthcare systems around the world also need to focus on the things that are being done in view of the variation in practice between one country and another, one region and another, and one clinician and another. There is now general recognition that it will be necessary to focus on clinical decision making as well as on the process of care, and the definition of quality

in the British Government White Paper on the new NHS<sup>6</sup> emphasises this. Quality is defined as doing the right things, for the right people, at the right time, and doing them right first time. This new definition embraces the old definition of quality, focused on the process of care, and the concepts of appropriateness and clinical effectiveness, but it also points to a broader vision of quality improvement (increasingly adopted internationally) which, like corporate governance, is an organisation wide concept.

Typical of the present rather compartmentalised approach is the attitude towards professional peer review activities. Initiated as medical audit, in Britain, peer review has broadened to include other health professionals and is called clinical audit. Despite this, it still tends to be seen as an activity undertaken by professional staff in isolation from the rest of the organisation.<sup>9</sup> As a result, managers are unclear about how it benefits the organisation and professional staff can be defensive and fearful that greater involvement of management may

lead to a punitive approach to any problems identified in current practice.

On the other hand, during the 1990s management in the public sector has embraced many of the approaches to quality improvement which stem back to industrial organisational theories, for example the work of Deming.<sup>10</sup> Various called total quality management (TQM) or continuous quality improvement (CQI) these approaches have several features in common—good leadership; empowerment of staff; team work; prevention (rather than correction) of adverse outcomes; analysing, simplifying, and improving processes; as well as strong customer focus. Professional staff have been traditionally less comfortable with these approaches because of misconceived anxieties about health care being equated with products of industry. The relatively straightforward applicability of these approaches to health care has been well described.<sup>11</sup> Indeed, the common basis of many cycles of quality improvement is perhaps more obvious than is generally realised (fig 1).

Maria Mitchelson is the new Chief Executive of the Flinster NHS Trust, a large general hospital serving a population of about 300 000. Maria's appointment came after an enormously difficult period for the hospital which had culminated in the departure of her predecessor Dickie Bayes. The Trust's Chairperson, Mrs Cynthia Utall-Boon had herself resigned after an 18 month newspaper campaign by the Flinster Clarion based on numerous complaints by former patients about the care that they had received in the hospital.

Among senior managers and health professionals, Flinster had long had a bad reputation. Surgeons and physicians at the teaching hospital St Paul's noticed that they received a relatively high number of transfers of severely ill patients who had not been adequately stabilised before transfer or who developed complications after their initial treatment. Withdrawal of training approval for junior doctor rotations which included Flinster had been threatened by Royal Colleges on several occasions and actual withdrawal had only been averted by crisis meetings with the Regional Office of the NHS Executive and urgent remedial action. Although Flinster is in one of the most picturesque parts of the country—the Marroch Hills and Tirvan Falls are both within 15 miles of the hospital—the Trust has had difficulty in recruiting and retaining the best consultants.

The Trust had been only one of two in the region to make a nil return for current clinical research activity during the Culyer research funding exercise. It had also not been a bidder for the evidence-based medicine development fund established in the region to promote good practice.

The senior management of the Trust and the Board frequently blamed the health authority and the region for "chronic underfunding" of the Trust. Suggestions made to collaborate with other hospitals in delivering specialist services did not progress. In his final two years in post, Dickie Bayes attended few of the regular meetings of health service chief executives with the regional director explaining his absences on the need to address urgent problems in his own Trust.

The Flinster Clarion, which had a wide local circulation, regularly featured health stories, most of which were critical of the hospital. Two stories broken by the Clarion went national and won the Clarion's health reporter, Finbar O'Reilly, the investigative journalist of the year award. Both concerned the care of children in hospital. The first was a teenager with a curable cancer who was given the wrong dose of cytotoxic drug and died and the second was a 10 year old who was discharged from the accident and emergency department four times in a 48 hour period, eventually developing kidney failure after peritonitis due to a ruptured bowel. In both cases, internal enquiries were held which did not expose the full nature of the problems and which found only minor criticism of the care provided. A staff nurse leaked details of the incidents to the Clarion reporter and the ensuing tabloid coverage led to a major external enquiry which severely criticised individual clinical staff and the management of the Trust.

At her first Hospital Medical Staff Committee meeting, Maria Mitchelson had a rough ride. She was asked to wait before being called to the Board Room and told that she was on 6 months probation as far as the medical staff were concerned.

Although one barrier to developing an integrated approach to quality at the level of health organisation may be attitudinal, another is confusion about how different initiatives fit together. Anecdotally, many health managers will say that they do not understand how approaches—such as clinical practice guidelines, specialist data bases of the medical literature, effectiveness bulletins, and clinical audit—relate to each other. The evidence-based medicine movement<sup>12</sup> has created an opportunity for much of this integration, it has a strong coherence as a strategy for clinical quality but it is still not well understood by some.

#### **Analysis of the case study**

The hospital described in the case study (box 1) is hypothetical but many will recognise features of an ailing organisation whatever the sector: dysfunctional relations between management and senior professional staff, the absence of an evaluative culture, poor external relations (particularly with the media), secrecy and defensiveness when problems develop, many seemingly avoidable errors, and difficulties in attracting and retaining high quality staff.

The challenge for the incoming chief executive is to rebuild the organisation. Whether she does so will to a large part depend on three things: whether she has the leadership skills necessary to bring about the transformation, whether she has a clear vision of the sort of hospital she is seeking to create, and whether she is supported in achieving this by her board and most of the staff.

She will want to begin by spending a great deal of time talking and listening to staff individually and in small groups so that they feel able to confide their perceptions of what went wrong in the past and describe their aspirations for the hospital as a whole and their area of service in particular. She will also want to establish a clear channel of external communication—showing a greater openness and meeting with local media to signal a fresh start and ask for their cooperation in rebuilding public confidence. She will wish to talk to patient representatives for their perceptions of the problems and the quality of care delivered.

She will also wish to understand in some detail, the failures in standards of care which had occurred particularly the two incidents involving children (box 1). The external enquiry showed that in the first case, the junior doctor was undertaking his first procedure, the nurse assisting had never seen one performed and there were no up to date protocols for administering cytotoxic drugs available on the ward. The second case also showed a mixture of individual error as well as failure of procedures and communication.

The scale of the challenge at the hypothetical Flinster Hospital is very great and will require the rebuilding of the structure, culture, and style of working the organisation. When implementing clinical governance in the new NHS, few health organisations will be starting from as

poor a position as Flinster but many of the underlying issues which need to be put right are common to all such organisations.

#### **Learning from and preventing failure**

One principle that is emerging from research on medical errors and their prevention is that we have placed far too much responsibility on the shoulders of the individual doctor, often a young and unsupported clinician, and have made insufficient use of systems analysis and engineering to minimise the probability of errors occurring or to take corrective action should an error have occurred. The most comprehensive study of medical errors is the Harvard Medical Practice Study which analysed the incidence of iatrogenic illness in a whole population in New York State.<sup>13</sup> This study showed how common medical errors were and further analysis, in particular by Leape,<sup>14</sup> has shown that “most errors result from defects in the systems in which we work”. Leape has used the approach developed in the airline industry and pilot training and applied the lessons learned from that industry, in which the incidence of error is very low, to the medical ward. Expecting young clinicians to manage everything correctly at 2 o'clock in the morning without systems support is, he argues, with considerable evidence, an unrewarding task for both manager and clinician.

From time to time, the NHS experiences serious failures in the standards of care delivered, sometimes with disastrous consequences for patients. For example, the bone tumour service in Birmingham misdiagnosed cancer in some cases leading to unnecessary radical and disfiguring surgery in young patients.<sup>15</sup> The confidential enquiry into peri-operative deaths established in the late 1970s regularly reports instances of avoidable surgical and anaesthetic deaths.<sup>16</sup> During the 1990s there have been several wholesale errors in presymptomatic population screening programmes for women's cancers.<sup>17</sup> These and many other well publicised lapses in the high standards of care expected of a health service may be few and far between given the nature and complexity of work dealt with. However, they have a huge impact on public confidence in the service. In situations like this, the mass media generally identify conflict, seek out the main protagonists, and identify individual people to blame.<sup>18</sup> This leads the public to think that they are only seeing the tip of the iceberg of problems and with context setting coming much later after the enquiry, anxiety is often not allayed.

Consistent with Leape's findings,<sup>14</sup> although almost all NHS enquiries into serious failures in standards of care have identified mistakes by individual people, a greater part of the explanation is at the organisational and systems level. An example of the range of such factors is shown in fig 2. Health services have little expertise in identifying organisations which are liable to have serious problems before they occur and preventing them. They are also not consistent in sustaining early improvements into the longer term, so that sometimes history

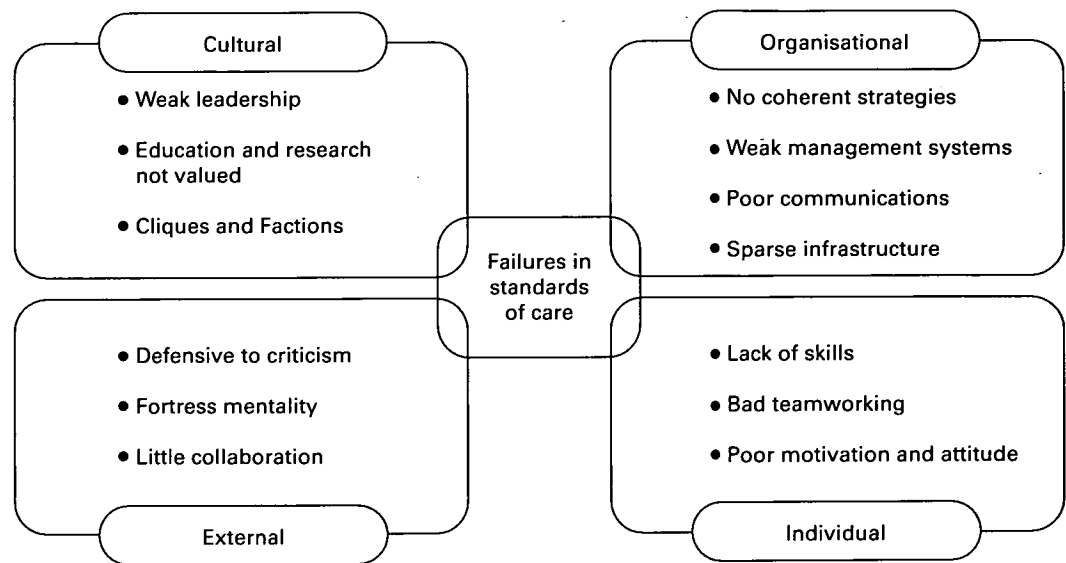


Figure 2 Lapses in standards of care: some examples of why things go wrong.

is seen to repeat itself in the same organisation. An important part of the new responsibilities of clinical governance will be to address these issues. Health services have much to learn from the fields of disaster, prevention, and risk management in the industrial sector.<sup>19</sup>

In considering problems within health organisations, clinical governance will also have to get to grips with the poorly performing doctor. This previously taboo area is becoming documented.<sup>20</sup> Ironically, increasing media criticism comes at a time when the General Medical Council (the main regulatory body for medical practice in Britain) has considerably broadened its concept of the duties of a doctor and introduced more comprehensive procedures to detect and deal with poor performance. There is little doubt that there is a growing intolerance of instances of poor competence and misconduct<sup>21</sup> and the support for continuing professional self regulation will only be sustained if the clinical governance initiative at local level is successful, allowing problem doctors to be identified and dealt with so that there is a reduction in harm to patients.

#### Managing organisations to promote good practice

The very word "governance" implies control and it is obvious that controls are needed but it is also important to think about the balance between self control and control by others, and, having clarified that distinction, to think of the steps that managers can take to support, facilitate, and encourage self control and systems which minimise error and promote quality. In doing this, the manager has, firstly, to be aware of professional concerns about loss of clinical freedom, and secondly, to take a range of steps to help clinicians.

#### Clinical governance and clinical freedom

"From Pegasus to Sisyphus": this was the dramatic headline of a leader in a prominent American medical journal<sup>22</sup> describing the change in fortunes of American medicine. Not much more than a decade ago, American physicians were free spirits, flying high, able to put

up their shingle wherever they wanted. Now the American medical profession is among the most tightly controlled in the world as "managed care" remorselessly becomes the prevailing style of healthcare funding management. In managed care, guidelines are drawn up and clinicians are expected to comply, sometimes having to check out their opinion with the payer where they have encountered what many doctors thought to be the indignity of a nurse with an algorithm to talk them through a decision which they thought they had already made.

In Britain, doctors and clinicians have had a longer tradition of working within a managed system, but even within the NHS, clinical decision making was largely left to the profession. This is, however, changing with increased pressure to introduce systems of care in which guidelines play an integral part. Aligned with the arrangements for clinical governance is the planned establishment of a National Institute for Clinical Excellence, the function of which will be to promulgate and validate guidelines. For some clinicians, this trend has been perceived as an infringement on clinical freedom. Clinicians and managers, both in individual hospitals and nationally, have had disagreements about the issue of clinical freedom. Clinical freedom is an emotive term, sometimes used as a shibboleth or rallying cry by the medical profession in particular, but it is an important issue and cause of concern to the professions, particularly the medical profession.

One way for organisations to relate in a constructive way to the medical profession is to appreciate, as the medical profession itself is now appreciating, that, as stated in the classic essay by Isaiah Berlin, there are two types of liberty—negative liberty and positive liberty. Negative liberty determines how much freedom an individual has to do what they would like to do (to prescribe a drug or introduce a new test); positive liberty means how much freedom an individual, or group of individuals, has to influence how much negative liberty they have. For clinicians, clinical governance



Figure 3 Creating an environment for good clinical practice. Reproduced with permission.<sup>23</sup>

presents them with an opportunity to be involved in the development of guidelines that influence, for example, what should determine whether or not a new intervention should be introduced to the service or the standards of care that are regarded as achievable or unacceptable. Clinical governance should be portrayed not as an infringement of liberty, although some negative liberties will be lost, but as the means by which the clinical professions can maintain the positive liberty they have enjoyed for so long without, until recently, serious challenge.

### Creating an environment for good clinical practice

The chief executive of an organisation who wishes to have a healthy system of clinical governance must take a lead in supporting clinical colleagues and helping them to develop their own systems for quality improvement. To do this it is necessary to develop individual people and to develop the organisation itself, for both are interrelated (fig 3).

### Developing individual people

All people have to be helped to develop the skills to find, appraise, and use best current knowledge—for example, that produced in the Cochrane Library.<sup>24</sup> Health services should, of course be able to rely on universities to have inculcated and developed the skills of finding, appraising, and using knowledge. However, universities have not yet adopted the new quality agenda and have not yet, with a few exceptions, developed the skills of knowledge management, which the decision maker of the 21st century desperately needs.

### Developing organisations

Organisations can be considered to be three interrelated concepts—culture, systems, and structure—and each of these needs to be changed (fig 4).

#### CHANGING CULTURE

Firstly, it is necessary to change the culture and one way to do this is by good leadership. A chief executive, for example, who makes it clear when assertions or decisions are based on evidence and when they are simply opinion, and who can ask again and again, of managers as

well as of clinicians, non-aggressively, “what is the evidence?”, is more likely to create a culture of a genuine learning organisation.

#### CHANGING SYSTEMS

One important part of the system to change—to promote evidence-based decision making and the new approach to quality management—is the knowledge management system. Clinicians can be criticised for not using the recommended guidelines or acting on best current knowledge but if the guidelines and the knowledge are not easily available the clinician cannot bear the whole responsibility. A reasonable objective, which is attainable with modern telecommunications, is for clinicians to have access to best current knowledge within 15 seconds of needing it—on the ward, in outpatients, in clinics, and in the patient's own home. Furthermore, patients need access to best current knowledge also.

This requires a focused approach to knowledge management so that the organisation is clear about the knowledge it takes in, how that knowledge is used within the organisation, and what knowledge, and the quality of the knowledge, is provided for patients. Most hospital drugs and therapeutics committees are now using good evidence to make their decisions but what of the person who is purchasing a new piece of laboratory equipment, or a new ripple mattress, or the latest technology for the operating theatre? In general, drugs, although an appropriate source of concern, have a much better research provenance than the equipment. It is essential for the systems that store and distribute knowledge (based on the library but run by the library's most valuable resource, the librarian) to market knowledge to other subsystems within the hospital. Knowledge may be needed but not asked for. By supplying it to other systems—for example continuing professional development—the use of knowledge can be promoted in ways which are not currently considered.

#### STRUCTURAL CHANGE

If such systems are developed there is usually little need for structural change, but one approach, which an increasing number of healthcare organisations are using, is summarised by the acronym “get REAL”—namely, integrate research, education, audit, and libraries—for these four different types of activities often take place in different departments of the health organisation with different

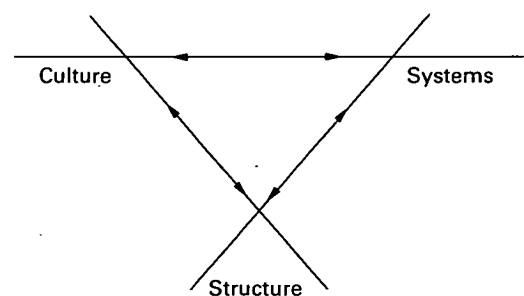


Figure 4 Developing organisations. Reproduced with permission.<sup>23</sup>



Figure 5 Building clinical governance into a health organisation

leaders. Some organisations would also put all these activities under the leadership of one person, for whom a reasonable title would be the chief knowledge officer; if knowledge is to be the dominant commodity of the 21st century and the main source of wealth, any organisation that has a chief finance officer should also consider having a chief knowledge officer.

All of these changes have to be seen in the context of organisation wide transformation.

Workforce	Recruit high quality staff and continue to develop them in post.
Culture	Create an open, participative culture where ideas and good practice are shared, education and research are valued.
Coherence	Establish an overall quality strategy and align to individual, team, and organisational goals; support with management systems and clinical processes which are continuously improved.
Problems	Ensure that problems with standards of care are recognised early, investigated, failures corrected, lessons learned, and improvement sustained; in the longer term prevent most problems.
Patients	Fully involve patients in defining quality and feeding back their experiences; enable patients to participate fully in clinical decision making.
Infrastructures	Create right support for clinical practice, particularly information technology and training.
Public	Demonstrate accountability for quality, communicate openly and effectively with the public.
Partnerships	Actively seek collaboration with partner organisations which will enhance the quality of care provided.

Box 2 Some key aims in establishing successful clinical governance.

**Organisation wide transformation**

The 1980s and 1990s saw a huge growth in publications on management research. In this field, a common method of research into organisations is to conduct studies (largely using qualitative methodologies) of top performing companies and failing ones. Early seminal work<sup>25</sup> in the field of organisational behaviour and organisational development had placed particular emphasis on the people side of the organisation—successful organisations were those which valued and empowered staff and sought to develop them. Later work<sup>26</sup> built on this and studied successful companies drawing out features—such as leadership, customer focus, and culture—to sit alongside the people issues. Recently, a particular type of management guru<sup>27</sup> has been very influential in organisational thinking and here the emphasis has been on the importance of style of working and organisational restructuring in creating excellent organisations.

There has been little similar systematic study of organisations in health care so a view on how to create good health organisations must draw on evidence from this large management field and from experienced and respected opinion in health service practice. On this basis there is little doubt that successful clinical governance will largely depend on creating the right sort of organisation (fig 5). A hospital or practice which has an open culture, supportive to evaluative practice and education, and which uses blame exceptionally will be one in which quality will be enhanced. Similarly, a health organisation in which there are strong management systems in place to support clinical processes and in which individual and organisational goals are aligned is likely to be a better one. The importance of training and development of staff is well recognised in health care but linking this to serve the goals of good clinical governance means taking steps towards integration and organisational coherence which have not yet occurred.

Turning the hospital described in the case study into an organisation such as this will require leadership across a broad range of fronts (box 2).

**Conclusions**

Clinical governance offers an unrivalled opportunity for the National Health Service in Britain to weave quality improvement into the fabric of every health organisation in the country. The challenge is formidable but it will be achieved by creating the kinds of organisations in which clinical teams are supported and resourced (with knowledge and information) and in a culture in which excellence can flourish.

1 Griffiths R. *NHS management enquiry*. London: Department of Health and Social Security, 1983.

2 Secretaries of State for Health. *Working for patients*. London: HMSO, 1989. (Cm 555.)

- 3 Gray JD, Donaldson LJ. Improving the quality of health care through contracting: a study of health authority practice. *Quality in Health Care* 1996;5:201-5.
- 4 NHS Management Executive. *The evolution of clinical audit*. London: Department of Health, 1994.
- 5 Secretary of State for Health. *The patient's charter: raising the standard*. London: HMSO, 1991.
- 6 Secretary of State for Health. *The new NHS: modern and dependable*. London: HMSO, 1997.
- 7 *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee, 1992.
- 8 Donaldson LJ. A first class service: quality in the new NHS. London: Department of Health, 1998.
- 9 Donaldson LJ. Clinical governance: a statutory duty for quality improvement. *J Epidemiol Community Health* 1998; 52:73-4.
- 10 Deming WE. *Out of the crisis*. Cambridge: MIT, 1986.
- 11 Berwick DM. Continuous improvement as an ideal in health care. *N Engl J Med* 1989;320:53-6.
- 12 Evidence-based medicine working group. Evidence based medicine: a new approach to teaching the practice of medicine. *JAMA* 1992;268:2420-5.
- 13 Brennan TA, Sox CM, Burstin HR. Relation between negligent adverse events and the outcomes of medical-malpractice litigation. *N Engl J Med* 1996;335:1963-7.
- 14 Leape L. A systems analysis approach to medical error. *Journal of Evaluation in Clinical Practice* 1997;3:213-22.
- 15 Malcolm AJ. *Enquiry into the bone tumour service based at the Royal Orthopaedic Hospital*. Birmingham: Birmingham Health Authority, 1995.
- 16 Gallimore SC, et al. *The Report of the National Confidential Enquiry into Perioperative Deaths 1994-5*. London: NCE-POD, 1997.
- 17 NHS Executive South Thames. *Review of cervical screening services at Kent and Canterbury Hospitals*. London: NHS Executive, 1997.
- 18 Donaldson LJ, O'Brien SJ. Press coverage of the Cleveland child sexual abuse enquiry: a source of public enlightenment? *J Public Health Med* 1995;17:70-6.
- 19 Reason J. *Managing risks of organisational accidents*. Aldershot: Ashgate, 1997.
- 20 Donaldson LJ. Doctors with problems in an NHS workforce. *BMJ* 1994;308:1277-82.
- 21 Smith R. GMC under the cosh. *BMJ* 1998;316:946.
- 22 Lipkin M Jr. Sisyphus or Pegasus? The physician interviewer in the era of corporatization of care. *Ann Intern Med* 1996; 124:511-3.
- 23 Gray JAM. *Evidence-based healthcare*. London: Churchill Livingstone, 1997.
- 24 The Cochrane Library [database on disk and CDROM]. *The Cochrane Collaboration, issue 5*. Oxford: Update Software, 1998.
- 25 McGregor D. *The human side of the enterprise*. New York: McGraw Hill, 1960.
- 26 Kanter RM. *The change masters*. London: HMSO, Allen and Unwin, 1984.
- 27 Handy C. *Beyond certainty. The changing world of organisations*. Boston: Harvard Business School, 1998.



# Promoting health care quality: what role performance indicators?

Trevor Sheldon

## Introduction

"Quality" is the big issue which is currently fashionable in healthcare circles in several industrialised countries. In the United Kingdom the government's White paper on the National Health Service (NHS) and subsequent documents stress that "the new NHS will have quality at its heart"<sup>1</sup> and that "high quality care should be a right for every patient".<sup>2</sup> In the United States, a Presidential Advisory Commission on Consumer Protection and Quality in the Health Care Industry has recently called for a national effort to improve and sustain the quality of health care.<sup>3</sup> Healthcare purchasers have been demanding, adopting, or developing measures of healthcare performance, and in the United States several national organisations—such as the National Committee for Quality Assurance (NCQA), the Foundation for Accountability (FACCT) and the Joint Commission on Accreditation of Healthcare Organisations (JACHO), have been developing quality metrics. There has been an explosion in the development of performance indicators of variable provenance and quality, some of which are on the JACHO's national library of healthcare indicators. Developing, collecting, analysing, and feeding back performance data from healthcare organisations is now big business.

In the United Kingdom similar developments are occurring but at a much slower rate reflecting differences in the organisation and financing of health care, the relative lack of routine data, poorly developed information systems, and cultural factors. The recent proposal by the Department of Health in England to establish a framework for assessing performance (measuring aspects of health improvement, fair access, effective delivery of appropriate care, efficiency, the patient experience, and health outcomes) as opposed to simply counting "beans" and relying on the largely discredited "efficiency index"<sup>4</sup> is a welcome and bold step.<sup>5</sup>

There is a danger, however, that these efforts will not result in the anticipated gains in quality because of potential conceptual and technical weaknesses in the performance management agenda. This paper discusses some of the issues raised by the use of performance indicators in managing healthcare services. The tone is cautionary in the context of the rapid investment in and relatively unevaluated adoption of performance indicators as one of the key elements of quality improvement strategies, whether the approach used is one or more of regulation, competition, continuous quality improvement, or financial incentives.

## What is quality?

If performance indicators are instruments for measuring aspects of quality of care it is worth a moment to consider what is meant by quality. That quality is now given such prominence on the health policy agenda is surely a good thing, but unless it is defined and sensibly used, calls for quality improvement will become merely slogans or fashion statements. This is not an easy task. The President's Advisory Commission for example, refers to ensuring appropriate use of health services, correcting oversupply and undersupply of healthcare resources, and reducing healthcare errors.<sup>3</sup> Notions of cost effectiveness or efficiency (referred to but not properly developed in the United Kingdom reports) are absent.

Surely, cost effectiveness must lie at the heart of quality. If health services are about maximising human health and welfare within the resources available, then if these resources are not used efficiently quality will be suboptimal. This involves both allocative efficiency—investing in the types of interventions which produce the most benefits (valued by consumers)—and technical efficiency—applying these interventions in the most technically competent and least wasteful fashion. Under this broad concept of quality, care would have to be clinically effective and medically appropriate, clinicians would need to be competent, and errors minimised and the systems for delivering care run smoothly and efficiently. However, isolating these elements from their resource implications is not rational. For example, no one would suggest devoting all the resources to preventing just one more medical accident or to providing one more hip replacement. There is some point at which investing more in one area of care generates such little benefit relative to the resources needed that it is not deemed worthwhile relative to the other beneficial uses to which they can be put (opportunity cost). Simply increasing appropriateness and access or reducing errors, without reference to the cost of so doing, cannot optimise wellbeing and therefore, cannot by themselves constitute quality. That it is not easy to use the cost effectiveness concept of quality does not make it less important. Very few quality improvement schemes either look at the efficiency of the strategy or include cost effectiveness as part of quality or performance indicators just as few clinical practice guidelines integrate evidence on resource use.

## Conceptual aspects of performance management

The issue of a performance management framework can be considered at two levels:

**York Health Policy Group, University of York, York, UK**  
Trevor Sheldon,  
professor

Correspondence to:  
Professor Trevor Sheldon,  
York Health Policy Group,  
University of York, York YO1  
5DD, UK. Telephone 0044  
1904 434559; email  
tas5@york.ac.uk

conceptual and technical. Attention is often focused overly on the technical characteristics of individual measures rather than the conceptual approach. Performance measurement is more than just a set of measures, it implies a mode of management. The increasing use of such indicators reflects a growing tendency for society to check and verify or audit activity.<sup>6</sup> This is embodied in the ideas of the "new public management" which argues for a shift in regulatory style. This provides a foundation for initiatives in quality management seen in the private sector, and increasingly the public sector, requiring that people and organisations are accountable and that they set down benchmarks for the legitimacy of organisational action. Although supermarkets are very different from hospitals, we see similar principles of quality control systems being applied. Under such regimes it is no longer sufficient to improve service quality but there is the need to make these improvements externally verifiable.<sup>6</sup> This has spawned a quality assurance industry in health care (and other public services such as education) with attendant quality experts.

Performance management of this type uses regulatory initiatives by government or purchasers to penetrate organisations, to change or reorder internal activities and relations and ensure compliance with rules while at the same time having less direct control or management responsibility for the running of services. All indicators embody a system of values and social goals.<sup>7</sup> By affixing the right labels to activities it is possible to turn them into desirable or valuable services which mobilise the commitment of internal participants. Different indicators produced by different organisations or processes will reflect different values. In other words performance indicators are not simply technical entities but they have programmatic or normative elements which relate to the ideas and concepts which shape the mission of practice.<sup>7</sup>

The potential impact of applying a set of indicators depends not only on their technical characteristics but also on the degree to which those managing, working in, and using health-care organisations support the programme, the existing professional cultures, and what change in the culture the introduction of performance management may produce. For example, when performance measurement frameworks are applied to organisations, they may tend to displace or replace pre-existing formal and informal internal or professional modes of quality assurance.

Governments and the public tend to focus excessively on outlying poor performers. For example, the recent case of two Bristol heart surgeons charged with serious professional misconduct over high mortality among child patients has accelerated the plans to regulate doctors. This will include the routine collection, publication, and comparison of hospital mortality data.<sup>8</sup> What we rarely ask ourselves is why there are not more poor outcomes; what are professionals already doing, what strategies do they currently use which result in good outcomes, how do they successfully avoid errors,

and how could we build on these to help make health care even better?

Because many of these strategies may not be easily externally verifiable and may be informal, there is a risk of assuming that they do not take place. These mechanisms are often built on notions of trust and professionalism and are often organised outside of the influence of formal management.<sup>6</sup> A danger of introducing the new performance management structure is that it may support abstract managerial values at the expense of other cultures of performance evaluation, both formal and informal. This depends among other things on the degree to which the framework builds on or uses such relations of trust and makes use of the quality promoting activities which are already established and go on within professions and health-care teams. Auditing of performance—such as clinical effectiveness—by the use of externally imposed indicators may have dysfunctional side effects. The key question is whether any potentially positive effect of these externally applied indicators will be counterbalanced by the negative effect of dismantling other (informal or formal) mechanisms of quality assurance?

It is not surprising that the introduction of external performance management in which judgements about quality are made by measuring performance based on precise standards can contribute to feelings of fear and loss of control by health professionals. Measurement and reporting, inappropriately used, can create an environment of fear instead of fostering quality improvement. Measurement alone does not improve quality, and indeed, when seen primarily as a way to improve accountability and to make judgements, may be self-defeating, reducing morale, and causing the collapse of other quality enhancing activities not part of the performance management strategy. "Measuring for improvement is not measuring for judgement"—measurement is more likely to be an asset when connected to curiosity and learning.<sup>9</sup>

A performance management structure constitutes a "health technology" which has effects on people, organisations, and system behaviour—that is why people want to use such mechanisms for changing performance. However, like all interventions applied to complex systems, the effects are often unexpected and difficult to control and may even produce net adverse outcomes. Given that the development and implementation of such frameworks can be quite expensive, it is important to be reasonably confident that it will result in the desired effect at an acceptable cost. There is a need therefore, for a greater empirical understanding of the consequences and the costs of performance management. However, there is little conclusive evidence about the impact of organisational performance assessment.<sup>10</sup> Although some projects have reported improvements in specific areas of clinical practice after publication of indicator data or other uses of indicators, much of the data are hard to interpret and few studies have evaluated in a comprehensive fashion the wider impact. For

example, the reported reduction in risk adjusted mortality in heart surgery associated with the use of hospital report cards could have been due, at least in part, to better reporting of comorbidity once the results of data collection were seen as being important along with other external factors.<sup>11</sup> There is also evidence that report cards had little effect on consumer choices even in the presence of reported wide variation in performance.<sup>12</sup> As with any other healthcare intervention with uncertain impact, use of performance indicators should be subjected to some form of health technology assessment.

### **Problems of using performance indicators**

Much has been written about the potential problems of using performance measures and this literature alerts us to the considerable risk that some performance management strategies may not be as effective as anticipated.<sup>13-17</sup> As well as the conceptual issues already raised, there are two main problems: "decoupling" where the measures are rendered ineffective and "colonisation" where they are effective in unintended ways.<sup>9</sup> These problems arise because of the difficulties inherent in the three activities of control systems: measurement of performance, analysis or interpretation of the results, and the subsequent action in the light of the results.

The NHS, its aims, its role in society, and its activities are complex and multidimensional. Not all of the outputs that are valued by society can be measured easily and some of these unfold over several years and cannot be accurately measured at any one time. Also, because most of the data which can be used in macro performance indicators are defined, recorded, and coded locally and are not easily verifiable, they can be manipulated—for example, "DRG creep" (the way in which diagnostic related groups were manipulated in response to the introduction of prospective payment for clinical interventions) in the United States and abuse of finished consultant episodes.

Even when measures are accurate, interpretation of the results can be very difficult for several reasons. Because of chance variation, it is often difficult to assess the degree to which variation reflects real differences in activity or outcome.<sup>18-21</sup> Because of the small numbers or rare outcomes involved in any one hospital or primary care group, averages over several years are often needed. This makes it more difficult to then act, because adverse results may reflect performance in the past rather than the present.

Variations in performance can be particularly difficult to interpret unless there is also adequate adjustment for case mix. Necessary clinical data are rarely collected in the United Kingdom.<sup>22</sup> In some conditions, the complexity of case mix adjustment required to make sensible comparisons is very high and may not justify the costs. It is interesting to note however, that in some areas of medicine, professional groups are coming together voluntarily to develop clinical databases with sufficient infor-

mation to assess case mix adjusted outcomes—for example, adult intensive care.<sup>23</sup> Such initiatives are creating an internal culture of critical self evaluation which is necessarily non-confrontational. It is unlikely that similar levels of data collection and analysis could be achieved by means of the national performance framework, so raising again the question of the degree to which external bureaucratic audit will achieve more than professional self organisation and quality improvement.

Finally, interpretation of the results is particularly challenging when health outcome data are used because these are affected by so many variables, most of which are not directly under the control of the health service. Although it may be important to measure these variables to see where there are unwanted changes or lack of improvement, they cannot be attributed easily to any particular part of the health service or health service activity, and so cannot be regarded as valid or sensible measures of health service performance.

If the problems of measurement and interpretation have been solved, the next step in the process is to decide what action to take in the light of the results. Internationally and over time various different responses have been developed. These include formal approaches such as punishments, rewards, investigation, facilitation, training, investment in problem areas, and less formal approaches—such as the publication of results to other health professionals or the public. It is important for performance management plans to clearly articulate a framework for action, and how this would be organised and resourced.

### **The law of unintended consequences**

More often than not, the use of aggregate policy instruments to influence human behaviour results in unintended and often adverse, consequences. In the public sector these have been well described by Smith at the University of York.<sup>15</sup> Although the problems are universal, some are illustrated with reference to the recent proposal in the United Kingdom for a performance framework.<sup>5</sup>

By focusing too heavily on a few indicators, other aspects of the service which are not being measured or are not so measurable may get less attention. Thus while the measured performance may improve, quality may fall in the less scrutinised areas, resulting possibly in a fall in overall performance. Depending on the indicators used, this may also engender a short term culture. Action to ensure good performance on this year's indicator may replace more strategic thinking about how to make more fundamental long term improvements. The recent allegations that water companies in the United Kingdom have been attempting to meet national targets for reduced water leakage from mains pipes by means of reducing street water pressure (so reducing the quality of the service) rather than by mending leaks is a classic example of this phenomenon. The focus on easily measurable outputs—such as waiting lists for non-acute surgery—has become political and

has resulted in narrow vision and more important indicators of unmet need being ignored.<sup>24</sup>

When indicators measure change over time—for example, as percentage change—organisations may purposefully underachieve in one year to be able to show steady improvement over time, and organisations at a high level to start with may look worse. This was found when annual 2% improvements in the efficiency index were expected, and when general practitioners (GPs) were expected to increase the proportion of generics prescribed.

The service can become so fixated with achieving high measurable performance that it distorts activity and can lead to “gaming”. For example, if waiting times are given prominence, GPs may just reduce their referral rate, or consultants may increase their thresholds for treatment. Also, GPs or hospitals may be reluctant to deal with certain types of patients or procedures because they are more risky and so may damage performance profiles. There is also the danger that data are actually manipulated to improve measured performance. It is possible, for example, that cancer registrations (already imperfect) may be affected because this is to be used as a measure of cancer incidence seen as an indicator of poor performance.

It is difficult to develop macro indicators which measure aspects of clinical effectiveness because the clinical decision making process at a micro level is complex and takes into account factors that are not visible at the macro level. The inability of macro indicators to look inside the clinical process can result in a misinterpretation of the results. For example, rates of effective surgical operations used as a performance indicator leads to the NHS regarding high rates of a procedure as a good thing, independent of who receives it, why, and the quality of the surgery. High rates of poorly conducted hip surgery, for example, cannot be regarded as good performance! Another proposed performance indicator is the rate of surgical insertion of a grommet in children with glue ear (where high rates are seen as bad practice).<sup>5</sup> However, although it is true that some glue ear operations may be unnecessary, in most cases it is probably appropriate; depending on morbidity, chronicity, the adequacy of audiometric testing, and clinical examination.<sup>25</sup> It is unlikely that this indicator will be able to be interpreted sensibly and it may result in some children in need being denied a cost effective operation.

Similarly, indicators of access that measure rates of effective surgical operations—such as CABGs, and hip and knee operations—are difficult to interpret because their effectiveness depends on who is receiving them. For example, a recent *Effective Health Care* bulletin urges caution in the use of invasive cardiology in less severe cases and stresses the importance of good medical management.<sup>26</sup> With the advent of the statins, it is likely that the objective need for some of these procedures may decline over time,<sup>27</sup> a trend which would be interpreted as poor performance according to this indicator.

In the NHS, measures of the rates of specific elective surgery are, of course, difficult to interpret without parallel data on private operations; areas with high rates of private insurance may have lower NHS rates of these operations than expected. Another example is provided by the proposed indicator based on the number of district nurse contacts. An area may decide to target those at greatest need and spend longer with fewer clients. This might be more effective, but it would look as if the district was performing worse than another area in which every person over 75 was visited regularly for 30 minutes independent of need.

#### **When to use performance indicators?**

Researchers are often criticised for being overly cautious. However, in this situation, given the resources that will be used and the potential negative effects of the introduction of performance indicators, caution is an appropriate response. This is not to say that we do not need measurement and accountability, or that there are not substantial variations in quality that need to be considered. What is in question here is the most cost effective way in which quality can be improved and the role within this for performance indicators.

Certain lessons can be learned from the international experience. Firstly, any system for measuring and improving performance should be integrated or coordinated with other parts of the service that are trying to promote quality. For example, where possible, indicators should be developed alongside the production of evidence-based clinical practice guidelines or guidance to which people are signed up to at a local or national level. In the United Kingdom site specific evidence-based cancer guidance to promote the most cost effective care includes a set of measures of structure, process, and outcome which can be used as indicators of a quality cancer service for that cancer site.<sup>28-30</sup>

The performance indicator framework (or at least a good part of it) should flow out of, or be coordinated with these guidelines or “frameworks of care”. Unfortunately in the United Kingdom performance frameworks were developed before and in isolation from the service frameworks. By uncoupling the performance indicators from the frameworks for care the service will become uncoordinated. It will also be important for any performance framework to be coordinated with successful local quality assurance schemes.

Secondly, indicators are more likely to be measurable, interpretable, and useful for action at a local rather than a national level because the underlying processes are more visible and local knowledge can be used. They should also be carried out in a way that creates trust and participation. Some of the apparently more successful quality schemes—such as the Maryland Hospital Quality Indicator Project—are characterised by it being voluntary, participatory, internal, and non-judgmental.<sup>31 32</sup>

Acting on the results of performance measurement requires considerable skills in analysis and also will need experienced people to work at a local level to help clinicians, hospi-

tals, and managers take appropriate action to improve the performance. The apparently successful Cooperative Cardiovascular Project for Medicare patients achieved improvements in the treatment of patients with myocardial infarction by feeding back the results in a positive manner.<sup>33</sup> This is a difficult task requiring intellectual, technical, and social skills which many managers do not have. It would seem sensible to develop a cadre of these facilitators before introducing a performance management framework.

External quality assessment is expensive. It has been estimated that it costs a health plan in the United States between \$20 000 and \$70 000 for analysing each of the Health Plan Employer Data and Information Set (HEDIS) measures.<sup>14</sup> The United States Health Care Financing Administration's (HCFA) Health Care Quality Improvement Program currently allocates over \$220 million a year for the 37 million Medicare beneficiaries. Ballard and Cangialose suggest that the cost effectiveness of external quality oversight should be assessed and that when programmes are developed they should be designed to maximise cost effectiveness.<sup>34</sup> For example, the programme design should include several items such as cost accounting, minimising the burden on the participants, and the selection of indicators on the basis of those healthcare interventions associated with the largest efficiency losses in that population.

Research in this area is underdeveloped compared with other areas of the health service. Some form of rigorous piloting should be carried out before routine use and full blown evaluations. For example, a type of "rubber windmill" exercise could be conducted in which data are presented to stakeholders in the service to see how they would respond. When presented with data, they might be asked whether these are the areas which they would have chosen to measure, what additional data they would request before acting, and what action they would take. These sorts of simulations with actual or constructed data would permit a deeper insight into likely effects. This should be followed up by in vivo piloting in several districts and hospitals. Ultimately though we need high quality experimental evaluations of quality management initiatives alongside a better conceptual understanding of how to evaluate organisational performance.<sup>35</sup>

### Conclusion

Policy makers are correct to want to be energetic in improving quality. A range of methods has been tried out around the world with variable results. Introduction of an elaborate performance indicator framework should depend on access to the available evidence and reflect on recent experience with performance indicators in several sectors of the economy. Availability and analysis of data in the NHS is limited, and perhaps we should consider making better use of what we have got before collecting a lot more new data. For example, we

don't even have diagnosis recorded on prescription forms!

Any performance management system should be integrated with other quality initiatives at national and local level to promote coordination. A blend of scientific accuracy, relevance to values, goals, and policies of the political community and of healthcare professionals is needed.<sup>7</sup>

There is evidence that performance indicators can result in adverse and unintended effects. Any health service embarking on performance management should attempt to establish whether it will produce the desired effects and at what cost before it is fully implemented. This is particularly important given the deep cynicism among the healthcare workforce and many managers about the value of macro performance measures. A further process of externally imposed change may further demoralise NHS employees and reduce the goodwill on which current initiatives and services rely.

- 1 The Department of Health. *The new NHS modern and dependable*. London: DOH, 1997. (Available on: <http://www.open.gov.uk/doh/newnhs/newnhs.htm>)
- 2 The Department of Health. *A first class service: quality in the new NHS*. London: DOH, 1998. (Available on: <http://www.open.gov.uk/doh/newnhs/quality.htm>)
- 3 The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. *Quality first: Better health care for all Americans*. US Government Printing Office, 1998.
- 4 Clarke A, McKee M, Appleby J, et al. Efficient purchasing. *BMJ* 1993;307:1436-7.
- 5 The Department of Health. *The new NHS modern and dependable: a national framework for assessing performance*. London: DOH, 1998. (Available on: <http://www.open.gov.uk/doh/newnhs/consult.htm>)
- 6 Power M. *The Audit Society: rituals of verification*. Oxford: Oxford University Press, 1997.
- 7 MacRae D. *Policy indicators*. Chapel Hill, NC: University of North Carolina Press, 1985.
- 8 Smith R. All changed, changed utterly. *BMJ* 1998;316:1917-8.
- 9 Berwick DM. The NHS: feeling well and thriving at 75. *BMJ* 1998;317:57-61.
- 10 Leggat SG, Narine L, Lemieux-Charles, et al. A review of organizational performance assessment in health care. *Health Services Management Research* 1988;11:3-19.
- 11 Greene R. Report cards: are they passing or failing? *Clinical Performance and Quality Healthcare* 1996;4:220-1.
- 12 Thomas JW. Report cards—useful to whom and for what? *J Quality Improvement* 1998;24:50-1.
- 13 Smith P, ed. *Measuring outcome in the public sector*. London: Taylor Francis Press, 1996.
- 14 Eddy DM. Performance measurement: problems and solutions. *Health Affairs* 1998;17:7-25.
- 15 Smith P. On the unintended consequences of publishing performance data in the public sector. *International Journal of Public Administration* 1995;18:277-310.
- 16 McKee M, Sheldon TA. Measuring performance in the NHS [editorial]. *BMJ* 1998;316:322.
- 17 Jackson P, ed. *Measures for success in the public sector*. London: Public Finance Foundation, 1995.
- 18 Goldstein H, Spiegelhalter DJ. League tables and their limitations: statistical issues in comparisons of institutional performance. *Journal of the Royal Statistical Society (A)* 1996;159:385-443.
- 19 Deely JJ. Quantitative refinement for comparisons of institutional performance. *Journal of the Royal Statistical Society (A)* 1998;161:5-12.
- 20 Marshall E, Spiegelhalter DJ. Reliability of league tables of in vitro fertilisation clinics: retrospective analysis of live birth rates. *BMJ* 1998;316:1701-5.
- 21 Poloniecki J, Valencia O, Littlejohns P. Cumulative risk adjusted chart for detecting changes in death rate: observational study of heart surgery. *BMJ* 1998;316:1697-700.
- 22 Iezzoni LI. Assessing quality using administrative data. *Ann Intern Med* 1997;127:666-74.
- 23 Rowan K. Intensive Care Society has set up a centre for national audit [letter]. *BMJ* 1996;313:1007-8.
- 24 Smith R. New government, same narrow vision [editorial]. *BMJ* 1997;316:643.
- 25 Sheldon TA, Freemantle N, Song F, et al. Surgical interventions for glue ear: what form will a quality service take? *Quality in Health Care* 1993;1:266-70.
- 26 NHS Centre for Reviews and Dissemination. Management of stable angina. *Effective Health Care* bulletin 1997;3(5):1-12.
- 27 NHS Centre for Reviews and Dissemination. Cholesterol and coronary heart disease: screening and treatment. *Effective Health Care* bulletin 1998;4(1):1-12.

- 28 Cancer Guidance Subgroup of the Clinical Outcomes Group. *Guidance for purchasers. Improving outcomes in breast cancer: the manual*. London: NHS Executive, July 1996.
- 29 Cancer Guidance Subgroup of the Clinical Outcomes Group. *Guidance on commissioning cancer services. Improving outcomes in colorectal cancer: the manual*. London: NHS Executive, 1997.
- 30 Cancer Guidance Subgroup of the Clinical Outcomes Group. *Guidance on commissioning cancer services. Improving outcomes in lung cancer: the manual*. London: NHS Executive, 1998.
- 31 Thompson RG, McElroy H, Kazandjian VA. Maryland Hospital Quality Indicator Project in the United Kingdom: an approach for promoting continuous quality improvement. *Quality in Health Care* 1997;6:49-55.
- 32 Kazandjian VA, Lied TR. Caesarian section rates: effects of participation in a performance measurement project. *Journal of Quality Improvement* 1998;24:187-96.
- 33 Marciniak TA, Ellerbeck EF, Radford MJ, et al. Improving the quality of care for Medicare patients with acute myocardial infarction. *JAMA* 1998;279:1351-7.
- 34 Ballard DJ, Cangialose CB. Eight recommendation for maximising the return on investment in external quality oversight. *Int J Qual Health Care* 1997;9:83-6.
- 35 Sicotte C, Champagne F, Contandriopoulos AP, et al. A conceptual framework for the analysis of health care organizations' performance. *Health Services Management Research* 1988;11:24-40.

## Can policy drive quality?

Rudolf Klein

Originality, it has been said, is a function of forgetfulness. Much the same can be said about policy making. Much of the credibility of policy makers when launching "new" initiatives depends on collective amnesia. There would be little harm in this form of political vanity—what politician, after all, wants to be seen simply making over somebody else's ideas?—but for one consideration. It leads to the neglect of historical experience: so we may, as a result, not draw the appropriate lessons from past failures (or successes). Hence the danger identified by Marmor and Mashaw<sup>1</sup> that policy reform may become a "perpetual-motion machine", a perpetual cycle of "high hopes and inflated rhetoric" subsequently abandoned in favour of a new set of aspirations and mechanisms. The invocation of quality in Labour's 1997 white paper<sup>2</sup>—and succeeding documents<sup>3</sup>—is a case in point. This rhetorical emphasis on quality as Labour's great theme in health care may, in itself, be significant—and welcome—as an indication of political priorities. But it tends to divert attention from the fact that governments have been struggling over the decades to achieve the various, sometimes conflicting, policy goals encapsulated in the notion of quality, and that there may be something to be learnt from their difficulties in achieving their aims.

In doing so, the first step is to unpackage the notion itself. Here the best starting point is Maxwell's matrix of the various dimensions of quality.<sup>4</sup> The notion, he argues, can be broken down into six components: effectiveness, efficiency, equity, access, acceptability, and appropriateness. Other dimensions could be added: thus it has been argued<sup>5</sup> that respect, choice, and the availability of information should be included in any definition. Nor would it be difficult to expand the notion still further—for example, by adding (in the wake of the Bristol case) technical competence—and thus turn into a decalogue: the 10 commandments for the National Health Service (NHS). In short, quality would seem to be shorthand for defining good performance: a hurrah word, capable of many interpretations, to which everyone can subscribe.

But analysing how public policy can best promote quality, in its many meanings, requires disaggregation. In asking how past experience can provide information for policy making, this paper will focus on the specific issues and problems encountered when trying to translate a generalised aspiration into specific policy goals and strategies.

fragile consensus all too likely to break down when it comes to attempting to implement its component parts. If we return to Maxwell's matrix—and even more so if we adopt the enlarged decalogue—it is immediately apparent that the various policy goals may be in conflict: that the challenge to public policy is how best to achieve an acceptable balance or mix. There is no necessary harmony between them. There may be trade-offs between the various policy goals and that the NHS (like all health-care systems) will have to choose between them.

The point can be simply illustrated with a familiar policy dilemma. It is generally accepted that effectiveness and efficiency require that accident and emergency departments should be concentrated in large units.<sup>6</sup> But these two dimensions of quality collide with two others: access and acceptability. Hence the phenomenon of widespread public resistance and protests whenever small accident and emergency departments are threatened with closure. This underlines the fact that different actors in the health policy arena attach different weights to the various dimensions of quality, and that it cannot be taken for granted that public and professional perceptions and definitions will point in the same direction. Similarly, if high value is placed on the access and acceptability dimensions of quality, then the obsession of politicians with waiting lists may not be as irrational as it seems to professionals in the NHS.

A similar conclusion follows if we include choice—as we probably should—as one of the elements in our definition of quality. Again, there may be conflict: this time between choice and equity, for the ability to exercise choice is unlikely to be equally distributed across the population. It depends on access to information and the confidence required to use it assertively. So the result of expanding opportunities for choice (like the emphasis, more generally, on generating more information for the public) might be to introduce a bias towards the better educated and better off and thus offend against the equity criterion for assessing the performance of the NHS. Again, therefore, harmony between the various components of quality cannot be taken for granted. In this case the split between perceptions of quality will be not between professions and public but between political parties: the Conservatives tended to stress choice, whereas the Labour Government has virtually expunged the word from its vocabulary.

In summary, then, the pursuit of quality does not eliminate the need for political decisions nationally or managerial decisions locally about the weight to be given to the competing

King's Fund, 11-13  
Cavendish Square,  
London W1M 0AN, UK  
Rudolf Klein, senior  
associate

Correspondence to:  
Professor Rudolf Klein,  
King's Fund, 11-13  
Cavendish Square, London  
W1M 0AN, UK.

### COHERENCE OR CONFLICT?

One danger in invoking the notion of quality as an all embracing goal of public policy is that this is calculated to induce a deceptive and

goals incorporated in the notion. The pursuit of quality thus turns out to be not a way of depoliticising the healthcare debate in pursuit of an aim which commands universal support—for who can be against quality in the abstract?—but a way of redefining the agenda. If discussion of the quality crusade concentrates exclusively on the mechanics and tools required—on how to measure performance, how to generate the required information, and so on—it will overlook an important aspect of the challenge to public policy: the need to balance different policy objectives.

#### PROFESSIONS OR ORGANISATIONS?

Past experience also underlines the difficulty of drawing a boundary between professional and organisational approaches to quality, and more fundamentally still, raises the question of whether there should be any. It therefore draws attention to what are likely to be the tense micropolitics of quality at the level of individual trusts or primary care groups. The Government's decision to introduce a statutory responsibility for quality on chief executives and their boards clarifies their constitutional position. In principle, it means that the missing link in the chain of NHS accountability<sup>7</sup>—that between clinical and managerial accountability—will be put in place. Translating theory into practice—in effect, working out a new relationship between the medical profession and management—is likely, however, to prove a difficult exercise: here, again, history warns against easy optimism. In many ways “clinical governance” is, like the quality crusade itself, a new way of redescribing an old problem: how best to integrate clinicians into the management process.<sup>8</sup>

The importance of doing so is, however, reinforced by the current policy emphasis on quality, because most of the dimensions of quality intertwine clinical and organisational issues. Equity and access are predominantly about resource allocation. Effectiveness and appropriateness are mainly about clinical practice. But the quality of services at the point of delivery to patients depends crucially on the way in which the organisation as a whole operates: highly skilled and technically competent doctors and nurses may deliver an inferior service if the organisational structure in which they work is inappropriate or badly designed.

Again, the point is self evident and a single example can illustrate it. In 1995 the Audit Commission—which in many ways is a precursor of the proposed new Commission for Health Improvement—carried out a study of the treatment of patients with hip fractures.<sup>9</sup> The study showed that many hospitals fall short of expected standards as laid down by the guidelines produced by the Royal College of Physicians and others. There were great variations in the time spent waiting for operations and these times were sometimes unacceptably long; too many operations were carried out by unsupervised and inexperienced junior doctors; rehabilitation and discharge planning was often inadequate. In short, it was the organisation of clinical resources which explained

many of the failings; although generous staff levels did not necessarily produce good results, some bad results were explained by poor staffing levels or by an inappropriate mix of staff.

To emphasise the importance of organisational factors in determining quality—in its many dimensions—is also to underline one of the main problems faced by policy makers. This is that the relation between structures, process, and outcomes is poorly understood. The Department of Health's research and development programme has—until very recently—been dominated by a medical model of research emphasising outcomes to the neglect of organisational factors. A similar neglect is evident in the indicators which the NHS executive proposes to use to assess the performance of the NHS.<sup>10</sup> These do not include any indicator which might measure organisational performance. Staff turnover would be an obvious candidate (and could be adjusted for local labour market conditions just as mortality figures can be adjusted for case mix). Yet there is increasing evidence that organisational structures and cultures are an important factor in determining the quality of clinical care; for instance, professional job satisfaction among nurses is a strong predictor of process measures of quality of care.<sup>11</sup>

#### *Challenges for policy makers*

One of the fashionable mantras of our time is the demand that policy making should be “evidence-based”. It is a misconceived demand. For the real trick of policy making is how to make sensible decisions, given inadequate, incomplete, and ambiguous evidence. Political and research timetables rarely coincide; policies change in the process of implementation, so making an evaluation of the original intention impossible; research commissioners tend to be slow to recognise emergent issues. The evidence needed to make policy is therefore nearly always lacking.

The case of quality in the NHS underlines all these points. We know very little about the appropriate mix of incentives and sanctions needed to make the NHS more quality conscious: indeed different mixes of incentives and sanctions will almost certainly apply to the different components of the concept. The 1991 reforms of the NHS were designed to make the NHS more quality conscious and more competitive. But as it turned out there was little competition and less interest in making quality (apart from access) a currency of competition. So the incentives had little impact. The 1997 reforms are, by contrast, intended to make the NHS more quality conscious by means of more central direction and control. But we know very little about what the effect of yet more performance tables will be: whether it will change behaviour, induce defensive attitudes, or encourage statistical gaming (possibly all three).

This would suggest that the Government's pursuit of quality will, inevitably and rightly, be a slow, incremental, and cautious process, with the balance of emphasis between the component elements shifting over time. The motto of



the 1997 white paper was "what counts is what works". That, too, should be the motto of the drive for quality. If the initial act of policy making cannot be based on evidence, the process of implementation will generate evidence about what does or does not work. In short, the Government's strategy should be seen for what it is—as a set of experiments that will, in turn, modify that strategy.

- 1 Marmor TR, Mashaw J. Rhetoric and reality. *Health Management Quarterly* 1993;15:21-4.
- 2 Secretary of State for Health. *The new NHS: modern, dependable*. London; HMSO, 1997. (Cm 3807.)
- 3 Secretary of State for Health. *A first class service: quality in the new NHS*. London: Department of Health, 1998.
- 4 Maxwell R. Dimensions of quality revisited: from thought to action. *Quality in Health Care* 1992;1:171-7.
- 5 Moss F. Quality in health care: getting to the heart of the matter. In: *The Quest for excellence: essays in honour of Robert J Maxwell*. London: King's Fund, 1998.
- 6 Audit Commission. *By accident or design: improving A and E services in England and Wales*. London: The Stationary Office, 1996.
- 7 Day P, Klein R. *Accountabilities*. London: Tavistock, 1987.
- 8 Harrison S, Pollitt C. *Controlling health professionals*. Buckingham: Open University Press, 1994.
- 9 Audit Commission. *United they stand: co-ordinating care for elderly patients with hip fracture*. London: The Stationary Office, 1995.
- 10 NHS Executive. *A national framework for assessing performance: consultation document*. London: Department of Health, 1998.
- 11 McKee M, Rafferty A-M, Aiken L. Measuring hospital performance: are we asking the right questions?" *J R Soc Med* 1997;90:187-91.

# Evolving quality in the new NHS: policy, process, and pragmatic considerations

Sheila Leatherman, Kim Sutherland

This paper examines current and proposed quality initiatives in the United Kingdom health sector. The evaluation was carried out during a time of enormous change in the wake of the 1997 elections, and was simultaneous with the emerging definition of *The New NHS: Modern, Dependable*<sup>1</sup> which encompasses many new initiatives specifically related to quality. This new focus is indicative of the growing importance of quality improvement as a function in healthcare systems<sup>2</sup> and has been accompanied by a shift away from a fixation on costs, in both the United States and the United Kingdom. In both countries, politics play an important part in explaining the high profile of quality in any public discussion of health care but more notably, quality is becoming an arena of responsibility and accountability perceived to be important by policymakers, managers, clinicians, payers, and patients. No longer is it acceptable for managerial and clinical leadership to view quality as discretionary.

This commentary on policy derives from a 1 year project, commissioned by The Nuffield Trust, intended to evaluate the context, policies, and processes in the NHS that influence the capacity for quality improvement in health care. The evaluation assessed the information from selective review of health policy and management literature; consultative documents; and interviews with key leaders in the United Kingdom health sector. Over 45 people were interviewed, with a semistructured interview format, representing about 75 hours of interview time. Interviews were held with people in political and policy leadership positions, members of the NHS Executive, health service managers, medical and nurse leaders, academics, and quality experts. Interviews were conducted in England, Northern Ireland, Scotland, and Wales.

The project sought to capitalise on the different backgrounds of the researchers. The lead researcher brought to the work an outsider's perspective, from an American viewpoint, that has been shaped by a career that includes two decades of focus on healthcare quality through national research and policy projects as well as executive managerial roles in healthcare delivery systems. The second researcher, provided the United Kingdom link, with an appreciation of the contextual and historical background against which the quality agenda is set.

## Conceptualising quality

Quality has traditionally represented a relatively risk free and widely popular articulation of policy. It is, after all, extremely rare to find

someone who is opposed to the notion of quality. However, it has lacked a shared understanding, a set of common standards, and any explicitly stated common goals which are universally subscribed to, thereby making it difficult to drive forward a meaningful quality agenda. Yet, healthcare quality is an arena that must rely on objectivity and rational measurement.<sup>3</sup> It is essential to make explicit the objectives of, and rationale for, a quality agenda as well as to specify the expected contributions of quality evaluation and improvement.

Our conceptualisation of quality (fig 1) is based on the assumption that quality improvement activities can contribute to the performance of the healthcare sector, and to the nation at large, in many valuable ways. It reflects ideological principles which underpin the modern NHS, including efficiency, effectiveness, and economy<sup>4,5</sup> and sees quality in terms of the three key constituencies to whom quality is delivered: individual patients, patient populations, and the system as a whole. Each constituency has its own champions, particular organisations, and conceptions of quality. For instance, individual patients may see quality as unlimited expertise, technology, and resources directed towards their particular problem, although a population may regard it to be the greatest good for the greatest number. The system, it could be argued, can be seen as an instrument for securing quality for the other two constituencies, however, because of the complexity and size of the NHS, the system itself requires specific quality considerations and initiatives if it is to function effectively. We therefore consider the system to be a key constituent in its own right. Importantly, the three constituencies also contribute to quality—for example, individual patients can affect quality through their choices of lifestyle which subsequently impact on demand for services; patient populations exert influence through collective social conditions and specific demand for services, and the system impacts on quality by the efficiency with which it operates.

Figure 1 shows other contributory factors which shape quality in health care—namely, staff (both professional and non-professional groups), strategies, technology, resources, and the environment. These factors are often the levers used to secure change. Underpinning all of the factors and constituencies which comprise the quality field is the ethos derived from the values and culture of the health service, the sense of public service, and the motivation to improve.

**The Judge Institute of Management Studies, University of Cambridge, Trumpington Street, Cambridge CB2 1AG, UK**

Sheila Leatherman, senior associate  
Kim Sutherland, research associate

Correspondence to:  
Sheila Leatherman,  
Executive Vice President,  
United HealthCare, 9900  
Bren Road East,  
Minnetonka, MN 55343,  
USA. email  
sleather@uhc.com

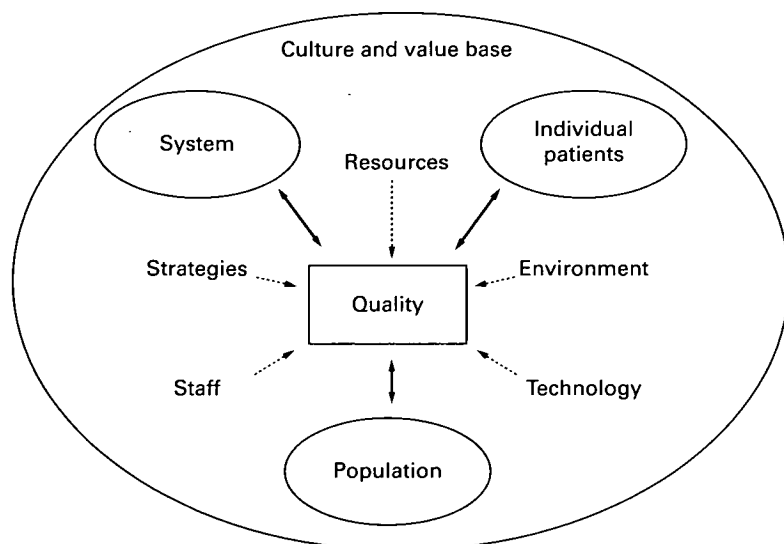


Figure 1 Conceptualisation of quality.

An evaluation of NHS quality must ask how do current and proposed policy initiatives deliver quality to these three constituencies? Several objectives emerge as critically important (box 1). Firstly, in terms of the system, do quality initiatives enhance the design and management of discrete health systems, programmes, or organisations? Do they provide information for and allow evaluation of macro-health policies? Secondly, in terms of individual patient care, does the quality agenda optimise that care by providing appropriate services (diagnostic and treatment processes) and tracking individual outcomes of care? Thirdly, is population health supported through the provision of appropriate resources and interventions? Is health status monitored and fed back into planning and policy making processes? Is the public engaged as informed consumers and active patient participants? And fourthly, across all three constituencies, is the effectiveness of interventions recorded, analysed, and used as information for future decisions?<sup>2</sup>

Thus in evaluating the quality agenda in the United Kingdom, we explore how current policies and initiatives support these purposes and seek to identify possible gaps where policymakers may have overlooked the link between specific quality initiatives and the purpose or justification for investing in a comprehensive quality programme.

Our conception of quality encompasses the notion of continuous quality improvement at a system level.<sup>6</sup> It requires interplay and mutual understanding between the constituencies. It allows for the necessary and timely attention to the areas of individual poor, or even outrageous, performance but does not unduly dedicate precious resources to only anomalous events, which would thereby prejudice the system and concerns about population health.

### Context in the United Kingdom

#### A LOOK AT THE PAST

Organisational performance and in particular, issues of efficiency and economy, have long dominated health policy in the United King-

### Objectives for a national quality agenda

- To improve design and management of discrete health systems, programmes, or organisations
- To provide information for and allow evaluation of macro-health policies
- To optimise individual patient care by:
  - Providing appropriate services—that is, diagnostic and treatment processes
  - Tracking individual outcomes of care
- To manage population health through the:
  - Provision of appropriate resources and interventions at the level of defined population
  - Monitoring of population health status for purposes of revising plans, programmes, policies, and resources to better serve health needs
- To engage the public as informed consumers and active patient participants
- To record and analyse effectiveness of interventions

Box 1 Delivering quality to key constituencies.

dom and have acted as the primary drivers for health sector reform.<sup>5,7</sup> Quality has often been subsumed under the heading of organisational performance, and in viewing policy developments, it is important to acknowledge that although it has long been the subject of rhetoric, until recently, there has been little in the way of comprehensive policy or implementation. Nevertheless, key policy developments, although not specifically targeted at improving quality, have had a considerable bearing on it.

The history of the NHS has been shaped by an extensive catalogue of structural reform. Noteworthy developments include the introduction of consensus management by the Joseph report<sup>8</sup> which sought to unify the system in a quest for greater efficiency; the introduction of annual performance reviews in 1982 which sought to shift focus from concerns with input to output; and the Griffiths report<sup>9</sup> which rejected consensus management in favour of the general management model. The subsequent introduction of the internal market in *Working for Patients* (1989)<sup>10</sup> sought to secure for health service managers, greater control over their organisations through the establishment of contractual transactions between purchasers and providers. It was envisaged that contracts would be agreed on the basis of such variables as cost, volume, quality, and timeliness.<sup>11</sup> However, the opportunity to put right differences in quality through contractual mechanisms met resistance in the shape of political and professional factors—such as the protection of clinical autonomy<sup>12</sup>—and the lack of meaningful comparative data. These factors mitigated against the ability to engage in selective purchasing based on performance.

One of the mechanisms used to secure improved performance in the NHS has been the use of target setting. Since 1982 managers have been accountable for output measures—such as cost per case, or operations

completed.<sup>13</sup> The *Health of the Nation*<sup>14</sup> targets sought to reduce the incidence, and improve outcomes, of particular disease groups: coronary heart disease and stroke, cancers, mental illness, HIV/AIDS and sexual health, and accidents. These targets were revisited in the recent green paper, *Our Healthier Nation* (1998).<sup>15</sup> Similarly, the *Patient's Charter* (1991) laid out the rights available to all citizens as well as service guarantees and targets, and published league tables of *Patient's Charter* performance. Targets, however, have long concentrated on non-clinical aspects of quality<sup>16, 17</sup> and even the more clinically oriented *Our Healthier Nation* targets concentrated on population based indicators rather than individual clinician, or unit performance. In terms of the constituencies in figure 1, these initiatives have secured some benefits for specific populations, and to some extent, for the system, however, they have tended to be discrete and not take a systematic approach to quality.<sup>18</sup> By and large, control of quality at the individual patient level has been left to processes of professional values, trust, and clinical autonomy.

Also, several programmes have been implemented over the past decade including audit, total quality management, business process re-engineering, and clinical effectiveness. These are all examples of knowledge generating processes and functions that should affect quality of care but the impact of which may have been compromised in effecting systematic change. None of them created a conceptual coherence or operationally integrated national approach to initiatives in quality evaluation and improvement in the NHS.

#### ASSESSMENT OF THE CURRENT SITUATION

There is currently an opportunity to act on the well articulated but largely rhetorical agenda and to bring coherence to the diverse range of fragmented initiatives which have dominated quality in health. In 1997-8, the new labour government set out its plans for reform in a series of white papers and consultation documents: The *New Modern NHS, Dependable* (England);<sup>1</sup> *Designed to Care* (Scotland);<sup>19</sup> *Putting Patients First* (Wales)<sup>20</sup>; and *Fit for the Future* (Northern Ireland).<sup>21</sup> These documents feature quality as a prevailing purpose rather than a desirable accessory. However, this change in emphasis should be seen not as a revolution, but as part of the evolution of the health service, building on and bringing conceptual coherence to earlier, disparate policy initiatives. As the Labour reforms for the NHS are implemented and quality moves to centre stage, it is critically important to reassess the mechanisms for evaluating and improving quality of care in a systematic and systemic fashion.

Advancing quality in the United Kingdom means building on the legacy of the past, capitalising on existent knowledge, experience, and technologies, and integrating these with a vision for the future of quality in the new NHS. The timing for the newfound vigour in pursuit of quality is both opportunistic and essential. It is now that major statutory reforms in struc-

ture, organisation, and programmes are being proposed and instituted. Many of these explicitly set the stage for defining the principles, responsibilities, and desired outcomes for quality of care. Establishing a common understanding of the problems, gaps, or deficiencies will allow for a more judicious and sustainable set of quality reforms.

In stark terms, what needs fixing? Emerging from synthesis of the interviews, and substantiated by or derived from publications, are several common themes on deficiencies in the scope, capabilities, or policies of the systemwide quality initiatives. Correcting these concerns could and should provide a basis for directing the evolution of a quality approach in the NHS. The following represents a list, admittedly incomplete, of priority concerns to be considered:

- *Identifying and ameliorating unjustified variation in clinical practice and service*

This is a priority issue and the consensus with which it was identified in the interviews was striking. It is viewed as a problem at both the individual and system level. Unidentified and patterned variation from normal practice has been implicated in several recent cases of individual substandard performances which have been highly publicised in the media and heighten political and public pressures for reform in quality responsibilities and accountabilities.

- *Lack of conceptual coherency and operational integration*

Existent initiatives, although in many situations resulting in laudable actions, are compromised in their effectiveness due to a lack of conceptual coherency and operational integration. For example, it is not commonly understood how clinical effectiveness initiatives dovetail with practice guidelines and inform selection of audit topics and performance monitoring.<sup>3</sup> These initiatives too often exist in their own orbits unlinked to other related activities of evaluation or intervention.<sup>18</sup>

- *Lack of clear authority and accountability has been problematic*

Quality of care has been historically viewed as the domain of the medical profession but physicians may be reluctant to accept responsibility for cases of suboptimal performance among colleagues. Managers in the NHS were either unwilling or unable to take responsibility for, and implement specific actions for, problems in care. Sometimes this was because problems and performance issues were not sufficiently identified or validated.<sup>18</sup> In other cases, it was an unwillingness or perceived inability to act on known problems of quality. (It should be noted that clinical governance seeks to rectify this deficiency.)<sup>1</sup>

- *Insufficient objective measures or indicators of quality*

For the most part, previous indicators and league tables were focused on cost and resource and efficiency measures, as opposed

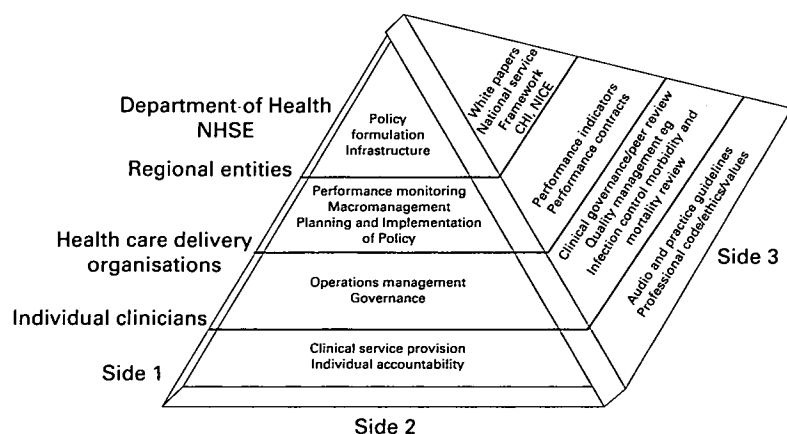


Figure 2 Organising and implementing quality.

to quality of care. This had two untoward effects: firstly, constraint of attention throughout the NHS on efficiency and resource issues without balance on quality of care issues; secondly, creation of a jaundiced view of performance indicators as being associated with financial issues rather than patient care.

● *Lack of sufficient incentives*

Interviews highlighted an area of policy that has for a long time needed considerable appropriate and effective attention. The lack of incentives to encourage quality and to implement sanctions in the cases of poor performance.<sup>22</sup>

● *Data capacity*

In the absence of market forces and traditional command and control structures, a primary lever for quality improvement, particularly at clinician and unit levels, is the use of comparative performance data.<sup>23</sup> Considerable investment is needed to generate the human and technological resources for the collection, analysis, and reporting of data through fair and valid instruments, if this is to be an effective mechanism for delivering quality.

● *Clarify the assumptions and roles of professional self regulation versus government regulation*

In two recent and highly publicised episodes, professional self regulation has been criticised as failing to provide sufficient safeguards to ensure clinical quality—for example, the high mortalities in the paediatric cardiology unit at the Bristol Royal Infirmary and the anomalies in the results of the cervical screening service at Kent and Canterbury Hospital. What is reasonable and prudent in the domain of professional self regulating conduct requires explanation. It is also essential to elucidate the rationale for professional self regulation versus external regulation, and to define how the two may complement one another optimally.

● *Role of primary care*

Key themes in the NHS reforms are primary care, a commitment to quality, and the emergence of clinical governance as a concept and approach to responsibility and accountability.<sup>19-21</sup> However, the feasibility and methodology for linking these three is an

acknowledged challenge. Specifically, the means of including primary care practitioners into a clinical governance structure must be considered.

● *Organising quality*

Evolving quality in the United Kingdom is now dependent on rationalising and integrating past and proposed policies, processes, roles, and accountabilities. There must be a scheme that is coherent and logical to stakeholders, to conceptualise, organise, and implement quality. The scheme, illustrated in figure 2, is introduced to consider this need. It encompasses several stages: policy formulation, the definition of criteria for performance; definition and application of indicators of quality; identification and remedies for problematic or substandard performance; and continuous improvement in overall performance within the system.

It implies a context of centralisation to decentralisation (side 1) where certain key and critical processes are performed. Each stratum must explicitly be accorded both discrete responsibilities and accountabilities related to quality of care. A national healthcare system, where standards, guidance, and definition of authority and accountability can be articulated and implemented with some consistency, may have inherent advantages for organising in such a framework.

There are certain general functions and responsibilities that must occur in a national strategy for quality (fig 2, side 2). Policy formulation is generally centralised, within a nationalised healthcare system. Likewise, the government as sponsor of the health system retains most of the responsibility for infrastructure, both organisational and technological. Both are important in building for quality management. The second tier portrays the step down macro-management and monitoring functions at the regional level. In the NHS in England, this may be the regional health authority or health authority, and (at least historically) encompasses the implementation responsibilities of the health departments of Scotland, Wales, and Northern Ireland. The third tier applies to the level of the trusts, where governance is vested (in the past primarily for fiscal matters and throughput responsibilities) and operations management is performed. Finally, forming the foundation for the hierarchy, are the clinical transactions of the healthcare system. The encounter between a clinician and patient fundamentally defines all inputs and outputs of a healthcare system. At this fundamental level, the responsibility and accountability for quality is individual and interpersonal. The challenge is to engender commitment among the clinicians, managers, and patients to initiatives originating from higher levels.

The essential nature of quality is abstruse, multidimensional, and multifactorial.

Disciplining a healthcare system—every level of it—to strive towards the realisation of quality—necessitates discrete processes and tools (fig 2, side 3). In the United Kingdom it is essential to rationalise and integrate the

many current but disparate and unlinked activities impinging on quality management and the equally many proposed initiatives for both policies and processes in the future. Figure 2 assigns processes and tools to the four organisation levels and functional responsibilities. A key issue in taking the quality agenda forward is determining how the various layers interrelate to deliver coherence across the entire system. It is insufficient to define structures and objectives for organisations at each level. Rather, there needs to be meaningful integration of the different structures, processes, and goals at the various levels.

### **Evolving quality in the United Kingdom: the findings**

Looking across the Departments of Health in England, Scotland, Wales, and Northern Ireland, there are clear similarities and differences at both the macro-level and micro-level of quality evaluation and improvement. Philosophical congruence, shown through the individual white papers, is evident.<sup>1 19-21</sup> Considerable differences exist in resources, priorities, and political issues influencing policy development. The evolution must appropriately reflect fundamental differences based on such factors as the homogeneity or heterogeneity of populations, the distribution of expertise, the state of the art for critical processes—such as guideline development—and essential issues of infrastructure—such as data and information technology. The following findings and recommendations, although intended to be generic, necessarily apply differently to the four regions.

There is general agreement about the principle challenges for quality improvement in health care. Unjustified variation in practice and the gap between evidence and performance are widely identified throughout the United Kingdom to be key areas of opportunity to secure considerable advances.<sup>1 18-21 24</sup> A well defined and commonly understood national approach to quality is needed, and by many indications is underway. We examine current directions of strategic concerns, the linking of strategy with operations and local responsibilities. From the pyramid (fig 2), although there is some fuzziness at the margins, strategic concerns are primarily within the apex; the linking of strategy with operations is carried out largely at a regionalised level; and local responsibilities fall within the remit of individual clinicians, their units, and the organisation to which they belong (level 3 and the base).

### **Strategic issues**

At the most central level the Department of Health and NHS Executive certain tasks of policy setting and increasing organisational capacity are of paramount importance.

#### **WHITE PAPERS**

The white papers published in 1997–8 provide a policy for the evolution of measurement and management of quality in the United Kingdom. The mission, objectives, and vision are compelling. The short term value of the white papers is articulating a vision and strategy for

setting quality at the top of the NHS agenda and for providing balance to what is rather widely perceived to have been an unmodulated focus on cost and efficiency. Mid-term value lies in the most critical task, convincing many key constituencies that these white papers are “for real”—that is, overcoming what is an obvious fatigue and skepticism with the constant announcements of new reforms and restructuring in the NHS over the past 20 years. The lasting value of these white papers will be judged many years hence by their contribution to resetting the stage for realising health gains.

One of the new organising processes being delineated is the national service framework. The Calman-Hine framework, for cancer services, provides a template to be replicated for other areas. Wisely, it is envisioned that there will be some coordination between the health departments of England, Scotland, Wales, and Northern Ireland but that different priorities will be set based on the perceived needs of specific populations. For example, England has identified heart disease and mental health, and Wales has added a third priority of cervical screening. These national service frameworks should be designed to provide specific guidance to advance quality. This can be done by establishing explicit benchmarks for excellence, requiring the use of practice guidelines and protocols thus defining good clinical performance and creating an ongoing evaluation process for discrete clinical processes and outcomes.

#### **NATIONAL PERFORMANCE FRAMEWORK**

A national performance framework has been delineated and will be refined. Again, the concept, as that of the white papers, is clear and persuasive. The scope is arguably too ambitious for the current capacity for methodological development, the availability of requisite data, and analytical expertise. However, the new NHS quality agenda is clearly indicated to be a long term (10 year) strategy.<sup>24</sup>

The creation of two major new entities has been announced: the Commission for Health Improvement (CHI) and the National Institute for Clinical Excellence (NICE). Definition of these organisations is under consultation. If they are to advance quality, they should play complementary parts. The first, established at arm's length from Government, with power to influence and intervene in cases of poor performance and the second, ensuring that information and advice about what constitutes best practice is effectively disseminated. The National Institute for Clinical Excellence is positioned to play a much needed part in the convening, developing, endorsing, and promulgating of standards of practice. If it can develop its role to include the definition of such standards of indicators or measures of quality, it has the potential to rectify several of the most deficient aspects of quality evaluation in the United Kingdom—namely, the short supply of widely agreed and publicly available measures of clinical quality, the lack of interplay between the professions and the public in setting indicators, and the

consequent deficit of comparable performance data in clinical quality. Three important questions for the National Institute for Clinical Excellence emerge: how to secure synergy with existing organisations who perform a similar role—such as the NHS Centre for Reviews and Dissemination and the Cochrane Collaboration; how to implement recommendations and secure change in individual clinicians; and how to define what amount of customisation of guidelines and measures is justified at a local level.

There seems to be some controversy over whether the primary mission of the Commission for Health Improvement is one of inspection and regulation, or consultation and guidance. Recent and highly publicised cases of poor medical practice have created pressures on government to intervene in cases of unacceptably poor individual performance where local controls have not prevailed. On the other hand, the possibility for the Commission for Health Improvement to play a larger strategic and visionary part in identifying the priorities for the health system and integrating the various players and processes is argued by some to be the most needed and potentially constructive contribution. There is, however, little policy documentation supporting this concept of the role of the Commission; rather its function is described as one which ensures that clinical governance processes are in place, and to carry out rolling inspections of NHS organisations.<sup>24</sup> There is for many a question about whether the Commission for Health Improvement can play both the interventionist, possibly even punitive, part and still be seen as the judicious arbiter of macro-level strategy.

#### Linking strategy with operations

From these policy and infrastructure activities flow implementation issues. Three processes are critical to assure quality: planning and programming to achieve standards of quality, setting clear and measurable performance standards, and monitoring actual performance.

#### PERFORMANCE INDICATORS

Performance indicators can change behaviour. This has been shown in the NHS with the use of league tables and waiting lists.<sup>25</sup> It has likewise been shown in the United States through the use and public disclosure of certain clinical data.<sup>26</sup> Therefore, it is important to “get it right”; to identify which areas of performance are of the highest priority; to link performance indicators with accepted clinical guidelines; and make an informed selection of valid and reliable indicators to monitor and report. A thorny issue being debated is by whom, and how, will these selections be made. Certain political considerations are necessary. There is always a natural tension between the arguments for a top down versus a bottom up process. Effectiveness is delivered through a prudent blend of the two. Clinical and managerial expertise in combination with unique patient insights are needed to construct robust performance indicators; front line practitioners and the public should be involved

alongside acknowledged experts.<sup>22 27</sup> However, aspirations for such an inclusive approach must be tempered by reality. Developing indicators is costly and complicated and therefore justifies a high degree of central activity for the definition, testing, and development of methods of performance indicators.<sup>28</sup> Central development allows for economies of scale and standardisation of content. Legitimate customisation and modification can be made through structured processes of review and ratification. Whether this central development activity is convened by government, professional organisations, or by the public is a strategic consideration. A blended approach, although perhaps harder to initially organise and manage, may be necessary for political viability and content stability.

#### PERFORMANCE CONTRACTS

A related issue is that of performance contracts. There is precedence in the NHS for performance stipulations related to quality of care, and even with associated financial incentives. Certain primary preventions such as immunisation and cervical screening have historically had targets for achievement established and primary care payment made to reflect the standards met. Expanding this tradition, in an incremental fashion, to judiciously selected additional areas of process and outcome measures, should be considered. Several pilot schemes could be designed to test those measures that seem most amenable to valid and fair monitoring and performance based payment. The areas for initial focus should be tied to the practice guidelines of the National Institute for Clinical Excellence and to the national service frameworks, thus showing the conceptual and operational integration of the initiatives. Extensive research into implementing the evidence into practice has shown us that there are “no magic bullets” when it comes to securing comprehensive change in clinical practice; however, one underused lever for change is that of incentives.<sup>23 29</sup>

#### Local responsibilities

In operations management and governance (fig 2), certain processes are essential; peer review, established ways of monitoring quality in hospitals—such as infection control and morbidity or mortality reviews—as well as the delineation of procedures for considering areas of compromised or poor performance.

#### CLINICAL GOVERNANCE

It is here that the new concept of clinical governance, introduced in the recent white papers, will be instrumental.<sup>1 19-21</sup> Notable throughout our series of interviews was the frequency with which respondents identified clinical governance as the factor which would be most influential in effecting meaningful change to the culture and the delivery of quality improvement in the NHS. This is consistent with another major finding of the interviews; the concern about the lack of clear and statutory responsibility on the part of any individual to answer for known problems of quality. Clinical

governance is defined within the consultation document *A first class service* (1998) as

"A framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish".<sup>24</sup>

It establishes a legal responsibility for the trust chief executives, commensurate with their current fiscal responsibility, for the quality of care in their organisations. Although this may in part rectify the vacuum of accountability and authority at an institution and specialty level of medical care, it is not clear how this will apply to primary care. This is an issue of pressing importance to be considered by policy makers in the professions, and consequently explained to the public.

For the front lines (the clinicians and practitioners of health care) two very different factors and processes for self regulation of conduct and practices relating to quality improvement must be integrated. The first is external performance evaluation and monitoring. It is at the individual level of the practitioner that much of the previous quality evaluation has supposedly taken place, largely through the mechanism of audit. Audit remains a highly controversial subject throughout the United Kingdom. It is widely recognised by physicians and managers to have played a constructive part in raising the issue of evaluation of clinical practice but not delivering great systemic, or even local, impact.<sup>30</sup> As implemented, audit had many problems. It was viewed, at least initially, as the private domain of the medical profession. This history compromised more recent attempts to adopt a more inclusive multidisciplinary approach of so-called clinical audit. Also, it was often performed on a "one off" basis as a project or clinical research activity as opposed to a deliberate attempt to gather objective data on a problem within the context of an organised system of evaluation and intervention. Is audit an obsolete process? Not necessarily. However, the potential to realise any benefits from audit, commensurate with direct and indirect costs, argues that it be used selectively within systematic evaluation.

The second key determinant at the individual level is that of professional code and ethics. A striking theme from our interviews was the faith placed in professional values as a means to secure quality in health care. Despite being a fundamentally important aspect, the professional ethos is unlikely to be sufficient to support the ambitious quality agenda of the new NHS. Strong values have long been a feature of professional life and despite them there are, albeit rarely, episodes of poor or dangerous clinical performance. Relying solely on professional values does not seem to be an adequate or prudent means of predictably advancing the cause of quality.

- Clarification about the underlying assumptions regarding professional self regulation versus government regulation
- Attention to the issue of incentives—defining the importance (or lack of), and what currently exists or needs to be designed
- Definition of clinical governance in operational terms
- Inclusion of primary care in all of the quality initiatives
- Prioritising and design of a strategy to increase capacity, including data and information technology, human resources, and analytical expertise
- Engagement with the public—through new communication and education capabilities

Box 2 *Defining priorities for the quality agenda.*

### **Evolving quality in the United Kingdom: priority tasks**

On the political side to effect an orderly and constructive evolution for quality improvement, we see several issues as essential. Firstly, it is imperative to capitalise on the opportunities presented by the current high level of interest in quality. Secondly, there is a need to establish conceptual coherence in the quality agenda, bringing together the disparate pieces and ensuring that the people within each level of responsibility or accountability understand and have regard for other levels of the quality pyramid. Policy objectives and goals related to defining, monitoring, evaluating, and improving quality of care should be made explicit. Thirdly, there are several particular aspects of the quality agenda which need attention or clarification. These have been explored throughout the paper and are summarised in box 2.

### **Conclusion**

How do we see the state of quality in the NHS? Many of the ingredients are there: there is recognition, although often tacit, of the three key constituencies, the individual patient, the population, the system, to which quality must be delivered; there is an appreciation of the factors which contribute to quality—staff, technology, strategy, resources, and environment; and there is a healthy respect for the values and culture in which the health service is grounded. What is required is a unifying approach for all of these elements which together make up the NHS, taking into account the disparate concepts of quality and areas of interest.

Several dynamics found in the current NHS environment augur well for efforts to evolve the mission of, and capacity for, quality measurement and improvement. First and foremost may simply be the confidence of the population in the NHS.<sup>18</sup> This is not trivial. When looking for levers of change and incentives for improving performance, positive regard and trust for the institution is noteworthy. Collective goodwill and the desire to protect and preserve the health system is a force that should be



harnessed. Secondly, by contrast with the fragmented and disparate United States health sector, in the United Kingdom it is at least conceivable to align politics, policy, and resources within the NHS to advance a deliberate and directional strategy for quality improvement. Again, this is no trivial advantage.

The overriding message is one which urges coherence in approach; recognition of quality as a concept with multiple stakeholders and the difficulties that this implies; regard for the many processes of quality necessitating coordination and integration, and acknowledgement of the values, attitudes, and commitment that make the NHS a unique entity.

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- 1 Department of Health. *The new NHS: modern, dependable*. London: DOH, 1997. (Cm 3807.)
- 2 NHS Executive. *Promoting clinical effectiveness. A framework for action in and through the NHS*. Leeds: Department of Health, 1996.
- 3 Winyard G. Improving clinical effectiveness: a coordinated approach. In: Deighan M, Hitch S, eds. *Clinical effectiveness from guidelines to cost effective practice*. Manchester: University of Manchester, Early Brave Publications, 1995.
- 4 Carter N. Learning to measure performance: the use of indicators in organisations public administration. *Public Administration* 1991;69:85-101.
- 5 Farnham D, Horton S, eds. *Managing the new public services*. London: McMillan 1993.
- 6 Berwick D. Continuous improvement as an ideal in health care. *N Engl J Med* 1989;320:53-6.
- 7 Hood C. A public management for all seasons? *Public Administration* 1991;69:3-19.
- 8 Department of Health and Social Security. *The Joseph report*. London: Her Majesty's Stationary Office, 1974.
- 9 *NHS management enquiry. (The Griffiths report.)* London: Department of Health and Social Security, 1983.
- 10 Department of Health. *Working for patients*. London: HMSO, 1989. (Cm 555.)
- 11 Le Grand J. Evaluating the NHS reforms. In: Le Grand J, Robinson R, eds. *Evaluating the NHS reforms*. London: King's Fund Institute, 1993.
- 12 Sutherland K, Dawson S. Power and quality improvement in the new NHS: the roles of doctors and managers. *Quality in Health Care* 1998;7(suppl):S16-S23.
- 13 Honigsbaum F. How the health service evolved. In: Ham C, Merry P, eds. *The NHS handbook*. Kent, UK: NAHAT/JMH Publishing, 1994.
- 14 Department of Health. *The health of the nation*. London: HMSO, 1992. (Cm 1986.)
- 15 Department of Health. *Our healthier nation*. London: DOH, 1998.
- 16 Pelling N. Measure for measure. *Health Service Journal* 1997;107:26.
- 17 Edhooze J, Wardrope J. Do the national performance tables really indicate the performance of accident and emergency departments. *J Accid Emerg Med* 1996;13:123-6.
- 18 NHS Confederation. *Toward the 21st century: a way forward for the NHS*. London: NHS Confederation, 1997.
- 19 The Scottish Office. *Designed to care, renewing the National Health Service in Scotland*. Edinburgh: Department of Health, 1977. (Cm 3811.)
- 20 The Welsh Office. *NHS Wales putting patients first*. Cardiff: Department of Health, 1998. (Cm 3841.)
- 21 Department of Health and Social Services. *Fit for the future Belfast*. Belfast: DHSS, 1998.
- 22 The Scottish Office. *National Health Service in Scotland. Clinical Resources and Audit Group. Clinical Guidelines*. Edinburgh: Department of Health, 1993.
- 23 Chassin M. Assessing strategies for quality improvement. *Health Affairs* 1997;16:151-61.
- 24 Department of Health. *A first class service, quality in the NHS*. London: Department of Health, 1998.
- 25 Akehurst R, Ferguson B. The purchasing authority. In: Drummond M, Maynard A, eds. *Purchasing and providing cost-effective health care*. London: Churchill Livingstone, 1993.
- 26 Schneider E, Epstein A. Use of public performance reports; a survey of patients undergoing cardiac surgery. *JAMA* 1998;279:1638-42.
- 27 NHS Executive. *The new NHS: a national framework for assessing performance—consultation document*. Leeds: Department of Health, 1997.
- 28 The President's Advisory Commission on Consumer Protections and Quality in the Health Care Industry. *Quality first: better health care for all Americans*. Washington, DC: US DHSS, 1997.
- 29 Oxman A. *No magic bullets. A systematic review of interventions to improve the performance of healthcare professionals*. London: North East Thames Regional Health Authority Research and Development Directorate, 1994.
- 30 Pollitt C. The politics of medical quality: auditing doctors in the United Kingdom and the United States. *Health Services Management Research* 1993;6:24-34.

# Different countries, different cultures: convergent or divergent evolution for healthcare quality?

Heather Buchan

In some places people do not die in hospital any more. Instead they have "negative patient care outcomes", "terminal episodes", "systems' failure", or even "failure to fulfil their wellness potential".<sup>1</sup> Indeed, publication of hospital specific mortality tables may mean that, in future, patients deemed likely to have "multiple cell drop out" will be encouraged to rapidly leave hospital so that they can fail to fulfil their wellness potential in the community. Alternative terms for death, patients (now known as consumers although the term coproducers of health has also been suggested<sup>2</sup>) and even public hospitals (Crown Health Enterprises<sup>3</sup>) have blossomed. Healthcare quality, however, has not needed to be reframed into jargon laden phrases—it is already bedevilled by them. Healthcare quality has a wealth of meanings and is interpreted in various different ways. It may be regarded as anything from technical excellence to a smoke-screen designed to obstruct any kind of change in service delivery. Given the cultural divides over quality that exist within any one healthcare setting, to what extent are views of quality and the ways of considering quality issues transferable between countries? In this supplement to *Quality in Health Care*, Leatherman and Sutherland<sup>4</sup> report on their recent review of quality issues in the United Kingdom National Health Service (NHS). Across the other side of the world in Australia there has also been a focus on healthcare quality, although this has not been accompanied by the shift away from a fixation on costs which it is claimed has occurred in the United States and the United Kingdom.<sup>4</sup> Our healthcare managers and bureaucrats continue to keep a beady eye on matters relating to money. This paper examines some of the issues in healthcare quality and the similarities and differences in approach between Australia and the United Kingdom.

## Concepts of quality

Quality, as Leatherman and Sutherland point out, has long been the subject of rhetoric. It has also been the subject of stereotypical beliefs around which a set of ritualistic behaviours have grown. The statement: "No longer is it acceptable for managerial and clinical leadership to view quality as discretionary."<sup>4</sup> is part of this ritual rhetoric. It has its origins in an environment where quality has been used as a weapon in the fight against limits to healthcare funding. In one corner of the ring stands the clinician, outraged that a paper pushing manager concerned with throughputs and efficiency does not understand or care that quality of care is adversely affected by cost cutting. In

the other corner stands the manager, convinced that quality is the last refuge of the medical scoundrel—a convenient, vague, and all embracing term used to block any attempts to question or change clinical behaviour. Quality has been one of the last "no-go" areas for non-clinical managers. An acceptance that people other than clinicians have an important role in defining and judging quality indicates a substantial shift in culture from the time when Aneurin Bevan promised: "My job is to give you all the facilities, resources, apparatus and help I can, and then to leave you alone as professional men and women to use your skill and judgment without hindrance".<sup>5</sup>

Leatherman and Sutherland present a concept of healthcare quality as something which is underpinned by the values and culture of the health service, which is shaped by factors such as staff, resources, and the environment and which has three key constituencies—individual patients, patient populations, and the system as a whole. There is one feature of this view of quality which is particularly striking—the constrained way in which public participation is framed. The public is a patient population; public engagement with healthcare quality initiatives is as a consumer or as a patient participant. This concept of the public role in healthcare quality has gained common currency in many countries, including Australia. It reflects in many ways the influence of economists in shaping the way we think about healthcare throughout the world. However the public also have a broader interest and a more powerful role than is suggested when they are simply viewed as recipients of a service. When the system is funded by and for the community, public opinion is an important force in determining the ways in which governments are prepared to intervene to influence healthcare quality.

The problem for policy makers in any country is how do they intervene and to what purpose? Given the multiple components of quality, the need for trade offs between one dimension and another, the varying views of what is important, and the relative power of different groups within the system, this is an area fraught with difficulty. Safety is probably the one area where there is a universal shared belief of what quality in healthcare should encompass. Patients and their relatives judge how well the health system performs by assessing factors such as their access to care, the environment in which it is delivered, the information they are given and whether they are treated humanely and with respect. They hope for excellent treatment and a good outcome. But they expect that when they are cared for, they will be safe. Safety also tends to be a

**Acute Health Division,  
Department of Human  
Services, Victoria,  
Australia**  
Heather Buchan,  
assistant director quality

Correspondence to:  
Dr Heather Buchan, Acute  
Health Division, Department  
of Human Services,  
555 Collins Street, Victoria,  
Australia

baseline for clinicians. Judgements about levels of quality will vary depending on assessments of technical capacity and proficiency but ability to practice safely, both as an individual clinician and within a system, is seen as a minimum requirement. Those responsible for managing and funding the system are expected to do so in a way which assures safety. Public allegations of deficiencies in other aspects of quality provoke reactions ranging from embarrassment to justification on the part of healthcare bureaucrats and elected politicians, but rarely receive the commitment to immediate action that proved systematic failures in safety can bring. Public concern about failures in safety has driven changes at a national level in approaches to healthcare quality in both the United Kingdom and Australia.

#### What needs fixing?

Leatherman and Sutherland highlight several themes and priority concerns that emerged from the interviews they held with key leaders in the United Kingdom NHS. Many of these concerns are also dominant concerns in this part of the world, but there are also some important differences in emphasis.

Three years ago in Australia the Commonwealth Minister for Human Services and Health released preliminary results of a government funded study into the occurrence of adverse events in Australian hospitals.<sup>6</sup> The study found that a high prevalence of admissions to hospital were associated with an adverse event. A short period of intense media scrutiny and vocal community concern followed and led to the establishment of a Taskforce on Quality in Australian Health Care, charged with advising on measures that should be adopted to reduce the incidence and impact of adverse events due to healthcare management.

Taskforce members came from professional colleges (including the College of Health Service Executives), the Consumers' Health Forum, the National Health and Medical Research Council, the research group undertaking the study of adverse events, and State and Commonwealth Departments of Health. The taskforce undertook a series of public consultations, invited submissions, reviewed the scientific literature, and met with various experts in the field of healthcare quality, both nationally and internationally.

A year after the initial release of the study results the final report of the taskforce was published.<sup>7</sup> This report focused on the need to introduce a systematic approach to quality of care into the Australian health system and proposed several ways in which this might be achieved. A recent follow up report<sup>8</sup> has reinforced the principle directions signalled by the original taskforce. Identification of what needs fixing in Australia shows some key similarities and differences with the issues identified as priorities in the United Kingdom.

#### A CONSUMER FOCUSED SERVICE

One of the most noticeable differences between the concerns raised in Australia and those

reported by Leatherman and Sutherland relates to patient focus and responsiveness. Although engaging the public is mentioned as one of the objectives for a national quality agenda, this issue gets no mention in the list of common themes outlined as being identified priorities for United Kingdom systemwide quality initiatives. The need to improve consumer feedback and participation was a key theme in the Australian taskforce's consultations and recommendations. Current lack of consumer involvement in defining, managing, and monitoring the safety and quality of health care was perceived as a major problem, particularly in a health service that is supposed to be focused on the needs of those who used it. The efforts in the United Kingdom to develop more appropriate and accessible health information for consumers are well ahead of national initiatives in Australia. However, it is surprising that issues relating to broader patient participation and patient feedback do not apparently have a high profile among health sector leaders in the United Kingdom, despite the intention of the government to introduce a national patient survey. It seems that the concept that we collectively have something to learn from patients about their experience of care has not yet been accepted. In Australia patient surveys are regarded with scepticism by many clinical staff but attempts to try to refine and use patient feedback to improve healthcare services are nevertheless being actively pursued. The State of Victoria, for example, has just published hospital specific information from its first statewide patient survey,<sup>9</sup> and ways to obtain regular ongoing patient feedback, both for general monitoring purposes and for possible use in financial incentive programmes are now being investigated.

#### INAPPROPRIATE VARIATION

This is a common theme. Inappropriate variation in clinical practice and service is an issue which is not nation specific. Nor is it new. Papers highlighting practice variation have been published repeatedly for the past 20 years. Finding effective ways to differentiate between desirable and undesirable practice variation and to prevent undesirable variation at a system and individual level are a challenge for many health systems.

#### ACCOUNTABILITY FOR HEALTHCARE QUALITY

Lack of clear authority and accountability is also an issue which is common to both systems. The Australian taskforce noted that the responsibility for monitoring and improving patient safety and quality often lies with the self motivated efforts of individual clinicians or groups of clinicians. Often professional activities aimed at improving care safety and quality occur in isolation within one professional group or hospital department. A key point of the taskforce report was the understanding that a concern for safe, high quality care should permeate the system. It states that.

"Currently managers and policy makers are accountable for financial control of the healthcare system. They should be just as

accountable for the safety and quality of the care delivered by the system."<sup>7</sup>

#### PERFORMANCE INDICATORS

Do we know if we have a safe, high quality healthcare system? In Australia, as in the United Kingdom, reliable measures to underpin and support the rhetoric do not exist. We do not have the capacity to obtain good information on the overall performance of the healthcare delivery system and its component parts. Clinical information systems which would help provide good measures are woefully underdeveloped.

The push for performance indicators is on. And this is the area where there is most potential for conflict. In part this is because of the desire for indicators to serve apparently mutually incompatible objectives—justification, judgment, and improvement. In the United States published indicators were developed partly as a marketing tool to influence choice of healthcare provider—to help purchasers and consumers choose among plans.<sup>10</sup> In systems which provide universal coverage and which are predominantly funded by taxpayers, there is a different emphasis and audience.

The use of quality by clinicians as a weapon in the battle against cost containment has led those pressured for resources (managers, bureaucrats, treasury officials, and politicians) to demand measurable proof of performance. At every level, efforts to retain or increase funding are met by requests for hard data. People who control budgets focus on throughput because we cannot show, in a way that has meaning for them, the effects on quality of adding or subtracting money. In part the push for performance indicators comes from the need to show value for money. And if there are to be tangible incentives—financial or otherwise—to reward good quality, then measurable ways of assessing quality are required.

When quality failures become public, there is media and public pressure for accountability. People want a healthcare system that encourages safe care; and recognises and acts if safety is compromised. When people consider that the trust they have placed in the system is abused they want the opportunity to judge for themselves the quality of the system they are funding. Whether publication of performance indicators can actually meet this expectation is a second order issue. People may be influenced far more by media reporting of rare occurrences, their own experiences, and those of their families and friends than by any list of indicators.<sup>11</sup> This is in a sense irrelevant to the issue of whether performance indicators should be publicly available—the important point is that secrecy about performance encourages suspicion. Willingness to publish information indicates respect for a public desire for more openness.

If performance measures are to be used for accountability can they also be used for learning? Not according to some, who find it difficult to see how blame free quality improvement approached through measurement of performance can be aligned with a requirement

for public accountability. A major problem is that our systems for promoting learning have a long way to go before they even begin to resemble the quality improvement models which are now being widely promoted. Peer review, as it is currently conducted, is poorly resourced, lacks good information and analysis, and is not well integrated with other parts of the health system.

There are concerns that publicly available performance measures will encourage healthcare providers to focus on producing information that looks good rather than patient care that is good. Or even worse that a "psychology of conflict" will be fostered around measurement.<sup>12</sup> At present little is known about the kind of performance information the public wants to see, thinks is useful, or actually uses. Some information is becoming available from the United States<sup>11 13 14</sup> but this may well be an area where cultural differences do matter and where research in each country is needed to develop an informed and specific approach. Also measures that matter to the public may be quite different from those which matter to clinicians or those who manage healthcare budgets.

There are obvious tensions between approaches which promote blame free recognition of error and those which require public accountability. But many of the most important issues are still unclear. A focus exclusively on the measures and the methodological problems associated with them fails to consider the critical issue of how people and the organisations they work in react to data. This is an area where debate is often driven by belief reinforced with anecdote. Performance indicators can be a tool used to produce change at both an individual and a system level. We should be trying to encourage a focus on the change as a quality indicator not just on the tool. This is an area where wisdom about what information to publish and publicly promote is needed.

#### INCENTIVES FOR QUALITY

Ability to use incentives to encourage desired changes depends on having agreed measures of good performance. The need for appropriate and effective incentives to encourage quality is a common concern. Introduction of policies that reward healthcare teams for good performance as proposed recently<sup>15</sup> would be worthy of exploration in several systems. Financial incentives for hospitals have been used to improve access to emergency care and as a tool in management of waiting lists in the Australian State of Victoria for several years.<sup>16</sup> Hospitals have clearly responded to incentives to change behaviour, although recently there were allegations of manipulation of the waiting list numbers to ensure that incentives were not withheld. A consequent inquiry found no evidence of systematic gaming.<sup>17</sup> One advantage of transparent incentive systems is that industry and public scrutiny of information reported on performance acts as a potent force to identify possible dishonesty.

#### POOR INFORMATION AND INFORMATION TECHNOLOGY

Information issues are other common themes in considerations of safety and quality. The Australian taskforce spoke of the "dramatic mismatch between the use of technology to deliver care to people, and the extent to which technology is used to ensure that the care which is delivered is safe."<sup>17</sup> There are two separate issues here. One relates to treatment of the individual patient and the ability to transfer clinical information about patients between healthcare providers. The other relates to the development of information systems that can support clinical review and measurement of the effects of health care. Support systems for clinical information and decisions are not well developed in Australia. Some states have better systems than others, but there is no unique patient identifier, and in most states record linkage across systems is very limited. Risks to confidentiality and privacy have been the predominant features of public debate around the introduction of electronically linked medical records. The risks of not using technology in this way have received minimal publicity.

#### SYSTEMS FOR REGULATION

The reasons for the current focus in the United Kingdom on professional self regulation versus external regulation are clear. Issues around the Bristol case have been followed with some interest on this side of the world, particularly as the traditional British approach to perceived troublemakers—exile to the colonies—seems to have persisted into the 1990s.<sup>18</sup> The judicial inquiry held in New Zealand 10 years ago into the treatment of cervical cancer at the National Women's Hospital<sup>19</sup> showed many of the same underlying issues around clinical autonomy and the failure of a system to respond to persistent concerns about the behaviour of powerful people within it.

Spectacular system failures of this sort, in which there are identifiable individual patients and doctors, provide a powerful push for changes to regulatory processes. Undercurrents of dissatisfaction with these processes clearly exist in Australia. Submissions to the Australian taskforce showed that several members of the public are unhappy with current systems of self regulation. The view that professional quality assurance activities do not rectify persistent poor performance by individual practitioners was commonly expressed. Formal systems for dealing with unsatisfactory performance were themselves viewed as unsatisfactory by several people. There was a widespread perception that, when things go wrong, the system closes over and information is withheld from patients and their relatives. Several years ago each Australian state and territory agreed to establish independent complaints commissions to resolve complaints about public hospital services. In many states the brief of these organisations is wider and they cover both public and private healthcare services in institutional and community settings. These commissions have an emphasis on

conciliation and provide an important service to the public. However, the other systems that exist in Australia for redress when people are dissatisfied with the care they have received are widely viewed by consumers as deficient.

#### NEED FOR SYSTEMS APPROACH

This was a pervasive theme of the Australian taskforce report. Rigid traditional clinical views of quality—that it is something confined to the interaction between doctor and patient or nurse and patient—were never wholly accurate in any organisational setting. Clinical encounters do not occur in a vacuum—the system affects them and they affect the system. As care has become more complex, the way in which the ability to assure that quality is built into healthcare systems has increasingly become the predominant predictor of whether quality care is delivered. The principles proposed by the taskforce (box 1) reinforce this idea that quality is an attribute of the system. Moving to a more regulatory approach was explicitly rejected as a way forward. The Australian healthcare system lacks the degree of uniformity found in the NHS. In Australia different levels of government, sometimes of different political persuasions, have split responsibilities for general prac-

- Those organising and managing the healthcare system are responsible for creating and maintaining a system which provides safe, high quality care
- Those practising within the system are responsible for the standard of their own practice and should share responsibility for creating and maintaining a system which provides safe, high quality health care
- All those managing and working in the system should work together and with consumers to improve the safety and quality of health care
- Consumers should be represented and participate in quality management
- Health care should be based on the best evidence available on what works and what does not
- Health services should be focused on the consumer
- All healthcare providers should have access to systems which produce information about the outcomes of the care they provide
- The safety and quality of the healthcare system and its component parts should be regularly and consistently monitored and reported
- Useful information relating to safety, quality, and outcomes of care in the healthcare system should be readily available to all those who want it
- Consumers should have ready access to effective systems of complaint

Box 1 Taskforce on quality in Australian health care: safety and quality principles.

tice and hospital care and states differ in the ways that they organise hospital systems. A common centralised regulatory approach poses both philosophical and practical difficulties. It also means that issues around the role of primary care are even more complex than in the United Kingdom. Increasingly, even when people require hospital care, the inpatient component of care is decreasing. Ways of ensuring a coherent approach to quality issues are a major challenge.

### **Evolving quality systems**

The importance of professional acceptance and good timing of any proposed changes in systems for assuring and improving quality cannot be underestimated. In the United Kingdom there is a public push for change, a professional recognition that the status quo is no longer acceptable, and a political will and mandate for radically new policy directions. Substantial change seems likely to occur rapidly.

A more gradual approach has been taken in Australia for several reasons. The media attention to the results of the adverse events study was shortlived. There was not an identifiable group of patients who had clearly suffered as a result of a specific failure in the system. The manner in which the original study findings were released—they were not published in a peer reviewed journal<sup>20</sup> until 5 months after they were first released in the Australian Parliament—outraged many doctors. The Australian Medical Association became a vocal critic of the study, the manner of release of study findings and many of the taskforce recommendations. By the time the taskforce report was released there had been changes of government at the Commonwealth and in several of the States. Australian health ministers received the report of the taskforce in June 1996 but did not endorse it at that time. Nevertheless, work on most of the fundamental areas of concern flagged by the taskforce has been taking place.<sup>21</sup> Ministers did not establish the safety and quality in healthcare organisation that the taskforce had recommended to co-ordinate national initiatives and oversee implementation of the other recommendations. Instead, another body was formed—the National Expert Advisory Group on Safety and Quality in Australian Health Care. This group was asked to make practical suggestions to improve safety and quality in Australian healthcare services, and to direct and influence initiatives for acting on the recommendations of the taskforce. Their recent report<sup>8</sup> has been endorsed in principle by health ministers and makes several recommendations in five key action areas (box 2). The report emphasises the need for a systematic view of quality, and importantly, recommends that health ministers take steps to specify performance standards more clearly, outlining expected safety and quality enhancement achievements for boards of management and senior managers of healthcare organisations. Ministers have agreed to do this and have also agreed that some safety and quality issues are best dealt with at a national level. The next report of the Expert Advisory Group, expected in March 1999, will make recommen-

dations for a national co-ordination mechanism and a national action plan. The principles established by the original taskforce have shaped the directions for healthcare quality in Australia. The Expert Advisory Group has provided a way of moving forward. Although movement has been slow the changes that will come are more likely to be widely accepted.

Within the space of a few decades there has been a dramatic change in the kinds of diagnostic and treatment interventions that can be offered to patients. Although this change has been startling, it is even more startling to find the relative lack of change in the culture, beliefs, and support systems that exist to deliver these interventions. Some parts of our healthcare system seem to have stayed in the niche that was established generations ago—peer review, for example, is still largely viewed as a process where your peers are defined as those who belong to the same specialty and discipline. Other parts of the system have evolved down pathways that ignore or dramatically underestimate the profound changes in the environment in which care is delivered. Medical education continues to be focused on the notion of the clinical encounter between an individual doctor and an individual patient, when even for one specific episode for one specific illness a patient may have multiple encounters with different clinicians. Ability to work as part of a team within a complex organisation or across organisational boundaries is much talked about but little studied. High quality health care, however that is defined, will be difficult to deliver in any country where the various components of the health care system fail to interact in a mutually beneficial way. We may find that variation between countries in values and concepts of quality is less important than the variation within systems that has evolved.

- Providing appropriate and accessible consumer health information
- Providing better frameworks for healthcare organisations to manage quality of care throughout their organisation
- Improving systems for self assessment and peer review by all clinical service providers
- Encouraging learned colleges, professional associations, and medical and nursing administrators actively to ensure quality performance through ongoing programmes of certification
- Strengthening the quality focus of organisational accreditation processes through requiring organisations to show mechanisms for quality enhancement

Box 2 Key action areas of the Expert Advisory Group.

- 1 Lutz W. *Doublespeak*. USA: Harper, Perennial, 1990.
- 2 Tudor Hart J. Thoughts from an old GP. *Lancet* 1998;352: 51-2.
- 3 *Your health and the public health*. Green and white paper. New Zealand: Ministry of Health, July 1991.
- 4 Leatherman S, Sutherland K. Evolving quality in the new NHS: policy, process, and pragmatic considerations. *Quality in Health Care* 1998;7(suppl):S54-S61.

- 5 Quoted in: Fifty years ago. The new NHS: message to the medical profession from the Minister of Health. *BMJ* 1998;317:56.
- 6 Lawrence CM. *Ministerial statement on Australian hospital care*. Canberra, Australia: The Minister for Human Services and Health, 1 June 1995.
- 7 *The final report of the Taskforce on Quality in Australian Health Care*. Australian Health Ministers' Advisory Council. June 1996. Available on the Internet at <http://www.health.gov.au/pubs/hlthcare/toc.htm>
- 8 *Commitment to quality enhancement. The interim report of the National Expert Advisory Group on Safety and Quality in Australian Health Care*. Australia: April 1998.
- 9 *Patient satisfaction survey Victorian public hospitals*. Executive Summary, September 1997. Available on the Internet at <http://hna.fh.vic.gov.au/ahs/patsat/index.html>.
- 10 Eddy DM. Performance measurement: problems and solutions. *Health Aff (Millwood)* 1998;17:7-25.
- 11 Blendon RJ, Brodie M, Benson JM, *et al*. Understanding the managed care backlash. *Health Aff (Millwood)* 1998;17:80-94.
- 12 Berwick DM. The NHS: feeling well and thriving at 75. *BMJ* 1998;317:57-61.
- 13 Mennemeyer ST, Morrissey MA, Howard LZ. Death and reputation: how consumers acted upon HCFA mortality information. *Inquiry* 1997;34:117-28.
- 14 Schneider EC, Epstein AM. Use of public performance reports. A survey of patients undergoing cardiac surgery. *JAMA* 1998;279:1638-42.
- 15 Bloor K, Maynard A. Rewarding healthcare teams. *BMJ* 1998;316:569.
- 16 Street A, Duckett S. Are waiting lists inevitable? *Health Policy* 1996;36:1-15.
- 17 Clarke B, Bennett R. Review of elective surgery waiting lists. September 1998. Available on the Internet through <http://hna.fh.vic.gov.au/ahs/waitlist/index.htm>.
- 18 Warden J. High powered inquiry into Bristol deaths. *BMJ* 1998;316:1925.
- 19 Paul C. The New Zealand cervical cancer study: could it happen again? *BMJ* 1988;297:533-9.
- 20 Wilson RM, Runciman WB, Gibberd RW, *et al*. The quality in Australian health care study. *Med J Aust* 1995;163:458-71.
- 21 Buchan H, Brook C. Quality in Australian hospitals—who cares? *Int J Qual Health Care* 1997.

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