



# **Healthcare professionals' views on clinician engagement in quality improvement**

A literature review

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April 2007

**Published by:**

The Health Foundation  
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London WC2E 9RA  
Telephone: 020 7257 8000  
Facsimile: 020 7257 8001

[www.health.org.uk](http://www.health.org.uk)

Registered charity number 286967  
Registered company number 1714937

First published 2007

ISBN 0-9548968-6-6

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# Introduction

## Background

- It is widely accepted that the active involvement of staff is an essential requirement for quality improvement in any organisational setting.
- Yet quality improvement initiatives in the NHS have not generally secured the full engagement of clinicians.
- As a result, The Health Foundation is planning to commission new research to investigate the opinions of UK healthcare professionals on clinicians' engagement in quality and quality improvement.
- To inform this research, we were commissioned to conduct a literature review to clarify what is already known about the views of UK healthcare professionals in this area.

## Remit agreed with The Health Foundation

- To carry out a narrative literature review that considered these four areas:
  - healthcare professionals' understanding of, and attitudes towards, quality and quality improvement
  - what activities healthcare professionals are involved in that they would describe as quality improvement
  - where healthcare professionals think responsibility should lie for quality and quality improvement
  - what activities healthcare professionals would like to be involved in to improve quality and what would enable them to do so.
- To do this by reviewing relevant published and 'grey' literature on UK healthcare (primary, secondary and tertiary care; employees and contracted staff; NHS and the independent sector) published between 1990 and 2006.
- To use a working definition of 'healthcare professionals' that included doctors and non-medical health professionals (eg, nurses, midwives, allied health professionals [AHPs], pharmacists and others) and managers (both clinically qualified and 'lay' managers) from all different grades and levels.
- To use the definition of quality proposed by The Health Foundation: 'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge'.

(Institute of Medicine 1990)



# Summary of key findings

## Introduction

- Healthcare professionals express strong support for the principle of quality patient care, but this may not reflect a clear understanding as to how quality might be defined, recognised or improved.
- Healthcare professionals' espoused beliefs about quality may not translate into changes in everyday practice. Instead, clinicians have shown a variety of responses to quality initiatives, ranging from apathy to outright resistance.
- Our reading of the wide literature documenting how healthcare professionals have responded to various quality initiatives in the UK since 1990 prompted a series of ten inter-related questions, which we have used to structure this summary and the main report.

## Methods

- In searching for published papers, policy reports and 'grey literature' relevant to the review, we used a comprehensive range of sources including key databases, a wide range of medical, nursing, allied health professional and management journals, and websites of relevant Government bodies, professional organisations and research centres. We also searched reference lists of retrieved papers and consulted individuals with knowledge of the field.
- Eighty-six significant empirical studies were uncovered, reported in around 100 different papers. It is largely the findings from these that are summarised and integrated using the ten key questions as an organising framework (the studies are also listed and summarised in the Technical Appendix).

## Ten key questions emerging from the literature

### **1. Do different healthcare professional groups define quality in the same way?**

Different health professional groups largely inhabit separate hierarchies and networks, often with surprisingly little inter-communication. Thus, different professional groups often do not define quality in the same way. Moreover, the processes of determining what constitutes good or quality practice within an individual profession are complex and sometimes divergent between different professional groups.

### **2. Do healthcare professionals think that the quality of care needs to be improved?**

Healthcare professionals may assert that high-quality care is already being provided, and may need substantial local data to challenge this conviction. Paradoxically, however, they are often well able to identify important deficits in care that they believe need to be addressed.

### **3. What are healthcare professionals' attitudes towards initiatives aimed at quality improvement?**

Although some studies show that healthcare professionals may respond positively to involvement in certain national quality initiatives, overall, healthcare professionals are reluctant to engage. In part this is because they perceive that the initiatives will be ineffective and a waste of scarce personal and organisational resources; in addition, healthcare professionals may be concerned about harmful effects that may result from quality initiatives.

#### **4. Do healthcare professionals have a clear understanding of the concepts and methods of quality improvement?**

Overall, clinicians and managers seem to have a limited understanding of the latest concepts and methods underlying quality improvement, and many show relatively little interest in learning about them. However, new initiatives, such as the online resource [saferhealthcare.org.uk](http://saferhealthcare.org.uk), may help them to enhance understanding and share experience about quality improvement activities.

#### **5. Where do healthcare professionals think that responsibility for quality improvement should lie?**

Quality improvement is often the scene of 'turf battles' between different professionals. Nevertheless, within the clinical professions, many healthcare professionals will readily devolve responsibility for quality-related issues (such as pain management, or infection control) to a designated individual or team if a suitable candidate exists. Quality improvement is also the subject of conflict between doctors and managers. Doctors think that responsibility for defining and assessing healthcare quality should rest with the medical profession rather than managers, and quality improvement initiatives that appear to erode this and to give what is seen as undue power to others (eg, managers or non-clinical assessors) are often vigorously resisted. Managers may struggle to implement quality improvement initiatives against sometimes-entrenched attitudes, and may have to devise strategies to circumvent considerable opposition.

#### **6. What do healthcare professionals think about clinical guidelines and quality?**

Managers support greater systematisation of clinical work through the use of such tools as clinical guidelines. However, despite some positive orientations, many clinicians do not regard clinical guidelines and related initiatives (eg, National Service Frameworks) as useful tools in providing quality care, and may resist them because they are perceived as hampering clinical freedom and impeding local practice.

#### **7. What do healthcare professionals think about evidence-based practice (EBP) and its contribution to quality?**

Evidence-based practice is a controversial issue, with enthusiastic supporters and equally vociferous detractors. For many clinicians, evidence-based practice is seen as, at best, only one tool in a range of approaches to providing quality care and, at worst, an impediment to providing individualised and holistic patient care.

#### **8. What are healthcare professionals' attitudes to the measurement of healthcare quality for quality improvement purposes?**

Clinicians have strong and diverse concerns about the measurement of healthcare quality, even when these indicators are only being used for internal quality improvement purposes. There are concerns that: the indicators are flawed and do not reflect the care provided; they are based on inaccurate data; and they are difficult to understand and interpret. In addition, there are fears that the data will be used for managerial and cost-cutting purposes that may impose significant constraints and control on healthcare professionals.

#### **9. What are healthcare professionals' attitudes to measures of quality being made public and used for external judgement and accountability?**

Clinicians are generally wary about the effects of publicising measures of healthcare quality, and can see these processes as divorced from, and often inimical to, local clinical priorities and local quality improvement. For managers, such initiatives may prove useful as levers to bring about change in specific areas of care, but they are also concerned about the limited picture shown by quality measures and about the potential for adverse consequences.

## 10. What do healthcare professionals see as the barriers and enablers to quality improvement?

Healthcare professionals describe a wide range of barriers to quality improvement, and give only a more limited list of enablers (eg, effective training, modern medical records systems, and structured programmes). Lack of time and resources are most commonly cited by all healthcare professionals, but other barriers include: lack of expertise or advice on project design and analysis; problems with group dynamics; lack of a coherent overall plan; and organisational impediments (eg, clinician–manager battles; organisational mergers). Many of the identified barriers arise from the well-documented problems of working effectively between and across health professions. This means that although more time and more resources may be necessary or helpful (directly and in their explicit recognition of healthcare professionals' concerns), they are unlikely to be sufficient on their own to overcome the substantial barriers to clinicians' active engagement in successful quality improvement.

## Concluding remarks: setting the findings in context

- This review is necessarily broad, moving out as it does from the 86 empirical studies to broader literatures. Many of the areas touched on have their own substantial bodies of research (eg, evidence-based practice, management of change or professional identity).
- The review draws predominantly on studies that rely on self-reported attitudes; inevitably there is a risk in such studies of social desirability bias (ie, individuals may wish to present themselves or their organisation in a favourable light). Nevertheless, studies like this provide a rich picture of perceptions. Such perceptions arise from, and contribute to, the shared meanings that are part of local organisational cultures.
- Studies of healthcare professionals' perceptions cannot show the extent to which these perceptions accord with actual circumstances and so they need to be used with care in identifying what may be needed to promote engagement with quality improvement. Nevertheless, such perceptions are an important part of setting the context for change and constraining what may be achieved.
- Attitudes towards specific quality initiatives are influenced by the political and local contexts and by other events occurring at the same time. Three contextual features that have been particularly influential in shaping healthcare professionals' attitudes to quality and quality improvement in the period covered by the review are: the substantial and sustained organisational turbulence in the NHS; the conflict between quality assurance and quality improvement; and the sustained and largely critical attention the NHS receives from politicians and the media.
- Increasing clinician engagement is likely to be difficult: non-engagement of clinicians is a long-standing, multifactorial and international problem. Nevertheless, a detailed understanding of the diverse perceptions of healthcare professionals in relation to quality and quality improvement, which this literature review and the research that will follow contribute to, is a vital part of planning and implementing such change.

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## Engaging clinicians with quality: the literature review

*'My patients seem to be reasonably happy, and I don't know what I could personally do to make it better.'*

(Consultant anaesthetist, quoted in Powell 2006, p 245)

*'As practices that saw themselves as being conscientious and already striving to provide a high standard of care, there was a feeling that "NSFs [National Service Frameworks] are not directed at us" and therefore did not need to be looked at in detail.'*

(Checkland 2004, p 965)

*'In general practice we are self-employed... So it is very difficult to tell a GP... that you think they could pull their socks up. They are liable to get the huff and get offended and you lose their support.'*

(GP, quoted in Exworthy et al. 2003, p 1498)

### Introduction

*'In terms of top down strategy, the UK NHS probably has the most ambitious quality improvement strategy in the developed world.'*

(Roland 2001, p 66)

An important component of the substantial and often controversial NHS policy agenda since 1997 has been the implementation of the 'quality agenda' (Ferlie and Shortell 2001). This has led to what has been described as a 'massive overhaul' of the NHS, with the establishment of new organisations and processes in such areas as external inspection and oversight; performance evaluation and public reporting; payment reform; and public engagement (Leatherman and Sutherland 2003). It is widely accepted that an essential requirement for quality improvement in any organisational setting is the active involvement of staff. For organisational change to be successful, all key players have to recognise and acknowledge that the proposed changes have a clear advantage over current practice in terms of effectiveness or cost-effectiveness (so-called 'relative advantage': Rogers 1995; Gustafson et al. 2003; Gollop et al. 2004; Greenhalgh et al. 2004). Staff also need to perceive that they, as well as patients, will benefit (Ham et al. 2003): the specific benefits for staff will vary depending on the change, but perceived benefits will always be needed to compensate for the effort required to change. Relative advantage is also important as a prerequisite for another key feature of successful organisational change: that of 'ownership' of the change by participants (Flood 1994; Harvey and Kitson 1996; Locock 2003; Gollop et al. 2004).

Quality improvement initiatives in the NHS have not yet secured this vital ingredient of the full engagement of clinicians (Ovretveit 1996; Shekelle 2002; Leatherman and Sutherland 2003; Degeling et al. 2004; Jorm and Kam 2004; Gollop et al. 2004; Leatherman and Sutherland 2004). This is having a marked effect on the success of initiatives: 'The widespread engagement of staff has not yet occurred and is slowing the potential impact of modernisation... the opinions and behaviour of doctors are particularly important, and their support is vital.' (Gollop et al. 2004, p 113) Instead, as this review will show, such initiatives have met with a range of responses from apathy to outright resistance. In accordance with the commissioning brief, this review looks at the UK literature on healthcare professionals' attitudes to quality and quality improvement in order to uncover some of the reasons why clinicians are not yet fully involved.

Unsurprisingly, healthcare professionals express strong support for the principle of quality patient care: '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.' (Leatherman and Sutherland 1998, p S54)

Quality patient care is emphasised as the overriding objective in all professional documents and in both public and private statements made by individual healthcare professionals. For example, consultants and managers closest to service delivery have ranked quality as their primary goal over volume of care (eg, number of patients treated) or financial break-even (Crilly and Le Grand 2004); nurses and midwives have cited their inability to deliver quality care according to their own standards and professional training as a major reason for leaving a particular post or leaving the NHS all together (eg, Meadows *et al.* 2000; Newman and Maylor 2002; Reeves *et al.* 2005; Kirkham *et al.* 2006), and managers pride themselves on their own emphasis on quality concerns relative to their colleagues: 'Managers gave more importance to maintaining quality within their own priorities than they attributed to most service/business managers, taking the view that they had a more conscientious attitude to quality than had most of their peers.' (Crilly and Le Grand 2004, p 1817)

However, this apparent unanimity around quality across healthcare professional groups may be misleading. 'Quality' is such a broad and generally unobjectionable concept that it can encompass a very wide range of interpretations and responses. Thus, the strong and predictable rhetoric in support of quality may not reflect a clear understanding on the part of health professional groups or individuals of how quality might be defined, recognised or improved, and espoused beliefs about quality may not translate into changes in everyday practice (Stevenson *et al.* 2004). In assessing healthcare professionals' views on clinician engagement with quality, this review will explore these issues further.

## Methods

Further to the commissioning brief, we searched for studies dealing with UK healthcare professionals' attitudes to quality and quality improvement published between 1990 and 2006, using a broad definition of 'healthcare professionals' to include both clinicians (eg, doctors, nurses, midwives and allied healthcare professionals) and managers (both clinically qualified and 'lay' managers). For our working definition of 'quality in healthcare', we took the definition used by the US Institute of Medicine and adopted by The Health Foundation for the current review:

*'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.'*

(Lohr 1990)

The literature search had four inter-related components: a search of key databases; a search of contents tables of relevant medical, nursing, allied health professional and management journals; a search of reference lists of retrieved papers; and a review of other material including policy reports and 'grey literature'. Further details of the search terms used, the databases searched and methods of selecting relevant papers are available from the authors. We traced policy reports and related material using a range of strategies. These included consulting individuals with knowledge of the field and searches of the websites of relevant government bodies, professional organisations and research centres (eg, the Audit Commission, Department of Health, Healthcare Commission, National Primary Care Research and Development Centre, National Co-ordinating Centre for NHS Service Delivery & Organisation R&D Programme, Nuffield Trust, Quality Improvement Scotland, Royal College of General Practitioners, Royal College of Nursing, The Health Foundation).

After we had sorted retrieved papers to remove papers not directly relevant to this review, we retained papers and other material (eg, reports) on UK healthcare professionals' attitudes to quality and quality improvement, and divided them into two broad categories: empirical studies (around 100 published papers), and commentary, debate and other miscellaneous papers that made direct observations on healthcare professionals' attitudes to quality and quality improvement (a further 110 publications). The main empirical studies (86 in total) are listed and summarised in the Technical Appendix, which highlights their key findings relating to healthcare professionals' attitudes to quality. Material from these empirical studies informs the bulk of this review.

## Structuring our review

Much of what we know about healthcare professionals' attitudes to quality and quality improvement comes from research carried out on specific quality initiatives (eg, clinical governance) rather than research on attitudes towards quality *per se*. Inevitably, attitudes towards specific quality initiatives are influenced by the political and local contexts, and by other events occurring at the same time. Nevertheless, reading across a whole range of studies published between 1990 and 2006, we have gained insights into the diversity and complexity of attitudes demonstrated by healthcare professionals during this time.

Unsurprisingly, there are areas that have received more research attention than others, and there are gaps in the existing literature. For example, the literature is not balanced in its coverage of the different health professions. We found that much of the UK (and indeed international) literature on quality improvement focuses on the medical and (to a lesser extent) nursing professions and on managers. Compared to doctors, little research has been carried out on allied healthcare professionals' views about evidence-based practice (Stevenson *et al.* 2004). There is also a marked emphasis in the literature on the NHS, with only a few papers referring to the independent sector (eg, Gray 1998; Shirley 2000; Vallance-Owen and Cubbin 2002; Thomson *et al.* 2004). Devolution of responsibility for health services in the four countries of the UK in 1999 means that healthcare professionals in these constituent parts of the UK are subject to different policy initiatives, and there is a marked emphasis in the research literature on England (which has been subject to the highest number of these initiatives). Although there was no indication from the literature of any distinct differences between healthcare professionals' attitudes by UK country, there has been no systematic evaluation of this issue and so it is possible that such differences exist but have not yet been explored empirically.

In this review, we draw on empirical work carried out on a range of quality improvement strategies in the UK health service, including audit, comparative data and its public release, external review, clinical guidelines and evidence-based practice. It is not that the design and operation of these initiatives themselves is our primary concern. Instead, our aim throughout is to try to use reactions to such initiatives as a means of drawing out the views of healthcare professionals on clinician engagement with quality improvement initiatives more generally. In doing so, we also draw on published commentaries on healthcare professionals' attitudes towards, and engagement with, quality improvement, and on related literature in the field of organisational change.

In reviewing this widespread literature, we will address four key issues, as requested by The Health Foundation in the commissioning brief:

- healthcare professionals' understanding of, and attitudes towards, quality and quality improvement
- what activities healthcare professionals are involved in that they would describe as quality improvement
- where healthcare professionals think responsibility should lie for quality and quality improvement
- what activities healthcare professionals would like to do to improve quality, and what would enable them to do so.

Studying these four issues in the light of the literature prompts a series of inter-related questions (see the box below). These ten questions provide a helpful framework for understanding clinician engagement in quality improvement and we will therefore use them to structure the review.

### **Ten key questions on healthcare professionals' attitudes to quality and quality improvement**

**These questions emerged inductively from a reading of the wide literature documenting how healthcare professionals have responded to various quality initiatives in the UK since 1990.**

1. Do different healthcare professional groups define quality in the same way?
2. Do healthcare professionals think that the quality of care needs to be improved?
3. What are healthcare professionals' attitudes towards initiatives aimed at quality improvement?
4. Do healthcare professionals have a clear understanding of the concepts and methods of quality improvement?
5. Where do healthcare professionals think that responsibility for quality improvement should lie?
6. What do healthcare professionals think about clinical guidelines and quality?
7. What do healthcare professionals think about evidence-based practice (EBP) and its contribution to quality?
8. What are healthcare professionals' attitudes to the measurement of healthcare quality for quality improvement purposes?
9. What are healthcare professionals' attitudes to measures of quality being made public and used for external judgement and accountability?
10. What do healthcare professionals see as the barriers and enablers to quality improvement?

The following sections take each of these questions in turn to see what is known about each of these issues in a UK context.

## 1. Do different healthcare professional groups define quality in the same way?

*'Quality has lacked a shared understanding, a set of common standards, and explicitly stated common goals.'*

(Leatherman and Sutherland 1998, p S54)

*'Quality is a term which defies precise definition... [it] is a contested concept, and is defined by individual actors according to their particular experiences, value systems, and deeply held assumptions.'*

(Sutherland and Dawson 1998, p S20–21)

*'You will know it when you see it.'*

(cited by Reeve 1997 as a common attitude among nurses)

*'Quality has become a "battleground" on which professions compete for ownership and definition of quality.'*

(Ovretveit 1997, p 221)

Quality of care is not a static concept: it depends on such factors as whose perspective is taken, the timescale over which it is examined, and the purpose of any measures applied (Chin and Muramatsu 2003; Currie *et al.* 2005). Different healthcare professionals have different views on what constitutes quality or a good outcome of healthcare (eg, Degeling *et al.* 1998; Firth-Cozens 2001). Indeed, getting diverse professional groups to reach a consensus on quality criteria was one of the factors that hampered the implementation of Total Quality Management (TQM) in NHS units in the early 1990s (Joss and Kogan 1995), and one which made TQM implementation more challenging in the NHS than in the private sector. Medical staff may define quality patient care as care that leads to control or resolution of illness and improvement of function (Attree 2001; Degeling *et al.* 2001), and can tend to disregard patient satisfaction as a specific marker of quality care (Newman and Pyne 1996).

Nurses, in contrast, may place greater emphasis on achieving patient satisfaction, on meeting the patient's psychosocial and physical care needs, and on the relationship between patient and health professional (Attree 2001; Degeling *et al.* 2001). However, professional groups are not themselves homogeneous, and members of the same professional group may differ (eg, between specialties and between sectors: Sutherland and Dawson 1998; Ferguson and Lim 2001; Willcocks 2004; Currie and Suhomlinova 2006). For example, although hospital doctors may place less emphasis on patient satisfaction, GPs have been shown to be sensitive to how patients perceive the quality of care they receive locally, perhaps in part because of their recognition that patients are able to choose between practices (Hogarth-Scott and Wright 1996; Tomlin *et al.* 1999): 'The respondents seemed to be acutely aware of, and sensitive to, patients' expectations and were inclined to judge their practice in terms not only of clinical outcome but also of a patient-centred interpretation of quality.' (Tomlin *et al.* 1999, p 1534)

On top of these broad differences between health professional groups about the domains that they prioritise in thinking about quality (eg, patient satisfaction or resolution of illness), the detail of what constitutes good practice (or 'quality') is also different for different professional groups. 'Evidence' is contested and socially negotiated (eg, Dopson and Fitzgerald 2005; Ferlie *et al.* 2005): the processes by which evidence is accepted and incorporated into practice are complex and depend on a range of factors, including the source of the evidence, the local networks and local pressure for change. Thus, what

constitutes good practice is not accepted 'off the shelf' but is subject to social processes and filtering through professional networks and local hierarchies. How these networks operate differs between professions (West *et al.* 1999), and there is little diffusion between the professions (Dopson *et al.* 2002; Currie and Suhomlinova 2006). Indeed, if particular activities are associated with a particular profession, this may make other healthcare professionals reluctant to engage with them: 'The current strong identification of quality with nursing can be a negative influence on other professions.' (Potter *et al.* 1994, p 25)

In summary, different health professional groups do not define quality in the same way. These different professional groups largely inhabit separate hierarchies and networks, often with surprisingly little inter-communication. The processes of determining what constitutes good or quality practice within an individual profession are complex and sometimes divergent between different professional groups.

## 2. Do healthcare professionals think that the quality of care needs to be improved?

*'They're doing their best under very difficult circumstances and very limited resources and I think the patients are actually not getting a bad deal.'*

(Consultant anaesthetist, quoted in Powell 2006, p 211)

*'I've been in areas where it's much worse... I think we're average.'*

(Allied health professional, quoted in Powell 2006, p 211)

The default belief among many clinicians (particularly doctors) seems to be that 'being a professional' is a near-automatic guarantee of quality care, and that with sufficient resources and with mechanisms in place to weed out 'bad apples' (for example, via professional self-regulation), the professions will continue to provide patients with quality care (Leatherman and Sutherland 1998): 'Most of us believe that we've been practising evidence-based medicine all our lives.' (Newman *et al.* 1998, p 157) This may arise partly because healthcare professionals are assessing quality of care using unreliable measures (eg, absence of patient complaints) rather than by systematic assessments: 'There was still the prevalent view that an absence of complaints [from patients, visitors and other users such as GPs] equalled high satisfaction.' (Potter *et al.* 1994, p 24)

Unfounded optimism about the quality of care already being provided is a strong feature. For example, 82 per cent of GP respondents in one survey rated the quality of healthcare offered to their patients as 'excellent' or 'above average' (Hogarth-Scott and Wright 1996), while a survey of 500 UK primary and secondary care doctors found that 72 per cent were 'relatively satisfied with their practice despite constraints' and 14 per cent were 'very satisfied' (Blendon *et al.* 2001). Local evidence to the contrary (for example, from a damning external report on an NHS trust) may therefore come as an unexpected jolt: 'There was that "What the heck's going on here?... I thought they were doing all right but they're obviously not." From a professional point of view, they were shocked.' (Manager, quoted in Powell 2006, p 210)

Local evidence is needed to shift healthcare professionals' beliefs that current care is satisfactory. Evidence from the research literature and from national policy reports on deficiencies in a particular area of care is unlikely to provide sufficient stimulus for local change (Mannion and Goddard 2001; Powell 2006). Even when such local data are overwhelmingly critical, healthcare professionals may continue to assess the deficiencies in the current service as relatively minor.

Healthcare professionals may assert that quality of care is good while at the same time suggesting a range of improvements that appear to belie their initial assertion. In the GP survey referred to above, in which 82 per cent of survey respondents rated the quality of healthcare offered to patients as excellent or above average, the GPs then suggested a range of fundamental improvements that they would like to see (eg, increased range of services available for patients, including counselling and physiotherapy, longer consultations and improved practice buildings). The GPs also suggested that there was a gap between how they saw their service and how they perceived their patients saw it: only 68 per cent felt that their patients would judge the practice as excellent or above average, while 30 per cent thought that patients would judge it to be only average. This difference may relate to the finding that 95 per cent of GPs in this study saw patients as more demanding than they used to be (suggesting that patients were disgruntled despite receiving what the GPs perceived to be good care), but it may also suggest ambivalence among some GPs about the quality of care provided.

Similarly, despite the overall confidence expressed by the 500 primary and secondary care doctors in the survey referred to above, 46 per cent thought that their ability to deliver high-quality care had reduced over the past five years; 62 per cent reported that doctors did not have adequate time with patients; 79 per cent thought that there were not enough hospital beds; and 62 per cent thought that there were not enough hospital consultants (Blendon *et al.* 2001). In common with doctors from the other four countries in this study, UK doctors wanted reforms to address a range of fundamental quality issues: more time with patients; better access to specialist care; improved systems for reducing errors; improved nursing or follow-up care after discharge; better access to preventive care; and better patient education (Blendon *et al.* 2001).

In summary, healthcare professionals may assert that high-quality care is already being provided, and may need substantial local data to shake this conviction. Paradoxically, however, with a little prompting, they are often well able to identify important deficits in care that they believe need to be addressed.

### **3. What are healthcare professionals' attitudes towards initiatives aimed at quality improvement?**

*'Clinical governance leads reported that many GPs and nurses were at best ambivalent about clinical governance, and at worst suspicious, reluctant, apathetic or fearful.'*

(Campbell *et al.* 2001b, p 92)

Many healthcare professionals, and particularly doctors (Sewell 1997), are involved in smaller local quality initiatives such as clinical audit. However, healthcare professionals are generally reluctant to become actively involved in broader initiatives aimed at quality improvement. These include organisation-wide programmes like TQM or CQI (Joss and Kogan 1995; Ovretveit 1996; Pollitt 1996; Jorm and Kam 2004), in which the level of participation of UK doctors is low, and lower than that of doctors in the US (Ovretveit 1996), and national initiatives like the National Booking Programme and the Cancer Services Collaborative (Gollop *et al.* 2004). Many clinicians are detached from, ambivalent about or hostile towards the concept of 'clinical governance' (Roland *et al.* 2001; Wallace *et al.* 2001b; Campbell and Sweeney 2002; Campbell *et al.* 2002; Goodman 2002; Clinical Governance Support Team 2003; Sheaff *et al.* 2004), which was introduced in 1997 with the stated aim of bringing together the many fragmented approaches to quality (National Audit Office 2003). There are few volunteers for such posts as clinical governance 'leads' in primary care (Meal *et al.* 2004). It is suggested that there is particular tension in primary care between

the Government's aims to eliminate poor care (through a range of initiatives, such as clinical governance) and the status of GPs as independent contractors (Roland *et al.* 2001). Those healthcare professionals who do actively engage with and enthusiastically support quality initiatives such as the Royal College of General Practitioners 'Quality Team Development Programme' (Macfarlane *et al.* 2004) seem to be part of a self-selecting innovative minority that may not be typical. For example, only six out of 147 practice teams invited to participate in facilitated quality improvement actually started the programme (Hearnshaw *et al.* 1998b).

Healthcare professionals' attitudes towards initiatives aimed at quality improvement can be broadly divided into two categories: beliefs that the initiatives will have no or limited effects on quality; and beliefs that the initiatives will have a range of adverse effects on patient care and professional work. Of those who view such initiatives as ineffectual, some healthcare professionals are sceptical about the inappropriate application of what they see as 'management fads' like TQM and CQI to healthcare (Potter *et al.* 1994; Pollitt 1996; Locock 2003) and are disparaging about the standard of training programmes in quality methods provided to doctors (Ovretveit 1996): 'The managerial accent of [such] approaches is anathema to many healthcare professionals for whom the terms these approaches use are jargon and subjugate professional autonomy.' (Buetow and Roland 1999, p 188) Many clinicians believe that each 'fad' will soon pass and will be replaced by another, and so there is little point in investing heavily in any one initiative (Goodman 2002; Gollop *et al.* 2004).

Healthcare professionals are often sceptical that quality initiatives, such as audit, will lead to any changes in practice or improvements in quality (Reeve 1997; Leatherman and Sutherland 1998; Buetow and Roland 1999; Johnston *et al.* 2000):

*'Audit is frequently regarded by individual professionals as an expensive addition to clinical practice rather than an intrinsic and effective part of it. They apply it periodically and perceive it to be tedious, compromising to routine clinical practice, lacking in strategic orientation, and too time consuming to be operationally useful.'*

(Buetow and Roland 1999, p 187)

Some healthcare professionals believe that quality initiatives may have some benefit in some settings but that these benefits will not be realised locally because of particular local constraints (eg, inadequate resources, poor relationships between team members, hierarchical working: Dean *et al.* 2004; Johnston *et al.* 2000). Concerns may vary between professional groups: in one study in primary care, GPs and administrative staff expressed concerns about understanding of and involvement in quality initiatives, while nurses and AHPs expressed more concerns about the impact of poor teamwork (Dean *et al.* 2004).

Not only may quality initiatives be seen as ineffective, but many healthcare professionals may also see them as potentially harmful. Concerns expressed include the substantial additional workload (including paperwork) involved in many initiatives, and the diversion of effort, time and resources from direct patient care (Newman and Pyne 1996; Johnston *et al.* 2000; Renshaw and Ireland 2003; Dean *et al.* 2004; Degeling *et al.* 2004; Roberts *et al.* 2004). For example, senior clinicians and managers involved in clinical governance external reviews commented on the heavy burden of preparing for the visit of the review team (Walshe *et al.* 2001; Benson *et al.* 2006). Many felt that the workload involved was not matched by the benefits, since the reviews rarely generated new knowledge about quality problems, although they did raise awareness and provide some stimulus to action (Walshe *et al.* 2001; Benson *et al.* 2006). Some healthcare professionals are concerned that national programmes that focus on particular services (eg, cancer services) are inappropriate and inequitable in diverting attention and resources away from other clinical areas (Gollop *et al.* 2004).

Doctors in particular may be suspicious of the underlying motives behind quality initiatives, seeing them as 'a management Trojan horse... a strategy in disguise for cutting costs'. (Ovretveit 1996, p 24) They may fear loss of autonomy, power, status and income if they become team players in redesigned organisations (Jorm and Kam 2004). They believe that quality initiatives like audit increase governmental and managerial control over doctors (Ovretveit 1996; Johnston *et al.* 2000; Degeling and Maxwell 2004; Sheaff *et al.* 2004), restrict clinical freedom and inhibit doctors' ability to provide optimum care for patients (Johnston *et al.* 2000). For many doctors, professional identity is bound up with autonomy, the ability to exercise discretion and to act as advocate for an individual patient. Quality initiatives that appear to be about standardising practice and imposing a 'one size fits all' model are therefore resisted.

Some clinicians fear that intimidation and denigration of individual practitioners may result from quality activities, and fear that such initiatives may increase discord between professionals (Johnston *et al.* 2000). Some medical managers are uneasy about their remit and the extent to which they are responsible for quality, particularly if they view quality as largely 'determined by the personal competence of other professions and doctors, rather than by the way care is organised'. (Ovretveit 1996, p 23) They are unsure as to whether they have, or should have, authority over other professionals and are concerned that fellow professionals may view them as having 'sold out' by taking up a managerial role (Ovretveit 1996; Degeling *et al.* 1998; Iedema *et al.* 2003; Forbes *et al.* 2004; Forbes and Hallier 2006).

Fears about the motives behind quality initiatives are shared by other professionals: AHPs (particularly more junior staff) have expressed concerns that audit means 'checking up' on their practice, with the longer-term aim of service reorganisation, reducing professional autonomy and cutting jobs (Johnston *et al.* 2000).

In summary, although some studies (eg, Roberts *et al.* 2004) show that healthcare professionals may respond positively to involvement in certain national quality initiatives, overall, healthcare professionals are reluctant to engage. In part, this is because they perceive that the initiatives will be ineffective and a waste of scarce personal and organisational resources; in addition, healthcare professionals may be concerned about a range of harmful effects that may result from quality initiatives.

#### **4. Do healthcare professionals have a clear understanding of the concepts and methods of quality improvement?**

'Most staff knew very little about quality management approaches. They believe there is a "right way" to carry out a task, as shown to them during their training, and may be aware of safety procedures to follow, but there is little interest in critically appraising what they do to provide a better service to others.'

(Potter *et al.* 1994, p 24)

Understanding and awareness of current concepts and methods of quality improvement are limited among healthcare professionals (Rogers 2001): 'Many doctors do not recognize the difference between the traditional and newer quality methods, or know about the measured improvements to clinical quality which these methods have achieved.' (Ovretveit 1996, p 21) Many clinicians have a limited understanding of such key concepts in quality improvement as the notion of other staff within the trust or practice as internal 'customers', or the interdependence of departments and processes throughout the organisation:

*'There was a low appreciation of the fact that every organisational member is someone else's "client" and there was a general lack of interest on the part of staff with whom we worked to find out what users of their services really wanted... there was however no shortage of complaints about the service received from other departments.'*

(Potter et al. 1994, p 24)

Many clinicians appear to have limited interest in looking beyond their immediate department: many had limited or no awareness of how similar services are run elsewhere (Potter et al. 1994). Similarly, although there are exceptions in some organisations (Sewell 1997), awareness of national quality initiatives or understanding of how these might be integrated into local strategies is often limited (Curley et al. 2002):

*'Most staff with whom we worked knew little or nothing about such centrally-sponsored initiatives as Performance Indicators; King's Fund Organisational Audit; Health Gain; Patient's Charter; Value for Money; etc. Managers who were aware of them saw them as disconnected tasks imposed by others, to be fitted in when they became someone else's priority.'*

(Potter et al. 1994, p 24)

Although it might be expected that healthcare professionals would be less familiar with newer concepts like clinical governance (Trueland 2002; Clinical Governance Support Team 2003; Murray et al. 2004), understanding is limited even in relation to older initiatives like audit (Curley et al. 2002). Thus, many projects labelled as audit emphasise only the first part of the audit cycle (ie, identification of deficiencies), and the full audit cycle of setting standards, implementing changes and quantifying subsequent improvements in care is never completed (Hearnshaw et al. 1998a; McLeod 2002; Renshaw and Ireland 2003). This may reflect a broader tendency to use quality approaches and terms loosely:

*'The hospitals studied used a variety of methods and systems to assure and improve quality, but there was little awareness of, or emphasis on, a disciplined scientific approach to quality improvement in the sense of running small scale experiments... It appeared that any activity could be renamed a quality project, and could then be eligible for resources.'*

(Ovretveit 1997, p 227)

Even those healthcare professionals (eg, clinical governance leads) who have a direct role in managing the implementation of quality initiatives in their organisation may lack knowledge and skills in current methods of quality improvement. Many clinical governance leads are optimistic that clinical governance will have a positive impact on patient outcomes and on relationships between managers and clinicians but do not specify any mechanism or intervention through which these desirable goals will be achieved (Wallace et al. 2001a). Instead of developing more systemic and trust-wide approaches, they may continue to use historical voluntary 'opt-in' approaches (eg, educational programmes and protocols and guidelines) to influence clinician behaviour, even when they recognise that these methods are ineffective (Wallace et al. 2001a; Wallace et al. 2004): 'Trusts seem to have been backing approaches that rely upon clinicians acquiring best practice through multiple optional means, and expecting organisation wide change to occur through some unspecified diffusion process.' (Wallace et al. 2001a, p 82)

Overall, clinicians and managers seem to have only a limited understanding of the latest concepts and methods underlying quality improvement, and many show relatively little

interest in learning about them. It remains to be seen whether new initiatives such as saferhealthcare, a partnership between the National Patient Safety Agency (NPSA), the *British Medical Journal* and the Institute for Healthcare Improvement (IHI) to produce a resource to help improve patient safety ([www.saferhealthcare.org.uk](http://www.saferhealthcare.org.uk)), will begin to offer new ways for healthcare professionals to enhance understanding and share experience about quality improvement activities.

## 5. Where do healthcare professionals think that responsibility for quality improvement should lie?

*'Clinicians regard themselves as being the guardians of professional standards and best clinical practice... One director of finance had a very different view: "managers are the rational level-headed engine of the health service ensuring that there are sufficient resources to keep health services operating... clinicians are not necessarily good managers, because I think they are needs-led not resource-led. They tell us what people should have, but not how to get the resources for that.'*

(Güven-Uslu 2006, p 98)

*'Managers and professionals have vied for centre stage in activities relating to quality of care.'*

(Buetow and Roland 1999, p 184)

Clinical healthcare professionals generally believe that responsibility for defining and regulating healthcare quality (and hence for overseeing quality improvement) should rest with the clinical professions (Buetow and Roland 1999; Hurst 2003). Clinicians believe that assessment of the quality of care is a clinical issue and that it is only acceptable if peers from the same profession carry it out. Thus, the credibility of external assessors, and the likelihood that their recommendations will be accepted, hinge on their proximity to the profession that they are assessing (Exworthy et al. 2003). Similarly, leadership by members of their own profession is key to clinicians' engagement with quality initiatives. For example, many GPs perceive that understanding of, interest in, and confidence in, medical audit was increased by the development of medically led medical audit advisory groups (Hearnshaw et al. 1998a), and the relative success of the National Confidential Enquiry into Patient Outcomes and Deaths (NCEPOD – renamed in 2004 from the National Confidential Enquiry into Perioperative Deaths: [www.ncepod.org.uk](http://www.ncepod.org.uk)) has been attributed to the fact that clinicians perceive it as professionally led (Simpson 2004).

Clinicians believe that responsibility for providing the resources necessary for the continuing delivery of quality care is ultimately the responsibility of the government, with local managers held responsible for appropriate delivery of local resources, but the right to determine the appropriate care and treatment for an individual patient is fiercely defended by doctors (Ferlie et al. 1999). 'Clinical freedom' and 'professional autonomy' are highly prized and seen by doctors as the historical values that are the best guarantee of quality patient care. Quality initiatives that appear to encroach on these professional roles and professional rights are therefore vigorously resisted (Sutherland and Dawson 1998), and initiatives that give substantial head room to clinicians are more likely to succeed: 'Challenging goals can be set, but more will be achieved if the professionals are given autonomy in how to reach those goals.' (Roland et al. 2001, p 198)

The dominant position of the medical profession among the health professions (Thorne 2001; Brown and Crawford 2003; Currie and Suhomlinova 2006) means that, in practice, 'professionally led' is often a euphemism for 'medically led': 'Medicine remains an

occupation with legislative and ideological backing for its claimed mandate to define... what constitutes knowledge and expertise in clinical work performance.' (Degeling and Maxwell 2004, p 121) Other healthcare professionals, such as nurses and AHPs, believe that they, as well as doctors, have the ability and responsibility to define clinical quality, and resent being marginalised when new initiatives are discussed (eg, Newton et al. 2003). 'Turf battles' around quality between clinicians from different professions are common (Hart 1996; McNulty 2003). Managers and doctors also clash over quality:

*'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.'*

(Buchan 1998, p S62)

There is much debate in the literature about whether managers or doctors have 'won' in the contest for power and dominance at different times of NHS change and development, and about whether the traditional tensions between doctors and managers are now easing (eg, Young 1997; Sutherland and Dawson 1998; Thorne 2002; Davies and Harrison 2003; Davies *et al.* 2003; Edwards 2003; Crilly and Le Grand 2004; Ploch and Klazinga 2005; Degeling *et al.* 2006; Fitzgerald *et al.* 2006; Sheps 2006). One reviewer commented: 'While at a collective level it is useful to continue to think of doctors and managers as adversarial superpowers, the micro-level reality is more complex and reveals some fascinating compromises, alliances and innovations.' (McKee *et al.* 1999, p 90) However, there is also evidence that relationships on the ground between doctors and managers continue to reflect traditional tensions: 'Management here plays a modest facilitative role rather than a directive function and has, by itself, little power to impose radical change in respect of practices involved in the actual organization and delivery of care.' (McNulty 2003, p S34)

Managers have expressed frustration about the extent to which initiatives are *de facto* medically led, in that if doctors do not support an initiative (or particular changes proposed under an initiative), it is likely to fail (Hearnshaw *et al.* 1998b). Some managers have resolved this tactically by bypassing doctors and working instead with more amenable members of the practice team such as practice managers and nurses when implementing quality initiatives (Marshall 1999).

Although healthcare professionals usually believe that clinical quality is a professional issue that should remain under the overall control of the professions, this does not mean that individual healthcare professionals necessarily see quality or quality improvement as the responsibility of *all* professionals. The tendency towards 'silo-based' working in large and complex organisations like hospitals is well recognised (Mintzberg 1979; Pollitt 1996; Ham *et al.* 2003, McNulty 2003). In relation to quality issues, there is a tendency for healthcare professionals to rely on the designated team or lead individual for a particular issue (eg, infection control, clinical governance, pain management) to carry that role for the whole organisation (Mytton and Adams 2003; Jack *et al.* 2004; Powell 2006). Thus, quality in relation to specific aspects of care such as pain management or infection control is seen not as a shared responsibility but as the responsibility of the designated individual or team: 'When you do offer a service, you kind of get dumped on you know. So it's like, "Oh, this patient's got pain, we don't need to think about it, we'll get the acute pain team to come and sort it out.'" (Anaesthetist, quoted in Powell 2006, p 213)

Thus, the efforts made by specialist teams to improve good practice throughout an organisation (eg, by leadership, providing up-to-date guidelines, training and strategic direction) may be frustrated by the very existence of the team, which allows some healthcare professionals to 'pass the buck'. This may arise from a range of factors, including resentment of colleagues who have been promoted to specialist posts (Sieloff 2004; Powell 2006), local de-skilling, or concerns about lack of competence: 'I think a lot of nurses nowadays think, "well I can't do that because there's a specialist who'll know more."' (Specialist nurse, quoted in Powell 2006, p 259) It is not yet possible to draw firm conclusions from the existing literature on specialist teams about the extent of adverse effects of specialist teams on the work of other healthcare professionals, but it is clear that some healthcare professionals respond to increasing specialisation in ways that reduce their engagement in quality improvement.

In summary, quality improvement is often the scene of 'turf battles' between different professionals. Nevertheless, within the clinical professions, many healthcare professionals will readily devolve responsibility for quality-related issues (such as pain management, or infection control) to a designated individual or team if a ready candidate exists. Quality improvement is also the subject of conflict between doctors and managers. Doctors think that responsibility for defining and assessing healthcare quality should rest with the medical profession rather than with managers, and quality improvement initiatives that appear to erode this fundamental tenet and to give what is seen as undue power to others (eg, managers or non-clinical assessors) are often vigorously resisted. Managers may struggle to implement quality improvement initiatives against the sometimes-entrenched attitudes and, at times, intransigence of clinicians (Hoque et al. 2004) and may have to devise strategies to circumvent such opposition.

## 6. What do healthcare professionals think about clinical guidelines and quality?

Managers and policy-makers have been keen to develop more systematised approaches to clinical work and to increase the degree of standardisation and uniformity between practitioners, with the aim of increasing efficiency and performance (Davies and Harrison 2003; Degeling *et al.* 2001; Degeling *et al.* 2003). However, clinicians – and especially doctors – are relatively less enthusiastic about these moves towards greater codification and transparency of clinical practice (Degeling *et al.* 2001; Degeling *et al.* 2003; McNulty 2003), and clinicians' attitudes towards clinical guidelines provide one illustration of this difference.

There is a wealth of evidence that demonstrates limited awareness, support and use of clinical guidelines by clinicians (eg, Blendon *et al.* 2001; Foy *et al.* 2001; Lane *et al.* 2001; Michie and Johnston 2004; Richens *et al.* 2004; Grol and Buchan 2006). However, this is not uniform across all professional groups and, where guidelines do exist and are known about, there are differences in attitude between professional groups. For example, a study of surgeons, anaesthetists and nurses (McDonald *et al.* 2005) found that the doctors' views about clinical guidelines in relation to patient safety differed from nurses' views, suggesting deeply ingrained divergent beliefs about what constituted professional conduct. The doctors rejected written rules and instead adhered to their own (unwritten) codes of practice; to the nurses, following the guidelines was synonymous with professionalism, and they criticised the doctors for not complying. Differences have also been found between GPs, with younger GPs and those with the Royal College of General Practitioners' (RCGP) membership exam more likely to express positive views about guidelines (Siriwardena 1995; Watkins *et al.* 1999).

Many clinicians object to clinical guidelines. Among the objections made about many clinical guidelines are that:

- they are not valid and reliable
- they lead to 'cook-book' practice, reducing clinical freedom and flexibility, and devaluing clinical judgement (Hackett *et al.* 1999; Welsby 2002; Jorm and Kam 2004)
- they stifle innovation and fail to capture important aspects of good practice that are not always 'scientific' (Siriwardena 1995)
- they are not appropriate to local circumstances (McColl *et al.* 1998), particularly if they are perceived to have been developed by 'others' (Richens *et al.* 2004)
- they are not readily available when they are needed in a consultation (Watkins *et al.* 1999)
- they damage the doctor–patient relationship (Summerskill and Pope 2002; Tan 2006)
- they are inappropriate for some patients (eg, because of patient preferences or lifestyle).

Even practices that actively use guidelines may be reluctant to implement National Service Frameworks (NSFs), which are intended to 'provide a standardised template for describing optimal care' (Leatherman and Sutherland 2003, p 12). Although one objection to NSFs is that they fail to address certain important aspects of care simply because they are not amenable to measurement, more pragmatic reasons are also given. NSFs are perceived to be lengthy, complex documents that do not fit readily into the existing organisational structures in the practice (for example, who is responsible for overseeing their implementation?), and they do not offer any practical advantage. One researcher commented: '[Non-implementation of NSFs] can more easily be explained by the failure of these weighty documents to make the job easier than by invoking profession-wide concerns relating to autonomy and control over working practices' (Checkland 2004, p 971), while one GP observed wryly: 'Only if NSFs 'scratched where it itches' would they be implemented.' (GP, quoted in Checkland 2004, p 967)

In summary, although managers support greater systematisation of clinical work through the use of such tools as clinical guidelines, the majority of clinicians do not always regard clinical guidelines and related initiatives (eg, NSFs) as useful tools in providing quality care, and may resist them because they are perceived as hampering clinical freedom and impeding local practice.

## **7. What do healthcare professionals think about evidence-based practice (EBP) and its contribution to quality?**

Evidence-based practice and, in particular, evidence-based medicine attract prolonged and intensive debate in the literature (eg, Miles *et al.* 2003; Holmes *et al.* 2006). For many healthcare professionals, evidence-based practice (EBP) is not synonymous with quality care: they believe that healthcare professionals can provide quality care without being signed up to EBP in the technical sense and that over-emphasis on evidence-based practice may inhibit rather than enhance their ability to provide quality care to individual patients (Ferlie *et al.* 1999; Freeman and Sweeney 2001; Cohen *et al.* 2004). Some healthcare professionals endorse the idea of EBP in principle, and believe that it improves patient care, but do not take this forward (eg, by reading research papers and applying them to their own practice: McColl *et al.* 1998). A large proportion (39 per cent) of GP principal respondents in

one study stated that they had no personal interest in research (Robinson and Gould 2000). While few respondents felt that primary care research was unimportant, one-third reported that they were not using research directly to influence their clinical practice. Another study found that awareness, use and perceived impact of evidence-based guidelines was much greater at health authority level among those directing policy than it was among practising consultants and GPs (Coleman and Nicholl 2001).

Concerns about the evidence-based practice movement cluster into three areas. The first is concerns about the conceptual and ethical basis of EBP. Such concerns are widespread among clinicians, despite some dissenting voices in the literature (eg, Parker, 2005, who argues that rather than being a threat to clinical freedom, evidence-based medicine is a necessary condition for it). Hospital doctors and primary care doctors have differing approaches to definitions of scientific evidence, and there are also differences between doctors and other healthcare professionals (eg, nurses and AHPs: Ferlie *et al.* 2005). Some clinicians perceive EBP as privileging a particular type of evidence, and one that excludes other types of information or evidence (eg, tacit and experiential knowledge obtained from long clinical experience) that clinicians value and use in reaching decisions about appropriate treatment for individual patients (Degeling *et al.* 1998; Ferlie *et al.* 1999; Buetow 2002; Rycroft-Malone *et al.* 2002). Clinicians perceive that there is a gap between the clinical studies and randomised trials on which EBP is based and the circumstances of individual patients (Cohen *et al.* 2004): 'Doctors are shaping the square peg of evidence to fit the round hole of the patient's life.' (Freeman and Sweeney 2001, p 4)

The second set of concerns relates to the first, and deals with concerns about the potential impact of EBP on clinical practice. Many clinicians are concerned that managers could use implementation of EBP as a way of reducing public funding of certain interventions (eg, prescribing of particular drugs: Lambert *et al.* 2006). Doctors perceive that their autonomy to prescribe treatment for an individual patient is threatened by inflexible application of EBP (eg, through rigid prescribing protocols) and that this may damage the relationship of trust between clinician and patient (Lambert *et al.* 2006). It is not only doctors who fear this restriction on their freedom to determine the appropriate intervention for an individual patient. Other healthcare professionals (such as occupational therapists) have expressed concern that EBP may restrict practice and make interventions less creative (Stevenson *et al.* 2004). In short, EBP is perceived as devaluing professional autonomy:

*'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.'*

(GP, quoted in Sutherland and Dawson 1998, p S21)

This set of issues is particularly problematic in primary care (Rosser 1999). Many GPs view the 'scientific evidence' available from randomised controlled trials and set out in evidence-based guidelines as more useful and appropriate to specialist practice in hospitals than to general practice: 'They felt that specialists approached evidence based practice differently, treating "diseases rather than patients" in a context that they perceived as much more controlled than the "real life" of general practice.' (Freeman and Sweeney 2001, p 3)

They were also aware that their practice populations often included a high proportion of elderly patients with co-morbidities, yet such patients tended to be excluded from clinical trials (Ferlie *et al.* 2005). Even when evidence did apply, GPs found it hard to balance implementation of EBP with the demands of the doctor-patient relationship (Freeman and Sweeney 2001; Summerskill and Pope 2002) and with their understanding of the patient's personal circumstances and ability to comply with or tolerate interventions:

*'The fact that the doctor sometimes chooses to place more weight on the patient's agenda than on clinical evidence seems to be a rational strategy aimed at maintaining an important relationship. The maintenance of this relationship – which is likely to impact on the "healing" process – may be more important to general practitioners than staying within the bounds of a statistically defined consensus on clinical effectiveness.'*

(Tomlin et al. 1999, p 1534)

The third set of concerns around EBP arises from clinicians' doubts about whether they have the time, skills and resources needed to keep up to date with and to apply the latest research evidence. A wide range of skills may be needed, including information management skills, technical skills and interpersonal skills (Newman *et al.* 1998). Clinicians from across the healthcare professions have expressed these doubts; nurses and AHPs in particular perceive that they personally lack the skills to assess and apply evidence (Newman *et al.* 1998; McSherry and Haddock 1999; Tomlin *et al.* 1999; Stevenson *et al.* 2004) because of a combination of factors, including limited availability of relevant research evidence, their lack of confidence in understanding research and reviews, and their own lack of power and skills to effect changes in practice. These concerns may be more widespread than is sometimes apparent. For example, it has been suggested that it may be more difficult for cultural reasons for clinicians from some professions (particularly medicine) to be open about such concerns:

*'There is a fear of being discovered. From an early stage [doctors] have been trained to act competently even if they are completely incompetent. This is perpetuated over time and by the time they are consultants they can't expose their ignorance or knowing less than their trainees. There are relatively few doctors who have the confidence to admit that they don't know the answer.'*

(Newman et al. 1998, p 157)

To summarise, evidence-based practice remains a controversial issue. There are enthusiastic supporters and equally vociferous detractors. For many clinicians, evidence-based practice is seen as, at best, only one tool in a range of approaches to providing quality care and, at worst, as an impediment to providing individualised and holistic patient care.

## **8. What are healthcare professionals' attitudes to the measurement of healthcare quality for quality improvement purposes?**

*'While most people are in favour of measurement, few are comfortable being measured.'*

(Loeb 2004, p i6)

*'The NHS has yet to harness the power of data... Many in the NHS often view data with indifference or as a necessary evil... not as a useful tool to improve quality of care for patients within the local context.'*

(Leatherman and Sutherland 2003, p 179)

*'Monitoring health care quality is impossible without the use of quality indicators. They create the basis for accountability, quality improvement, prioritization and transparency in the health care system.'*

(Mainz 2004, p i1)

The literature distinguishes between two main uses of measures of healthcare quality (often referred to by the generic term 'indicators'): measurement for insight and learning in internal quality improvement (by identifying possible areas of good and poor practice); and measurement for judgement in external accountability systems (Solberg 1997; Freeman 2002; Pringle *et al.* 2002; Mannion and Goddard 2003; Thomson *et al.* 2004). In this section, we will look at healthcare professionals' attitudes to the first use, ie, the use of indicators for developmental purposes, to inform learning in quality improvement. In the next section, we will consider healthcare professionals' attitudes to making such data public and using it to make judgements in external accountability systems.

Most of the research carried out on the use of clinical indicators (measures derived from routine data sets and relating to the process and outcome of clinical care) has been completed in the US and not in the UK. However, the first in-depth evaluation in the UK (in Scotland: Mannion and Goddard 2001; Mannion and Goddard 2003) showed that healthcare professionals were unlikely to be aware of, or to use, indicators for quality improvement: 'The indicators were rarely used directly to support continuous quality improvement nor were they used to identify and share best practice between organisations.' (Mannion and Goddard 2001, p 262) Few trusts disseminated the indicators below board-level, and no trusts provided training, support or leadership in the use of the indicators (eg, by identifying an individual or team to champion use of the indicators). Many frontline staff (eg, nurses and junior doctors) were completely unaware of them. Clinicians' main use of indicators was indirect, relating to quality improvement, in that indicators were used to support bids for further funding or service development.

Other studies bear out this finding that healthcare professionals have limited awareness of, and interest in, comparative indicators: 'I know that most of the clinicians do not use comparative data and do not know anything about coding of clinical procedures.' (Consultant, quoted in Guven-Uslu 2006, p 99) Only around a quarter (26 per cent) of primary and secondary care doctors in one study wanted profiles comparing doctors' practice with their peers, in contrast to their strong support for other information developments (eg, 88 per cent in support of electronic prescribing; 66 per cent in support of electronic patient records: Blendon *et al.* 2001). Performance data may have enough credibility to prompt individuals across the professional groups to reflect on their own practice (Wilkinson *et al.* 2000), but GPs are unlikely to suggest using them to identify and address inequalities between practices (Wilkinson *et al.* 2000).

Moreover, strongly held prior beliefs about safe practice are resistant to change, even when detailed and credible data are presented (Parry and Tucker 2004). For comparative data to evoke any interest on the part of clinicians, they need to be appropriate, timely and close to the practice of the individual clinician (Wilkinson *et al.* 2000; Pringle 2002; Royal College of Physicians 2006). For example, individual healthcare professionals are more interested in comparing themselves to others in the same discipline than in using broad-brush indicators (Smith 2002). Low levels of engagement with comparative indicators have also been seen among healthcare professionals in the independent sector: 'Knowledge and understanding of indicators and their use varied widely across the [independent] sector... not all of the sector is yet convinced of the value of the project.' (Thomson *et al.* 2004, p i55–i56)

Attitudes towards comparative indicators vary between professional groups and between individual practitioners, as a result of factors like knowledge and understanding, practice issues, and perceptions about the purposes to which the indicators will or may be put: '[There were] differences in meanings, relevance and importance attached to performance indicators across professional groups.' (Wilkinson *et al.* 2000, p 173) However, in addition to complaints about the burden of data collection (Harvey 2004), healthcare professionals' attitudes to indicators cluster around four main concerns: that the measures themselves are

flawed; that the local data are inaccurate; that the measures are difficult to understand and interpret; and that the data will be misused.

### **Concerns that indicators are flawed and do not reflect the care provided**

Many clinicians object that measures of quality: concentrate on factors that can be measured, rather than factors that make a substantial contribution to the patient's outcome; are oriented towards failure and not improvement (Harvey 2004); fail to take sufficient account of important confounding factors, like case mix and chance variability (Buetow and Roland 1999; Shekelle 2002; Harvey 2004); and fail to take account of the need to balance process and outcome measures (Crombie and Davies 1998; Mannion and Goddard 2001; Mannion and Goddard 2003). GPs have argued that indicators are not appropriate to general practice because of the discretionary nature of general practice work, the difficulty in measuring certain aspects (eg, continuity of care, pastoral care) or in capturing full health improvements or the scope of GPs' competence (Exworthy *et al.* 2003). Data aggregated to population level inevitably mask the individual patient preferences and histories that had shaped the GPs' decision-making at the time and could therefore misrepresent the quality of care provided (Wilkinson *et al.* 2000). Healthcare professionals object that the time lapse between the development of indicators and their use means that the indicators themselves may be out of date by the time they are issued (eg, because clinical management of a condition has changed in the meantime).

### **Concerns that the local data are inaccurate**

Not only are the indicators themselves often seen as flawed, but healthcare professionals also object that indicators are not useful because the local data on which they are based are often inaccurate, incomplete or out of date (Wilkinson *et al.* 2000; Leatherman and Sutherland 2003; Mannion and Goddard 2003; Audit Commission 2004; Royal College of Physicians 2006). These concerns appear well founded: 'We saw that each Trust codes the same procedure differently. Then we tried to establish a base line where everybody should report in a certain way but people used whichever code they wanted.' (Trust accountant, quoted in Guven-Uslu 2006, p 99) The generic problem of obtaining high-quality data in healthcare organisations is well-recognised: 'Even in well resourced, well organised research studies, it is difficult to ensure that data are complete and of a consistently high quality. It is harder still to ensure that routine data are of a high standard.' (Powell *et al.* 2003, p 126) Indeed, the NHS is acknowledged to have widespread systemic problems around data collection (Leatherman and Sutherland 2003; Audit Commission 2004; NHS Quality Improvement Scotland 2005).

For many clinicians, the demands of collecting data seem to exceed the benefits of doing so (Leatherman and Sutherland 2003), particularly for those who are unfamiliar with electronic data collection methods (NHS Quality Improvement Scotland 2005). This creates a vicious circle, as the non-involvement of healthcare professionals in collecting and validating clinical data is seen as both symptomatic of, and a cause of, the continuing problems with data quality (Leatherman and Sutherland 2003; Royal College of Physicians 2006):

*'One of the biggest factors underlying poor data quality is the lack of understanding among frontline staff of the reasons for, and benefits of, the information they are collecting. The information collected is too often seen as irrelevant to patient care and focused on the needs of the "centre" rather than frontline service delivery. In particular, more effort is needed to involve clinical staff in validating and using the information produced.'*

(Audit Commission 2004, p 5)

### **Concerns that the measures are difficult to understand and interpret**

A third area of concern for healthcare professionals is that the measures are difficult to understand and interpret (such views are exacerbated by the first two concerns already

outlined). Clinicians' attitudes here are influenced by the way the data are displayed and communicated (Gysels *et al.* 2004) and by the ease (or lack of ease) with which they can use the data to identify potential courses of action to address local problems and quantify the potential improvement in quality that will result (Marshall *et al.* 2004). Many object that they are expected to understand the indicators without adequate supplementary information, training and facilitation (Mannion and Goddard 2001). In particular, healthcare professionals other than doctors (eg, practice nurses and practice managers) perceive that they miss out: that doctors are more likely to receive such support and to be familiar with the language and concepts involved (Wilkinson 2000).

### **Concerns that the data will be misused**

Even when measures of healthcare quality are largely being used for internal quality improvement purposes, many clinical professionals (particularly doctors) are wary. They may, for example, suspect that the data may be used as management tools to direct practice and to restrict doctors' autonomy (Wilkinson *et al.* 2000; Exworthy *et al.* 2003). This may be, in part, because many of the early performance indicators focused on resources, costs and efficiency measures rather than on quality of care (Leatherman and Sutherland 1998); Thus, quality measures are closely associated in the minds of some clinicians with managerialism, leading to resistance (Exworthy *et al.* 2003). Despite these concerns, some GPs believe that doctors' active participation in comparative data initiatives might benefit GPs in the future in preventing further government 'interference' (Exworthy *et al.* 2003; Sheaff *et al.* 2004).

Clinicians have, therefore, strong and diverse concerns about the measurement of healthcare quality, even when these indicators are only being used for internal quality improvement purposes. They often perceive indicators to be flawed, based on inaccurate data and difficult to interpret. In addition, there are fears that the data will be used for managerial and cost-cutting purposes that may impose significant constraints and control on healthcare professionals.

## **9. What are healthcare professionals' attitudes to measures of quality being made public and used for external judgement and accountability?**

We have so far considered healthcare professionals' attitudes to the first of two main uses of measures of healthcare quality: the use of measures in quality improvement within organisations. The second main use is for external judgement and accountability. Healthcare professionals' attitudes to measures of healthcare quality being made public and used for external judgement and accountability purposes are an amplified form of the concerns described above, with some additional features.

For example, the concerns that indicators are flawed and do not reflect the care provided, that they are based on inaccurate data, and that the data will be misused for political ends, become more pressing still when the results will be made public: 'Something that's measurable may not be worth measuring, and maybe you can't measure the things that are worth measuring. What damage do you do by releasing information just because you can measure it?' (GP, quoted in Marshall *et al.* 2002a, p 1280) Healthcare professionals may express general support for the principle of publishing comparative performance data, but then have strong views on the implications in practice, perhaps influenced by prior experience of other forms of comparative data (eg, school league tables: Marshall *et al.* 2002a) Among the issues raised by GPs are: cynicism about politicians' motives; concerns about the potential impact of public disclosure on GPs' morale and job satisfaction; the potential to undermine the doctor-patient relationship (eg, patients in low-scoring practices might question past diagnoses and treatments); and the risk that inequalities will get worse

(eg, because resources are directed to indicator-related areas or because better educated and more articulate patients gravitate towards high-scoring practices: Marshall *et al.* 2002a; Marshall *et al.* 2003).

Similarly, hospital managers and clinicians objected that the (now superseded) 'star rating' system had major flaws: it did not represent a rounded view of their own organisation's performance; it overlooked many areas of excellent practice (especially clinical aspects); it failed to take into account local contingencies and mitigating factors; it was often based on incomplete and inaccurate data; and it was open to abuse (eg, because trusts could manipulate data: Mannion *et al.* 2005). These views were not universal: some managers viewed the star ratings as useful levers in changing entrenched ways of working by some doctors (Mannion *et al.* 2005). However, many clinicians perceived that the chosen targets diverted clinical and managerial attention and resources towards particular service areas to the detriment of other areas (Mannion *et al.* 2005) and that these targets had been wrongly chosen because of political agendas or lobbying by special interest groups, rather than by considerations of 'best outcomes' or 'best use of resources' (Mannion *et al.* 2005).

There is some evidence that healthcare professionals' considered views may be more accepting of the idea of public data than their off-the-cuff views (Marshall *et al.* 2002a), and some commentators (eg, Marshall and Romano 2005) argue that the concept of publicly available data is becoming more acceptable to both clinicians and managers. The value of publicly reporting quality information data is, however, largely undemonstrated, and research suggests that it may indeed have some unintended and adverse consequences (Marshall and Davies 2001; Werner and Asch 2005). In general, healthcare professionals view the star ratings system and associated initiatives negatively in relation to quality improvement, and continue to see the publicising of comparative data as punitive in outcome, if not in intent (Leatherman and Sutherland 2003): 'The espoused objective of a blame free culture [is perceived to be] at odds with "naming and shaming" poorly performing trusts.' (Leatherman and Sutherland 2003, p 178) It remains to be seen how healthcare professionals' attitudes may shift with the replacement of the star ratings system in 2006 with the annual health check, which is intended to look at a much broader range of issues and to use a broader range of data (Kennedy 2005; [www.healthcarecommission.org.uk](http://www.healthcarecommission.org.uk)).

In summary, clinicians are generally wary about the effects of publicising measures of healthcare quality, and can see these processes as divorced from, and often inimical to, local clinical priorities and local quality improvement. For managers, such initiatives may provide useful levers to bring about change in specific areas of care, but they are also concerned about the limited picture shown by quality measures and about the potential for adverse consequences.

## 10. What do healthcare professionals see as the barriers and enablers to quality improvement?

*'Medical and nursing staff perceived that the service was "under resourced" in terms of staff and equipment, and viewed specific quality problems as being caused by lack of financial resources. Virtually all the suggestions from nurses, doctors and patients to improve care quality involved increasing resources to provide more staff, time and beds... some managers viewed these suggestions [ie, for more resources] as automatic, predictable and unrealistic in the current era of economic control and restraint, suggesting instead that more effective use should be made of existing resources.'*

(Attree 2001, p 72)

The first barrier to quality improvement identified by healthcare professionals is lack of time: both 'integrated time' (time to consider quality issues during routine work) and 'shared time' (time to meet colleagues to plan and report on quality improvement; Roland 2001). Lack of time and lack of direct and indirect resources for quality improvement are the two major barriers identified by healthcare professionals, and to some extent managers, in almost all studies on healthcare professionals and quality improvement (eg, Sewell 1997; McColl *et al.* 1998; Johnston *et al.* 2000; Wilkinson *et al.* 2000; Attree 2001; Wallace *et al.* 2001b; Shekelle 2002; Summerskill and Pope 2002; Renshaw and Ireland 2003; O'Donnell 2004). This 'rhetoric of scarcity' may persist even when conditions change: 'We've certainly gone through a phase when there's been a lot of vacancies... we're now improving a great deal... it's quite interesting that people get stuck in the culture of we're really short-staffed, when actually you're not short-staffed.' (Nurse, quoted in Rycroft-Malone *et al.* 2004, p 919)

In addition to the most obvious and frequently mentioned barriers of lack of time and resources, different health professional groups refer to a range of further barriers, which reflect their respective roles and positions in health organisations.

Therapists refer to the barriers of high workload, inadequate managerial support, and 'inadequate skills' to access and implement evidence (Welch 2002). Nurses describe how they find it difficult to implement evidence-based practice because of factors like: staff shortages; their perceived lack of authority to bring about change; reliance on active consultant support; and difficulties reconciling research evidence with their own beliefs, experience and the practicalities of providing care (Rycroft-Malone *et al.* 2004). In addition, a perceived disconnect between local services and national initiatives can reduce healthcare professionals' commitment: 'A nurse from a professional body said that initiatives from the centre often failed to feel "joined up" with services provided. This could leave staff feeling they had spent a significant amount of time on tasks which yielded few improvements in their own areas of work.' (Finlayson 2002, p 6) A further example of this disconnect is that nurses in 'modern matron' posts experienced tensions between their employers' expectations that they would work on national targets and their own wish to deal with quality problems that had emerged from clinical areas (Savage and Scott 2004).

Barriers referred to by doctors include: conceptual factors (eg, 'clinical aspects of care too difficult to audit'; uncertainty about how to take forward the results of audit); practical factors (incompatible computer systems, not enough secretarial time); psychological factors (fear of being undermined by assessment and criticism); skills factors (eg, lack of IT skills); inter-professional issues (eg, 'language barriers'); and competing demands (eg, from contractual changes and increased paperwork: Johnston *et al.* 2000).

These comments suggest that the underlying barriers go beyond the frequently cited 'lack of time and lack of resources'. Indeed, a review of the main barriers and facilitators to clinical and medical audit (Johnston *et al.* 2000) generated a diverse list of barriers that the reviewers grouped under five main headings. In addition to lack of resources were: lack of expertise or advice on project design and analysis; problems between groups and members of groups (eg, 'bickering between consultants'); lack of an overall plan for audit; and organisational impediments (eg, clinician–manager battles; organisational mergers).

Perhaps the richest account of perceived barriers is drawn from studies of healthcare managers. Healthcare managers (including clinicians who undertake managerial roles) cite a wide range of barriers to quality improvement relating to organisational factors, their own role, and the attitudes and position of other healthcare professionals. These are summarised in the box overleaf.

## **Managers' perceptions of barriers to quality improvement**

**This list also includes the perceptions of clinician managers (eg, clinical governance leads), that is, clinicians who also have a management or leadership role in relation to quality improvement.**

### **Barriers relating to managers' roles:**

- Political pressure on managers to deliver rapidly on a range of competing and often conflicting targets (eg, providing training and meeting waiting times targets).
- Lack of clarity about the roles of managers and their authority in relation to clinicians.
- The existence of few levers that managers can use to encourage healthcare professional involvement in quality improvement.
- Reluctance of managers to put additional work onto clinicians: 'Managers were particularly aware they were asking a great deal from staff who were inadequately rewarded.' (Finlayson 2002, p 6)
- Managers' own lack of knowledge or skills to implement quality initiatives.

### **Barriers relating to the attitudes and position of other healthcare professionals:**

- Hierarchical organisations that make it harder for staff who are not used to taking a lead to be innovative in changing practice.
- The independence and autonomy of GPs and the attitude of some practices (eg, 'a high degree of apathy' among doctors: Marshall 1999).
- Doctors' suspicions of and cynicism about managerial motives and 'hidden agendas'.
- Poor communication between doctors, and (more so) between professions.
- Difficulties in providing training that fits the needs of professional groups from diverse backgrounds.
- Cultural issues (eg, a 'blame culture' that inhibits openness and learning; widespread perceptions that clinicians are not held accountable).

### **Barriers relating to organisational factors:**

- The lack of infrastructure support for quality improvement (eg, IT support, admin support from the health authority or primary care group).
- Poor quality – or absent – data on quality of care.
- Difficulties in freeing staff from clinical work to attend training on quality issues.
- The pace of organisational change and frequent mergers, leading to 'initiative fatigue' and disengagement from quality improvement.

### **Barriers relating to the initiatives themselves:**

- The lack of overall direction and impetus for initiatives such as clinical governance: 'The long history of independence and autonomy of GPs was perceived to be incompatible with the fundamental principle of collective responsibility underlying clinical governance.' (Marshall et al. 2002b, p 644)
- Tensions between authoritarian and developmental approaches to quality assurance and quality improvement, and the subsequent impact on clinicians' attitudes.

Derived from: Hearnshaw et al. 1998b; Marshall 1999; Campbell et al. 2001b; Heard et al. 2001; Roland et al. 2001; Wallace et al. 2001b; Campbell et al. 2002; Clark and Smith 2002; Marshall et al. 2002b; National Audit Office 2003; Renshaw and Ireland 2003; Sheaff et al. 2003a; Walshe et al. 2003; Sheaff et al. 2004.

The literature does not cover healthcare professionals' views about what would *enable* quality improvement to anywhere near the same extent as it includes views about the perceived barriers. Some idea of professionals' views of potential facilitators can be gained from scrutinising their perceptions of current barriers and considering approaches that might address them. Among the facilitating factors identified by healthcare professionals are: modern medical records systems; effective training; dedicated staff; protected time; structured programmes; and shared dialogue between purchasers and providers about the aims and processes of initiatives like audit (Johnston *et al.* 2000).

In summary, healthcare professionals describe a wide range of barriers to quality improvement, and give only a more limited list of enablers. Many of the barriers identified arise from the well-documented problems of working effectively between and across health professions (West *et al.* 1999; Firth-Cozens 2001; Caldwell and Atwal 2003; McNulty 2003; Dopson and Fitzgerald 2005; Ferlie *et al.* 2005): for example, poor relationships between clinicians and managers (eg, Johnston *et al.* 2000), and unclear roles affecting communication between clinicians and audit staff, and between primary and secondary care staff (Roberts *et al.* 2004). This means that more time and more resources, while they may be necessary or helpful (both directly and in their explicit recognition of healthcare professionals' concerns), are unlikely to be sufficient to overcome the substantial barriers to clinicians' active engagement in successful quality improvement.

Using the framework of the ten questions, we have explored a range of issues relating to UK healthcare professionals' attitudes to quality improvement. The concluding section highlights the need for caution in interpreting the main messages from this body of research, emphasising the context-dependent and contingent nature of the findings.

## Concluding remarks

In this narrative review, we have assessed the four core concerns about healthcare professionals and quality improvement (set out on page xx) by exploring ten questions that emerge from the literature (introduced on page xx). In the interests of condensing a wide range of relevant literatures into a readable summary, this review has taken a broad and eclectic approach, extending beyond the 86 empirical studies that provided useful information at the heart of the review (listed and annotated in the Technical Appendix). Many of the areas that we have touched upon (eg, evidence-based practice, clinical guidelines, organisational change, and professional identity) have their own substantial and distinctive bodies of literature that can be used to inform further study and research. Our coverage of these wider literatures has, of necessity, been partial and selective, but we have always been guided by trying to ascertain what work in these areas can tell us about clinician engagement with quality. We believe that the review provides a comprehensive overview of what existing empirical research shows about UK healthcare professionals' attitudes to clinician engagement in quality improvement.

At the beginning of the review, we noted that much of what we know about healthcare professionals' attitudes to quality and quality improvement comes from research carried out on specific quality initiatives. In drawing on these research studies, we were not aiming to explore the nature of the initiatives themselves or to examine whether or not they had been successful. Instead, we were using this research because of the insights these studies provided into our core concerns: in what ways and for what reasons are healthcare professionals engaged (or not) in quality improvement?

Clearly, a review that is concerned with views and perceptions of individuals and groups is taking a particular approach. Like any other research perspective, it will illuminate certain

facets and obscure others: 'a way of seeing is also a way of not seeing' (Poggi 1965, p 284). In this review, we are drawing predominantly on studies that rely on self-reported attitudes (in the form of participants' responses to surveys and in interviews) and on individuals' perceptions of the behaviour of colleagues. Inevitably, there is a risk of 'social desirability' bias (the desire to present the individual or the organisation in a positive light: Bowling 1997) as healthcare professionals articulate their perceptions in surveys or describe them to researchers in the social setting of an interview.

However, we have still gained a rich picture of healthcare professionals' perceptions. Such perceptions inevitably arise from, and contribute to, the shared meanings and other aspects of organisational culture (Davies *et al.* 2000; Harris and Ogbonna 2002; Scott *et al.* 2003), both in the individual's immediate workplace and in the wider context. Thus, a knowledge of the perceptions of healthcare professionals is crucial to our understanding of the gulf between policy and 'messy real world settings' (Keen and Packwood 1999, p 51).

What studies of healthcare professionals' perceptions cannot show, however, is the extent to which these perceptions accord with actual circumstances, and thus, they must be used with some care in identifying what may be needed to promote engagement in quality improvement. For example, the widespread perception that what is needed is more time and more resources is only part of the picture, and is therefore only a partial explanation for a lack of clinician engagement. Nevertheless, perceptions, especially when widespread and keenly felt, are important in setting a context for change and in constraining what might be achieved.

Inevitably, attitudes towards specific quality initiatives are influenced by the political and local contexts and by other events occurring at the same time (Pettigrew *et al.* 1988; Greenhalgh *et al.* 2004), and it is therefore important in considering the views of healthcare professionals to acknowledge the potential impact of the wider NHS context. In drawing this review to a close, we will highlight three contextual features that we regard as particularly influential in shaping healthcare professionals' attitudes to quality and quality improvement in this period.

### Three contextual features

#### *Organisational turbulence in the NHS*

The first feature is the substantial and sustained organisational turbulence in the NHS. First, the 1980s, the decade before the period covered by this review, was a time of accelerating change in the NHS (Ashburner *et al.* 1996), with substantial restructuring and the introduction of 'general management' aimed at changing 'not only the structure of the NHS, but also its ruling assumptions and much of the service culture' (Pettigrew *et al.* 1992, p 267). Second, the 1990s was a period when the scale and pace of NHS change increased still further (Young 1997). Indeed, many authors have argued that, since 1990, we have seen one of the most turbulent episodes in the history of the NHS, when measured in terms of marked shifts in policy direction, successive structural reorganisations and a plethora of diverse and sometimes conflicting initiatives aimed at changing aspects of the service (Robinson 1996; Davies *et al.* 2000; Leatherman and Sutherland 2003; Fitzgerald *et al.* 2006):

*'A formidable torrent of pledges, policy documents, laws, regulations, advice and guidance has issued from the Department of Health, without let-up since 1997, to knock the system into shape: ironing out disparities,*

*raising standards, improving productivity, increasing responsiveness, extending services, meeting unmet needs.'*

(Appleby and Coote 2002, p 5)

Organisational turbulence in the NHS in the past decade has been widely acknowledged to have had a range of impacts, including on clinicians' readiness to engage with quality improvement (and other) initiatives. This has prompted widespread 'change fatigue' and a reactive rather than proactive approach, and has inculcated a 'wait and see' attitude (Garside 1998; Leatherman and Sutherland 1998; McKee *et al.* 1998; Powell and Davies 2001; Smith *et al.* 2001; Cortvriend 2004; Fitzgerald *et al.* 2006). Such an approach may be characterised by organisational actors as 'surviving' rather than developing, and is likely to have a considerable influence on responses to centrally planned quality improvement initiatives. Indeed, Schalk and van Dijk (2005) argue that the motivation of employees to work on quality is dependent on the nature of the exchange relationship they have with the employing organisation: that is, on the psychological contract between the organisation and the employee. It is this relationship that is often greatly disturbed during organisational and policy change.

Other organisational developments will also have an effect. For example, many healthcare professionals have been affected by organisational restructuring. In the NHS, there were 99 mergers of trusts between 1997 and 2002 (Fulop *et al.* 2002), a process that forced staff in trusts that were used to working independently, and in different ways from neighbouring trusts, to work together as colleagues (Joss and Kogan 1995). Hospital mergers are acknowledged to result in a range of adverse consequences that may have a negative effect on delivering and developing services (Denis *et al.* 2001; Fulop *et al.* 2002; Hutchings *et al.* 2003; Langley *et al.* 2003; Sheaff *et al.* 2003b; Anonymous 2004; Cortvriend 2004). In particular, merging and integrating services is rarely accomplished smoothly: 'Projects for "integration" of services across sites were more often than not seen as "disintegration" by the people involved.' (Langley *et al.* 2003, p 199)

#### *Conflict between quality assurance and quality improvement*

The second feature, the conflict between quality assurance and quality improvement, is related to the organisational turbulence in the NHS, in that it is an example of policies that appear to pull in different directions (Sheaff and Pilgrim 2006). There have been multiple initiatives around quality and quality improvement in the last fifteen years but many of these have been implicitly or explicitly tied in to regulatory or monitoring functions (weeding out poor performers) rather than to developmental aims (improving quality and patient outcomes). Many commentators believe that the blurring of quality assurance and quality improvement – made explicit most recently in the Chief Medical Officer's 2006 consultation paper '*Good doctors, safer patients*' (Royal College of General Practitioners 2006) – has damaged quality improvement by increasing healthcare professionals' resistance to it. Quality improvement (which healthcare professionals support in principle) has been yoked together with quality assurance and performance management (the current manifestations of which many healthcare professionals oppose because of the heavy-handed way they are perceived to have been implemented):

*'The implementation of clinical governance has been shaped by an assurance-focused performance management culture in the NHS in England that may not promote quality improvement and can be argued to be antithetical towards it... the external mandating of what is at heart an internal process of improvement is problematic, and the risks of institutional symbolic compliance and distortion of policy goals are considerable.'*

(Freeman and Walshe 2004, p 342)

Historically, healthcare professionals, especially doctors, have been accustomed to professional self-regulation as the main form of quality assurance and have been prepared to comply with the requirements of these mechanisms. However, the recent changes in arrangements for regulating the professions, and the increased attention on quality assurance mechanisms (Donaldson 2001; Leatherman and Sutherland 2003; Sutherland and Leatherman 2006), have weakened this acceptance. Many doctors have viewed the changes as a significant threat to the closely guarded concept of professional autonomy and have shown suspicion and hostility towards a range of quality assurance activities. This resistance may then spill over into resistance to quality improvement initiatives. The dominance of the performance management agenda means that activities (like external review) that may be intended to be developmental and supportive of quality improvement may be recast in healthcare professionals' perceptions as judgemental inspections (Walshe *et al.* 2001). Certainly, in the UK, clinical governance leads in primary care trusts have experienced major difficulties in trying to reconcile the two conflicting aims: to 'police' poor practice (name and shame) while at the same time encouraging openness and learning (name and share) (Campbell *et al.* 2002).

*Sustained and largely critical attention from politicians and the media*

The third feature that we believe has had a significant influence on the attitudes of healthcare professionals to quality and quality improvement, and one that is closely linked to the other two issues, is the fact that the NHS attracts sustained and largely critical attention from politicians and the media. It is highly visible, with much media scrutiny, public 'naming and shaming', sustained criticism and low coverage of achievements. Against this background, many healthcare professionals see the espoused aim of Government policies – to bring about a change in the culture of NHS organisations to one 'where openness and participation are encouraged, where education and research are properly valued, where people learn from failures and blame is the exception rather than the rule, and where good practice and new approaches are freely shared and willingly received' (Department of Health website, cited in National Audit Office 2003, p 1) – as being far removed from their own experience.

The active engagement of all clinicians with quality improvement is essential but, as yet, largely unrealised. Increasing clinician engagement is likely to be difficult: non-engagement of clinicians is a long-standing, multifactorial and international problem. Addressing the many overlapping structural and cultural factors that contribute to the *status quo* requires the sort of multi-level, long-term approach to organisational change that is difficult to achieve in a highly politicised complex organisation like the NHS (Pettigrew *et al.* 1992; Ferlie and Shortell 2001; Ham *et al.* 2003). Nevertheless, a detailed understanding of the diverse perceptions of healthcare professionals in relation to quality and quality improvement, as contributed by this literature review and the research that will follow, is a vital part of planning and implementing such change. Such insights add to the 'diagnostic inventory' and context-sensitive knowledge that are required for the successful adoption of any innovation, quality improvement strategies being but one most important challenge (Dopson and Fitzgerald 2005; Grol and Wensing 2005; Wensing and Grol 2005).

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## Technical appendix: A summary of the main empirical studies used in the review

For each study, the table summarises only the key findings relating to this review. **Studies are listed chronologically and alphabetically, by year.** **Full references are given in the references section of the main report.**

Paper	Brief description of study	Key findings in relation to healthcare professionals' views on clinician engagement in quality improvement. (Note: this may not be the main focus of the study.)
<p>Potter <i>et al.</i> (1994) 'Continuous quality improvement in an acute hospital: a report of an action research project in three hospital departments'</p>	<p>Interviews with heads of departments and senior staff; observation; questionnaire surveys; focus groups</p>	<ul style="list-style-type: none"> <li>• Authors commented that it was clear that staff at all levels in all disciplines wanted to improve the organisation but often had no mechanism for participation.</li> <li>• Quality improvement was hampered by poor communication between staff groups, particularly between doctors and other healthcare professionals.</li> <li>• Healthcare professionals were more receptive to tailor-made quality improvement initiatives than to preconceived quality improvement approaches imposed onto a health setting.</li> <li>• Few junior staff had an appreciation of what happened in the wider hospital, what resources were available in other departments for patients and for their own work, and how similar services were run elsewhere.</li> </ul>
<p>Joss and Kogan (1995) 'Advancing Quality: Total Quality Management in the National Health Service'</p>	<p>Reports findings from an evaluation of TQM in NHS units from eight health authorities from 1990–1993; draws on around 750 interviews with staff at 38 hospitals and community units</p>	<ul style="list-style-type: none"> <li>• Compared to the commercial sector, it was difficult to secure consensus in the NHS on quality criteria or on organisational mechanisms for improving quality because of: the complex multi-professional nature of health care; the distancing of relationships between many groups; and the advent of autonomous trusts that led to different approaches, even within single districts.</li> <li>• Few doctors attended training in TQM approaches.</li> </ul>

<p>Siriwardena (1995) 'Clinical guidelines in primary care: a survey of general practitioners' attitudes and behaviour'</p>	<p>Postal questionnaire sent in 1994 to all 326 GP principals in one health authority; 213 responses (response rate 65 per cent)</p>	<ul style="list-style-type: none"> <li>• 78 per cent of respondents reported producing in-house guidelines.</li> <li>• 69 per cent felt that using well-constructed guidelines would improve patient care.</li> <li>• 51 per cent argued that guidelines should be based only on what has been scientifically proven, but 76 per cent agreed that good practice was not always scientific.</li> <li>• 44 per cent objected that they did not become a GP to practise 'cook-book' medicine.</li> <li>• 31 per cent were worried that guidelines would be used for performance-related pay; 26 per cent were concerned that they would diminish a GP's clinical freedom and 25 per cent thought that they would stifle innovation.</li> <li>• GPs who had passed the RCGP membership exam generally had a more positive attitude to guidelines than those who did not have this qualification.</li> </ul>
<p>Hogarth-Scott and Wright (1996) 'Is the quality of health care changing? GPs' views'</p>	<p>Semi-structured interviews with GPs and practice nurses (numbers not specified); postal questionnaire with 41 GP respondents (response rate 45 per cent)</p>	<ul style="list-style-type: none"> <li>• 82 per cent of respondents rated the quality of healthcare offered to patients as excellent or above average.</li> <li>• GPs suggested a range of improvements they would like to see (eg, increased range of services, longer consultations, fewer consultations, less paperwork, better IT facilities, improved buildings).</li> <li>• GPs thought that the Government was not explicit about their role as GPs in healthcare and that this led to unrealistic expectations on the part of patients, and that there had been a major increase in pressures on their time.</li> <li>• Those intending to improve quality recognised that patients are becoming critical of services and that patients are capable of choosing between practices.</li> </ul>
<p>Newman and Pyne (1996) 'Quality matters: junior doctors' perceptions'</p>	<p>Interviews and surveys with 193 junior doctors from five acute hospitals in England</p>	<ul style="list-style-type: none"> <li>• Junior doctors did not rate patient satisfaction as an important part of quality care (believing that if quality care is given, patients will be satisfied; patients considered to be poor judges).</li> <li>• Clinical audit was ranked as least important: many thought it took time away from patient care and led to no action.</li> <li>• Junior doctors said that they were unable to deliver the quality care they would like because of factors like excessive workload, poor organisation by clinicians or managers, and pressure on throughput.</li> </ul>

<p>Ovretveit (1997) ‘A comparison of hospital quality programmes: lessons for other services’</p>	<p>Findings gathered from research and consultancy in US and European hospitals (including in the UK) on a range of quality programmes, including TQM</p>	<p>Many healthcare professionals viewed quality as something separate and secondary to their main everyday work.</p> <ul style="list-style-type: none"> <li>• The main reason given was lack of time, but underlying reasons included the fact that quality programmes appeared to healthcare professionals to be concerned mainly with documentation and not with improving patient care.</li> <li>• There was little awareness of quality improvement methods and little emphasis on a disciplined scientific approach to quality improvement.</li> </ul>
<p>Reeve (1997) ‘Sisters’ and charge nurses’ attitudes to quality’</p>	<p>Semi-structured interviews with 10 sisters or charge nurses from a cross-section of clinical areas within a community trust</p>	<ul style="list-style-type: none"> <li>• Sisters and charge nurses used multiple, and often loose, definitions of quality.</li> <li>• Interviewees expressed negative comments about external auditing.</li> <li>• Some interviewees believed that quality initiatives would benefit patient care, but others were uncertain or thought that there would be negative effects.</li> </ul>
<p>Sewell (1997) ‘Continuous quality improvement in acute health care: creating a holistic and integrated approach’</p>	<p>Questionnaire survey of staff in 1994 as part of a larger study (number of respondents not specified)</p>	<ul style="list-style-type: none"> <li>• Staff showed a high degree of familiarisation with the trust’s quality programme.</li> <li>• 70 per cent of those applying the approach said that lack of time and resources were major blocks to a wider application of the approach.</li> <li>• There was a high degree of awareness of the King’s Fund organisational audit programme and a belief that it benefited the trust.</li> <li>• Medical audit was strong within the trust, but awareness and use of audit were lower in other clinical professions.</li> </ul>

<p>Degeling <i>et al.</i> (1998)          'Do professional subcultures set the limits of hospital reform?'</p>	<p>Questionnaire survey of 850 medical and nursing staff, medical and nursing managers and lay managers in two Australian hospitals and four English hospitals</p>	<ul style="list-style-type: none"> <li>• There were differences between professional groups in their frameworks of meaning and value assumptions.</li> <li>• Nurses may reject what they feel is unacceptable objectification of patients when the financial implications of clinical practice are made explicit.</li> <li>• Medical clinicians appear to dismiss and discount the prevalence of clinical practice variation.</li> <li>• Medical clinicians show a reliance on self-generated knowledge and are therefore likely to resist attempts to introduce evidence-based medicine based on the dissemination of formal knowledge (i.e. latest developments in medical publications). Clinicians would need to interact with the formal knowledge base of their specialty in such a way that it comes to be regarded as self-generated knowledge.</li> <li>• Medical managers experience conflict between their self-professed financial realism and their occupation-based preferences and desire to maintain good relationships with their clinical colleagues.</li> <li>• Previous research has clarified much about how different occupational groups position themselves on quality improvement, clinical audit and EBP, but: 'We still know little about how this positioning is realised or renegotiated, or both, in day-to-day interaction within clinical settings.' (p 97)</li> </ul>
<p>Hearnshaw <i>et al.</i> (1998a)          'A survey of audit activity in general practice'</p>	<p>Questionnaire sent to 707 practices from 18 Medical Audit Advisory Group areas; 428 responses (response rate 61 per cent)</p>	<ul style="list-style-type: none"> <li>• Authors comment that the number of active refusals to answer the questionnaire (152 practices, 21 per cent) suggest that many GPs do not regard audit as important.</li> <li>• Nearly half of respondents felt that understanding, interest and confidence in using audits had increased since the creation of the professionally led Medical Audit Advisory Groups.</li> <li>• In 64 per cent of audits, participants reported that changes had occurred as a result, but the audit cycle was completed by re-measuring in only 20 per cent of audits.</li> </ul>

<p>Hearnshaw <i>et al.</i> (1998b) 'Introducing a quality improvement programme to primary healthcare teams'</p>	<p>Evaluation of a facilitated programme of quality improvement in six primary care teams: surveys in final session of the programme and interviews with practice managers three years after the programme ended</p>	<ul style="list-style-type: none"> <li>• Only six teams out of the 147 teams invited started the programme.</li> <li>• Introducing the quality programme required substantial effort for the participants and the facilitator.</li> <li>• Problems arose when doctors in the team were not sufficiently committed or did not support action on quality issues identified by patients and/or other team members.</li> <li>• Staff who were used to a hierarchical structure, with doctors at the top, found it difficult to take responsibility for aspects of quality improvement.</li> </ul>
<p>Leatherman and Sutherland (1998) 'Evolving quality in the new NHS: policy, process and pragmatic considerations'</p>	<p>Interviews with key senior stakeholders eg, policy leaders, managers, medical and nurse leaders</p>	<ul style="list-style-type: none"> <li>• Interviewees expressed concern about the lack of clear and statutory responsibility on the part of any individual to answer for known quality problems.</li> <li>• Many interviewees showed a strong belief in professional values as a means to secure quality in healthcare.</li> <li>• Interviewees acknowledged the lack of incentives to encourage quality and to implement sanctions over poor performance.</li> </ul>
<p>McColl <i>et al.</i> (1998) 'General practitioners' perceptions of the route to evidence-based medicine: a questionnaire survey'</p>	<p>Random sample of 25 per cent (452) of all GPs in the Wessex region in 1997, with 302 replies (67 per cent response rate)</p>	<ul style="list-style-type: none"> <li>• Respondents mainly welcomed EBM and agreed that its practice improves patient care.</li> <li>• The major perceived barrier to practising EBM was a lack of personal time.</li> <li>• Respondents thought that the best way to move towards EBM was using evidence-based guidelines or proposals developed by colleagues; and not by identifying and appraising primary literature and systematic reviews.</li> </ul>

<p>Sutherland and Dawson (1998) 'Power and quality improvement in the new NHS: the roles of doctors and managers'</p>	<p>Draws on empirical data (interview transcripts) from research in their group over the past six years</p>	<ul style="list-style-type: none"> <li>• Research argues that although all parties agree that improving quality is a desirable objective, different stakeholders assert different priorities to achieve it (eg, R&amp;D, investment in new services, radical changes in education and training or reward systems, more patient participation, etc).</li> <li>• Attitudes are shaped to a large extent by two groups: doctors and managers.</li> <li>• The stereotypes are often called on to strengthen claims for power and control (eg, 'clinicians are concerned with what's best for the patient'), but neither group is homogeneous.</li> <li>• Research argues that the ways that clinicians (especially doctors) are socialised can make them particularly blinkered and resistant to change.</li> <li>• Despite recent erosions into the legitimacy of professional autonomy, it is still a powerful force and is one of the defining issues in doctor–manager relationships; self-perceptions of professional autonomy remain high.</li> <li>• The early days of medical audit did not extend managerial control over professional activity; instead, the results were largely kept secret within the profession.</li> </ul>
<p>Ferlie <i>et al.</i> (1999) 'Some limits to evidence-based medicine: a case study from elective orthopaedics'</p>	<p>Qualitative case study involving interviews with leading orthopaedic surgeons and research scientists in one NHS region</p>	<ul style="list-style-type: none"> <li>• Differing views were expressed about the status and use of formal scientific evidence (eg, from randomised controlled trials).</li> <li>• Tacit and experiential forms of knowledge from longstanding clinical experience were also regarded as important.</li> <li>• Non-scientific factors were also relevant to decision-making (eg, ease of administration, medicolegal considerations).</li> <li>• Key decisions about treatment modalities were made locally, largely by negotiation between consultants.</li> <li>• High level of group and individual autonomy over work practices.</li> <li>• Knowledge flows with difficulty across organisational, cultural and occupational barriers.</li> </ul>

<p>Marshall (1999) 'Improving quality in general practice: qualitative case study of barriers faced by health authorities'</p>	<p>Qualitative case study of senior and junior managers in three health authorities</p>	<ul style="list-style-type: none"> <li>• Managers perceived that among the barriers to quality improvement were:             <ul style="list-style-type: none"> <li>• sensitivity of healthcare professionals: there was a high degree of apathy among the doctors; doctors were suspicious of managers' motivations; doctors failed to communicate with each other; thus, junior managers said that they often found it easier to work with practice managers and nurses, bypassing the GPs</li> <li>• poor quality data</li> <li>• lack of authority of the health authority over GPs as independent contractors.</li> </ul> </li> </ul>
<p>Tomlin <i>et al.</i> (1999) 'General practitioners' perceptions of effective health care'</p>	<p>Semi-structured interviews with 24 GPs, three from each of eight practices</p>	<ul style="list-style-type: none"> <li>• Evidence-based practice was affected by:             <ul style="list-style-type: none"> <li>• doctor-related reasons (eg, shortcomings in knowledge, skills, experience, personal stress levels)</li> <li>• patient-related reasons (eg, more than one presenting problem, patient non-compliance)</li> <li>• doctor and patient-related reasons (eg, doctors finding it difficult to refuse requests for inappropriate referrals)</li> <li>• environmental factors (eg, lack of time, lack of resources).</li> </ul> </li> <li>• The main source of further advice for GPs was a colleague or hospital doctor.</li> <li>• GPs may not share evidence-based medicine's overarching concern with clinical effectiveness, but may see it as only one consideration in a wider framework.</li> </ul>
<p>Upton (1999) 'Clinical effectiveness and EBP2: attitudes of health care professionals'</p>	<p>Survey of 295 allied health professionals (207 responses; response rate 70 per cent): podiatrists, occupational therapists, speech therapists and physiotherapists</p>	<ul style="list-style-type: none"> <li>• The majority of allied health professionals (AHPs) believed that clinical effectiveness and evidence-based practice were key issues for the NHS; a minority considered them to be fads that would pass.</li> <li>• Many AHPs perceived that their knowledge of evidence-based practice was low.</li> <li>• AHPs perceived that they lacked the necessary technical skills to access evidence and use it to improve their practice.</li> </ul>

<p>Watkins <i>et al.</i> (1999) 'General practitioners' use of guidelines in the consultation and their attitudes to them'</p>	<p>Postal survey in 1996 of a randomly selected sample of 600 GPs from one NHS region (391 replies; response rate 65 per cent)</p>	<ul style="list-style-type: none"> <li>• Overall, there were positive attitudes towards guidelines and, if used, GPs believed that they led to good outcomes.</li> <li>• Younger GPs were more positive towards guidelines than older GPs.</li> <li>• GPs valued brevity, simplicity, ease of retrievability, reputable source and quality.</li> <li>• 59 per cent of GPs reported difficulties in finding a guideline when they needed it.</li> </ul>
<p>Johnston <i>et al.</i> (2000) 'Reviewing audit: barriers and facilitating factors for effective clinical audit'</p>	<p>Literature review of empirical studies on clinical and medical audit</p>	<ul style="list-style-type: none"> <li>• The main barriers to audit were seen to be: <ul style="list-style-type: none"> <li>• lack of resources</li> <li>• lack of expertise or advice in project design and analysis</li> <li>• problems between groups and group members</li> <li>• lack of an overall plan for audit</li> <li>• organisational impediments.</li> </ul> </li> <li>• Key facilitators for audit were seen to be: <ul style="list-style-type: none"> <li>• modern medical records systems</li> <li>• effective training</li> <li>• designated staff</li> <li>• protected time</li> <li>• structured audit programmes</li> <li>• shared dialogue between healthcare purchasers and providers.</li> </ul> </li> </ul>
<p>Meadows <i>et al.</i> (2000) 'The Last Straw: Explaining the NHS nursing shortage'</p>	<p>Literature review plus 11 focus groups in 2000 with nurses from acute and primary care in London, and 19 semi-structured interviews with key informants from a range of organisations (including managers and representatives from professional bodies)</p>	<ul style="list-style-type: none"> <li>• A major contributing factor to nurses leaving was being unable to carry out the job they were trained to do because of a range of factors (especially shortages of staff, budgetary constraints and organisational problems), leading to stress, a feeling of lack of control in their job, and an inability to work in accordance with their training and with personal and professional expectations.</li> </ul>
<p>Robinson and Gould (2000) 'What are the attitudes of general practitioners towards research?'</p>	<p>Questionnaire study in 1997 of 295 GP principals in one health authority (249 replies; response rate 84 per cent)</p>	<ul style="list-style-type: none"> <li>• 39 per cent of respondents stated that they had no interest in research.</li> <li>• Few respondents felt that primary care research was unimportant, but one-third reported that they were not using research directly to influence their clinical practice.</li> </ul>

<p>Wilkinson <i>et al.</i> (2000) ‘Reactions to the use of evidence-based performance indicators in primary care: a qualitative study’</p>	<p>52 primary care healthcare professionals (doctors, managers, nurses): semi-structured interviews</p>	<ul style="list-style-type: none"> <li>• Barriers to the use of performance indicators were: data quality and problems with technical specifications; lack of time and resources to act on indicators; lack of a coordinated team approach.</li> <li>• Performance indicators were rarely used to look at differences between practices.</li> </ul>
<p>Attree (2001) ‘A study of the criteria used by healthcare professionals, managers and patients to represent and evaluate quality care’</p>	<p>Semi-structured interviews in 1997 with 22 nurses, seven doctors and seven managers (total 36) from one acute medical ward, as well as patients and relatives</p>	<ul style="list-style-type: none"> <li>• Health professionals emphasised the need for adequate and sufficient staff, and enough time for them to provide quality care; and the need for adequate physical and material resources (eg, beds, equipment).</li> <li>• Managers emphasised resource management, while nursing and medical staff emphasised the need for resources to meet patients’ clinical needs and to provide acceptable standards of quality care.</li> <li>• Nearly all of the suggestions from nurses, doctors and patients to improve quality of care involved increasing resources.</li> <li>• Nurses emphasised the importance of psychosocial as well as physical care, and of communication with patients.</li> <li>• Nurses, doctors and managers identified lack of continuity of patient contact and care as a problem.</li> <li>• The relationship between patients and practitioners was seen as an important aspect of quality care, particularly by nurses and nurse managers; doctors made fewer, less explicit references to interpersonal relationships.</li> <li>• Medical staff emphasised the importance of control or resolution of illness and improvement of function; nurses emphasised meeting patients’ needs, and patient comfort and satisfaction.</li> </ul>

<p>Blendon <i>et al.</i> (2001) ‘Physicians’ views on quality of care: a five-country comparison’</p>	<p>Survey of around 500 primary and secondary care doctors from each of five countries, including the UK, in 2000 (findings not separated by primary care and secondary care)</p>	<ul style="list-style-type: none"> <li>• 46 per cent of UK physicians felt that their ability to deliver high-quality care had decreased over the past five years, but 25 per cent thought that it had improved.</li> <li>• Only 32 per cent thought that hospitals were excellent or good at finding and addressing medical errors; 45 per cent thought that nursing staff levels were poor; 31 per cent thought staff were discouraged from reporting/were not encouraged to report medical errors.</li> <li>• 47 per cent thought that there were shortages of medical and diagnostic equipment; of hospital beds (79 per cent); of GPs (44 per cent); of hospital consultants (62 per cent).</li> <li>• 62 per cent reported that doctors did not have enough time with patients.</li> <li>• Physicians in all five countries wanted reforms to address a range of quality issues: more time with patients; better access to specialist care; improved systems for reducing errors; improved nursing or follow-up care after discharge; better access to preventive care; better patient education.</li> <li>• Attitudes towards quality information were mixed among UK physicians, with strong support for electronic prescribing (88 per cent) and electronic patient medical records (66 per cent), but less support for guidelines/protocols (30 per cent), patient and family satisfaction reports (34 per cent) and profiles comparing doctors’ practice to peers (26 per cent).</li> <li>• 72 per cent of UK physicians stated that they were relatively satisfied with their practice, despite constraints; 14 per cent stated that they were very satisfied.</li> </ul>
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<p>Campbell <i>et al.</i> (2001a)          'Improving the quality of care through clinical governance'</p>	<p>National tracker survey (longitudinal survey of 72 of the 481 primary care groups (PCGs) in England): data reported here are from postal surveys completed by 49 (68 per cent) clinical governance leads (mainly GPs) in 1999 and 58 leads (81 per cent) in 2000</p>	<ul style="list-style-type: none"> <li>• More PCGs were organising half-day educational events for the whole PCG (a new departure for many GPs).</li> <li>• There was increasing use of cross-practice audits; in some cases, information provided to board members and other practices enabled practices to be identified (suggesting a cultural change); some practices were taking tentative steps towards making such information available to the public.</li> <li>• Some practices were still hostile to the changes, but the majority had at least acquiesced, if not enthusiastically adopted it.</li> <li>• More PCGs were using incentives to promote quality improvement.</li> <li>• Clinical governance leads were working with limited time and resources: 35 per cent said that they had little or no support, and 41 per cent did not have a budget to support implementation of clinical governance.</li> </ul>
<p>Campbell <i>et al.</i> (2001b)          'Progress in clinical governance: findings from the first NPCRDC national tracker survey of primary care groups/trusts'</p>	<p>Questionnaire in 1999 of clinical governance leads from a random sample of 72 PCGs: 52 clinical governance leads (74 per cent) responded, 96 per cent of whom were GPs</p>	<ul style="list-style-type: none"> <li>• Fewer than half the PCGs had an allocated budget for clinical governance, and most respondents reported little or no admin support from the health authority.</li> <li>• The majority of PCGs had consulted local GPs (79 per cent), nurses (68 per cent) or community nurses (60 per cent) about clinical governance; few had consulted other groups, eg, CHCs, user groups, etc.</li> <li>• PCGs were preoccupied in relation to clinical governance with set-up issues, eg, gaining more staff and IT, training and personal development issues.</li> <li>• The main barriers to development of clinical governance were lack of time and resources; a quarter of PCGs also specified the attitudes of practices as a problem.</li> </ul>
<p>Curtin and Jaramazovic (2001)          'Occupational therapists' views and perceptions of evidence-based practice'</p>	<p>Focus groups with senior occupational therapists followed by postal survey of 653 occupational therapists (500 responses; response rate 77 per cent)</p>	<ul style="list-style-type: none"> <li>• Occupational therapists were positive about evidence-based practice in theory but saw lack of time, high staff turnover and staff shortages as major barriers.</li> <li>• Many perceived that they needed more training about evidence-based practice.</li> </ul>

<p>Foy <i>et al.</i> (2001)          'The impact of national guidelines on obstetricians in Scotland'</p>	<p>Questionnaire surveys of 161 consultants and senior specialist registrars before and after the administration of guidelines: 121 respondents before the guidelines (85 per cent response rate) and 105 respondents after the guidelines (74 per cent response rate)</p>	<ul style="list-style-type: none"> <li>• There were significant improvements reported in management, in line with two of the guidelines, but little change in the practice areas relating to the other two guidelines.</li> </ul>
<p>Freeman and Sweeney (2001)          'Why general practitioners do not implement evidence: qualitative study'</p>	<p>Qualitative study using three focus groups of 19 GPs who met to discuss cases in which they had knowingly not followed evidence-based practice; transcripts of 11 meetings were analysed</p>	<ul style="list-style-type: none"> <li>• The use of evidence is affected by the doctor's personal and professional experiences (eg, accidents, mishaps and spectacular clinical successes) and by their relationship with the patient (ie, evidence is interpreted in the context of that particular patient).</li> <li>• There is a perceived tension between primary and secondary care: the GPs thought that specialists approached evidence-based practice differently, treating diseases rather than patients in a context that they perceived to be more controlled than the real life of general practice.</li> <li>• Clinical evidence had an emotional impact on practitioners and patients (eg, increased anxiety levels because of the difference between probability and certainty).</li> <li>• Decisions to use evidence-based practice were made by doctors partly on logistical grounds (eg, distance from specialist unit if complications occurred).</li> </ul>

<p>Freeman <i>et al.</i> (2001)          'How do trusts intend to measure progress in clinical governance?'</p>	<p>134 of 151 semi-structured interviews with selected staff from all 47 trusts in the West Midlands: chief executives, clinical governance leads and non-executive directors with a lead role in clinical governance</p>	<ul style="list-style-type: none"> <li>• Measurement intentions showed differences between leaders who saw clinical governance as a performance management and quality assurance system, and those who saw it as a means to bring about quality improvement.</li> </ul>
<p>Heard <i>et al.</i> (2001)          'Continuous quality improvement: educating towards a culture of clinical governance'</p>	<p>Evaluation of a training course for multi-professional groups in a range of knowledge and skills (including clinical governance, analysis of data and evidence, team working). Evaluation carried out through participant questionnaires and semi-structured interviews (a series of three interviews with each of 16 participants from the first programme)</p>	<ul style="list-style-type: none"> <li>• Barriers to such training initially were difficulties in being released from clinical activity, different types of education and training approaches between professions etc.</li> <li>• Participants gained greater understanding of continuous quality improvement and working in multi-professional teams, but expressed concerns about changing their own practice: the lack of resources, the time it would take, and the need for strong, overt and continuing support from senior NHS players and the Government.</li> </ul>
<p>Jones (2001)          'Exploring nurses' experience of clinical governance'</p>	<p>UK-wide discussion groups with 80 Royal College of Nursing members from acute and primary care</p>	<ul style="list-style-type: none"> <li>• Barriers to implementation of clinical governance related to lack of awareness among clinicians about clinical governance and their role; lack of resources to support clinical governance; cultural problems; and a failure to engage the 'hearts and minds' of staff in some areas.</li> </ul>

<p>Mannion and Goddard (2001) 'Impact of published clinical outcomes data: case study in NHS hospital trusts'</p>	<p>Case studies including semi-structured interviews with 48 trust staff, including chief executives, consultants, nurse managers and junior doctors to investigate staff views on the clinical resource and audit group (CRAG) outcome indicators, and their perception of the impact of these indicators on clinical practice and continuous quality improvement</p>	<ul style="list-style-type: none"> <li>• Indicators had a low profile in the trust and were mainly used to support applications for further funding or service development.</li> <li>• Professionals lacked faith in the indicators.</li> <li>• Problems identified included: data quality; time lag; limited dissemination; weak incentives to take action; healthcare professionals' predilection for process rather than outcome indicators; and their belief in informal information rather than quantitative data to assess clinical performance.</li> </ul>
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<p>Roland <i>et al.</i> (2001)          'Clinical governance: a convincing strategy for quality improvement?'</p>	<p>Annual survey by the NPCRDC of a representative sample (72 responses; 15 per cent response rate) of the 481 PCGs established in 1999 includes questionnaires to clinical governance leads to assess progress in implementation of clinical governance in primary care. This paper reports results from the 58 (81 per cent response rate) of clinical governance leads who responded to the October 2000 survey</p>	<ul style="list-style-type: none"> <li>• Clinical governance leads reported that a minority of practices viewed the changes with suspicion or hostility.</li> <li>• The pace of organisational change was seen as a major barrier to progress on clinical governance.</li> <li>• Clinical governance leads identified that significant 'initiative fatigue' was leading to healthcare professionals' disengagement from the quality improvement agenda.</li> </ul>
<p>Spooner <i>et al.</i> (2001)          'What makes general practitioners take part in a quality improvement scheme?'</p>	<p>Semi-structured interviews with 27 healthcare professionals and managers in primary care about a local quality improvement programme around chronic disease management</p>	<ul style="list-style-type: none"> <li>• Factors that motivated GPs to take part in the quality improvement programme included: a desire to improve patient care; financial incentives; continuing professional autonomy in determining how to reach the targets; and peer pressure and professional pride.</li> </ul>

<p>Wallace <i>et al.</i> (2001a)  'Organisational strategies for changing clinical practice: how trusts are meeting the challenges of clinical governance'</p>	<p>Postal survey in 1999 of clinical governance leads in 86 NHS trusts across two regions (senior clinicians, predominantly from medical and nursing professions)</p>	<ul style="list-style-type: none"> <li>• Clinical governance leads were most commonly using educational programmes and protocols and guidelines to influence clinician behaviour, but frequently rated these methods as ineffective.</li> <li>• Barriers to change included: lack of resources (especially money and staff time); the need to address cultural issues (eg, to develop a 'no-blame' culture and to ensure that clinicians are accountable for quality of care); and the lack of infrastructure support.</li> <li>• Clinical governance leads were positive about the expected impact of clinical governance on patient outcomes, closer relationships between managers and clinicians, etc (through no specified mechanism or intervention), but had lower expectations in relation to other outcomes like better use of resources, improved patient satisfaction, etc.</li> </ul>
<p>Wallace <i>et al.</i> (2001b)  'Clinical governance, organisational culture and change management in the new NHS'</p>	<p>151 semi-structured interviews with selected staff from all 47 trusts in the West Midlands: chief executives, clinical governance leads and non-executive directors with a lead role in clinical governance</p>	<ul style="list-style-type: none"> <li>• The commonest response of clinicians to clinical governance was ambivalence, although strongly positive and strongly negative reactions were also reported.</li> <li>• Trust leaders wanted to see a more open culture but were not explicitly attempting to bring about such cultural change: 'It seems that the key goal of clinical governance, building a shared culture, has been left to chance.' (p 31)</li> <li>• There were unresolved tensions 'between control and accountability on the one hand, and the blame-free openness required for organisational learning on the other.' (p 30)</li> </ul>

<p>Walshe <i>et al.</i> (2001)          'The external review of quality improvement in healthcare organizations: a qualitative study'</p>	<p>Face-to-face and telephone interviews with 151 clinicians and senior managers at NHS trusts in the West Midlands and 12 members of a regional clinical governance review team</p>	<ul style="list-style-type: none"> <li>• External reviews rarely generated wholly new knowledge, were more confirmatory than revelatory and did not usually lead to major changes in policy, strategy or practice, although they appear to have raised awareness of clinical governance.</li> <li>• Interviewees' views about the impending external review were affected by previous experience of other external reviews (ie, if positive, more likely to be positive about this review; if negative, sceptical or even hostile); many interviewees expressed a sense of 'inspection overload'; some saw it positively, 'seeing the visiting team as a "critical friend" able to raise concerns without being punitive or unpleasant'. (p 370)</li> <li>• Some interviewees felt the time required to prepare for the review (eg, the portfolio of evidence) was excessive, although some felt the process was instructive; some felt that the portfolio was good at describing formal structures and arrangements, but not in showing how well, or if, things worked.</li> <li>• NHS trusts valued the opportunity of the presentations to showcase their work; they valued the dialogue and contact with frontline staff, but were concerned that an individual member of staff could be out of tune with broader clinical opinion; some found the 'public' nature of the review process uncomfortable.</li> <li>• NHS trusts viewed the process as inspection, although the clinical governance team intended the process to be developmental.</li> </ul>
<p>Campbell <i>et al.</i> (2002)          'Implementing clinical governance in English primary care groups/trusts: reconciling quality improvement and quality assurance'</p>	<p>Qualitative case studies in 2000 using documentary review and semi-structured interviews with 50 senior staff (including chief executives, clinical governance leads, mental health leads and lay Board members) in 12 PCG/Ts</p>	<ul style="list-style-type: none"> <li>• Managers perceived that the barriers included: pace of change; perceived blame culture; not enough staff to implement clinical governance; lack of appropriate funding for implementation; practices at different stages in terms of quality of care, IT skills, financial resources, commitment; continued disengagement by some practices and staff; lack of clarity of roles between PCGs/Ts and health authorities; and lack of support, or suspicion from some practice staff, especially doctors.</li> <li>• Some senior managers were seeking to differentiate their two roles (in relation to quality improvement and quality assurance) because the tension between the two increased clinicians' hostility to clinical governance.</li> </ul>

<p>Clark and Smith (2002) 'Clinical governance and education: the views of clinical governance leads in the south west of England'</p>	<p>Qualitative study: interviews with 12 clinical governance leads; correspondence from 23 clinical governance leads; interviews with three GP clinical tutors; one focus group of eight GPs</p>	<ul style="list-style-type: none"> <li>• Education is central to achieving the clinical governance agenda; barriers to achieving this included the different systems for funding education for different professions.</li> <li>• A key problem for many of the clinical governance leads was the absence of identified funding and resources, including protected time.</li> <li>• There was also concern that clinical governance appeared to be developing in an authoritarian rather than developmental manner.</li> </ul>
<p>Curley <i>et al.</i> (2002) 'The new NHS: modern, definable? A questionnaire to assess knowledge of, and attitudes to, the new NHS'</p>	<p>Questionnaire survey of 230 nursing, midwifery and medical staff from one hospital in Northern Ireland in 2001 (response rate 88 per cent: 203 out of 230)</p>	<ul style="list-style-type: none"> <li>• The majority of individuals were unfamiliar with the key principles of the new NHS.</li> <li>• Only 44 per cent felt that the principles of the new NHS were of any value in clinical practice.</li> <li>• Staff had limited knowledge of internal and external audit: 'Staff were known to be directly involved in quality control through data submission to the confidential enquiries CEMD, CEPOD and CESDI but less than 20 per cent could identify what these enquiries audited.' (p 18)</li> <li>• There were problems with the high cost of audit (mainly staff time) and the lack of connection with other initiatives eg, research and development, clinical risk management.</li> <li>• Staff had limited understanding of evidence-based methodology.</li> </ul>

<p>Finlayson (2002) 'Counting the Smiles: Morale and motivation in the NHS'</p>	<p>Literature review; focus groups with clinicians and managers from different parts of the NHS; interviews with key workforce contacts from the NHS, the Department of Health and the NHS Executive</p>	<ul style="list-style-type: none"> <li>• Literature review found that factors affecting morale and motivation could be grouped under four categories: working environment; feeling valued; job satisfaction; and resources and pay.</li> <li>• Similar themes emerged from the focus groups: clinical staff and managers see feeling valued as the most important determinant of morale and motivation, but there was general consensus that staff felt more valued by patients than by colleagues or managers. Many staff did not feel supported by politicians or employers. On work environment, staff were very concerned about staff shortages and the impact on the quality of care they could provide. They experienced changes in the jobs within the health service (eg, shifting roles) as both positive and threatening, and found the lack of slack in the system very demoralising.</li> <li>• Some staff expressed concern over resources and pay, but these were not seen as major de-motivating factors in their own right: they were more likely to influence morale if other factors were already reducing morale. One senior manager commented that where the additional resources had reached the frontline, this had been a huge morale booster for her team.</li> </ul>
<p>Freeman <i>et al.</i> (2002) 'Achieving Improvements through Clinical Governance: A survey of Trust managers' views for the National Audit Office: Final report'</p>	<p>Postal survey in 2002 of Board members and directorate level managers/clinical leads from 100 trusts (acute, ambulance and mental health/learning disability): 1177 respondents (61 per cent response rate)</p>	<ul style="list-style-type: none"> <li>• The controls assurance aspect of clinical governance is more developed than the quality assurance aspect.</li> <li>• Trusts are largely achieving the structural changes required by clinical governance, but are achieving less against associated processes (eg, reviewing and discussing adverse incident data) and less against outcomes (eg, improving service quality following review of adverse incident data).</li> <li>• Commission for Health Improvement (CHI) visits have only a small impact on corporate accountability and performance improvement domains; there was no difference on other more developmental domains (although the existence of CHI may be helping to raise clinical governance awareness and activity in all trusts).</li> </ul>

<p>Marshall <i>et al.</i> (2002a)          'Attitudes to the public release of comparative information on the quality of general practice: qualitative study'</p>	<p>Qualitative focus group study. 12 focus groups: four of service users, four of GPs, four of primary care clinical governance leads. Total participants: 35 service users, 24 GPs, 18 clinical governance leads. Three of the early groups were reconvened to reflect on and develop their ideas about the issues discussed</p>	<ul style="list-style-type: none"> <li>• Although there was general support for the principle of publishing comparative data, all three groups had strong views on the implications in practice; attitudes were strongly influenced by experience of other forms eg, school and hospital league tables.</li> <li>• The initial negative response changed over time and became slightly more positive.</li> <li>• GPs emphasised the unfairness of drawing comparisons from current data: lack of routinely available data, questionable reliability and validity, accuracy of reporting, risk of 'gaming' the data (particularly in responding to requests for 'ridiculous' information).</li> <li>• GPs were cynical about politicians' motives (more control over doctors; measure what can be measured; use the data to serve political ends); report cards were seen by many as an abrogation of responsibility on the part of the Government – an attempt to shift attention to the providers.</li> <li>• GPs and clinical governance leads were concerned about the impact of public disclosure on the morale of GPs at a time of major stress for doctors.</li> <li>• Clinical governance leads thought that preserving job satisfaction among GPs was important and that report cards would not make GPs work any harder.</li> <li>• Clinical governance leads were concerned that 'naming and shaming' would run counter to the developmental approach they were trying to take regarding clinical governance.</li> <li>• GPs were concerned that inequalities would be exacerbated as better-educated and more articulate patients would use the information to gravitate towards good practices.</li> <li>• GPs were concerned that the data might undermine the doctor–patient relationship (eg, questioning past diagnoses and treatments).</li> </ul>
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<p>Marshall <i>et al.</i> (2002b)          'A qualitative study of the cultural changes in primary care organisations needed to implement clinical governance'</p>	<p>Semi-structured interviews with 50 senior non-clinical and clinical managers from 12 purposely sampled PCGs/ Ts in England; documentary review</p>	<ul style="list-style-type: none"> <li>• Senior primary care managers place a high priority on the need to change the culture of general practice to one that is more focused on accountability, collaboration between practices and reflective learning. There are significant historical, structural, professional and political barriers to facilitating or managing such changes (eg, the level of independence and autonomy of practices; perceived political pressure to deliver rapidly on specific tasks).</li> <li>• One clinical governance lead felt that many practices were ambivalent about clinical governance but that more practices were being supportive of the concept of clinical governance.</li> <li>• The most significant cultural change noted was a greater willingness of practices to work together and learn from each other.</li> <li>• Managers emphasised the need for practices to own any changes and not to be pushed too quickly.</li> </ul>
<p>McNulty and Ferlie (2002)          'Reengineering Health Care: The complexities of organizational transformation'</p>	<p>Qualitative study comprising 144 semi-structured interviews from 1994–1998 in an NHS teaching hospital exploring Business Process Reengineering (BPR)</p>	<ul style="list-style-type: none"> <li>• There were no examples of BPR-led change successfully imposed on clinicians: it had to be locally negotiated and agreed.</li> <li>• BPR change was more likely in settings where clinicians owned process redesign ideas.</li> <li>• Clinicians shaped implementation at local level, typically being more interested in quality improvement than in cost reduction.</li> <li>• Change that crossed professional jurisdictions (eg, two clinical directorates) was particularly complex.</li> <li>• Nursing was far more vulnerable than medicine to BPR-led change (eg, nursing middle management was a 'change victim' – it was essentially de-layered).</li> <li>• There was a strong defensive role of pre-existing vertical structures (like clinical directorates) in shaping and often blunting the move to more lateral forms of organising.</li> </ul>

<p>Newman and Maylor (2002) ‘Empirical evidence for “the nurse satisfaction, quality of care and patient satisfaction chain”’</p>	<p>Interviews with 131 nurses and midwives in six specialties in four London acute trusts in 2000</p>	<ul style="list-style-type: none"> <li>• Job dissatisfaction derived from the direct and indirect consequences of universal shortage of staff, and from poor management.</li> <li>• Staff were frustrated at their inability to satisfy their personal care standards because of lack of staff and equipment, or less than the optimum mix of skills and experienced staff.</li> <li>• All interviewees who had daily contact with patients emphasised that seeing patients get better, patient satisfaction and the people they worked with were crucial to their enjoyment of nursing.</li> <li>• Nurses ranked their commitment to patients and the staff in the immediate working environment higher than their commitment to the organisation.</li> </ul>
<p>Summerskill and Pope (2002) “I saw the panic rise in her eyes and evidence-based medicine went out of the door”. An exploratory qualitative study of the barriers to secondary prevention in the management of coronary heart disease’</p>	<p>Semi-structured interviews and focus groups with 14 GPs from 12 practices to explore consultations with patients previously diagnosed as having coronary heart disease</p>	<ul style="list-style-type: none"> <li>• GPs perceived that they lacked critical appraisal skills or the time to evaluate current evidence and stated that they tend to rely on secondary sources.</li> <li>• GPs balanced the use of evidence against competing demands.</li> <li>• GPs made judgements and decisions based on their understanding of a patient’s personal circumstances and ability to tolerate or comply with interventions.</li> <li>• GPs were concerned that a good doctor–patient relationship that they had built up over time might be jeopardised by ‘gratuitous’ interventions.</li> </ul>
<p>Davies <i>et al.</i> (2003) ‘Consensus and contention: doctors’ and managers’ perceptions of the doctor–manager relationship’</p>	<p>Postal questionnaire survey of clinical and non-clinical managers in the NHS (1092 responded, with a response rate of 70 per cent)</p>	<ul style="list-style-type: none"> <li>• Clinical and non-clinical managers often have divergent perceptions of the state of doctor–manager relationships, with mid-tier and clinical managers being more pessimistic about the quality of these relationships than senior and non-clinical managers.</li> <li>• Differences were most stark about whether financial or clinical priorities dominated.</li> <li>• There was strong agreement that clinical performance data could stimulate good practice and strengthen service management</li> </ul>

<p>Exworthy <i>et al.</i> (2003)          'The role of performance indicators in changing the autonomy of the general practice profession in the UK'</p>	<p>Qualitative interview and observational study in 1998–1999 of 29 GPs from 15 practices in one PCG in England. Interviews took place two months after a one-hour presentation of each practice's performance on two sets of performance indicators (PIs)</p>	<ul style="list-style-type: none"> <li>• Almost all of the GPs questioned the quality of the data used to generate the indicators.</li> <li>• Many were concerned about the appropriateness of PIs to general practice because of the discretionary nature of their work and its indeterminacy (eg, continuity of care, pastoral care), or because indicators were not indicative of health improvements or the full scope of their competence.</li> <li>• Perceived loss of autonomy was central to GPs objections to clinical PIs, but these views were not universal.</li> <li>• Many were suspicious about the potential uses of PIs; some suggested that participation in these initiatives could prevent further Government 'interference'.</li> <li>• The identity of the assessor and their expertise were critical: in general, the further that the assessor was, or was perceived to be, from those assessed, the less credible.</li> </ul>
<p>Ham <i>et al.</i> (2003)          'Redesigning work processes in health care: lessons from the National Health Service'</p>	<p>Review of NHS quality improvement initiatives since 1990, focusing on the 24 pilots in the National Booked Admissions Programme</p>	<ul style="list-style-type: none"> <li>• Healthcare professionals are unlikely to engage in quality improvement initiatives unless they can see that they, as well as patients, will benefit from the changes.</li> <li>• Action at different levels is needed (eg, a focus on individuals and teams may hinder change across a whole hospital).</li> <li>• Quality improvement takes a long time to take hold and to become firmly established in an organisation.</li> </ul>
<p>Hedley <i>et al.</i> (2003)          'People will support what they help to create: clinical governance large group work'</p>	<p>Explanation of the Clinical Governance Support Team (CGST) pilot 'protected time programme' plus case study of work carried out one hospital to improve the discharge process from emergency services</p>	<ul style="list-style-type: none"> <li>• A facilitated three-day event involving a wide range of staff from across the trust led to a range of service improvements.</li> <li>• Committing to the initiative in a public setting appeared to strengthen individuals' ongoing commitment.</li> </ul>

<p>Marshall <i>et al.</i> (2003)          'Public reporting on quality in the United States and the United Kingdom'</p>	<p>Literature review of research studies on public reporting</p>	<ul style="list-style-type: none"> <li>• Most of the evidence on public reporting derives from the US although what is available about the UK tends to support the US findings.</li> <li>• Politicians and the media are enthusiastic, but many consumers, purchaser, health professionals and, to a lesser extent, provider organisations are ambivalent, apathetic or actively antagonistic towards report cards.</li> <li>• There is little evidence that PCTs are using comparative hospital data to guide their contracting decisions.</li> <li>• A growing body of evidence suggests that provider organisations are most sensitive to report cards and may respond in ways that seek to improve quality of care.</li> <li>• There is both evidence and a perception that organisations and provider groups will devote resources to areas that are publicly reported in preference to other areas.</li> </ul>
<p>McNulty (2003)          'Redesigning public services: challenges of practice for policy'</p>	<p>Empirical study of the Department of Health-funded re-engineering programme at a large acute trust; data collection 1995–1998 through 144 interviews, documentary and archival analysis and observation of 50 meetings</p>	<ul style="list-style-type: none"> <li>• Established organisational structures and practices shaped the process and effects of redesign.</li> <li>• Changes in the organisation and delivery of patient care did happen to a degree, but it proved difficult for individuals and groups to bring about change across an entire patient process (eg, because of disputes between professionals about jurisdiction over aspects of clinical work).</li> </ul>

<p>National Audit Office (2003) ‘Achieving Improvements through Clinical Governance: A progress report on implementation by NHS trusts’</p>	<p>Census of trusts, survey of trust managers, reports from CHI</p>	<ul style="list-style-type: none"> <li>Structures have been put in place, but the components are not fully embedded in all clinical directorates.</li> <li>There have been many beneficial impacts of clinical governance eg, clinical quality is more mainstream; there is greater or more explicit accountability of clinicians and managers for clinical performance; changes in professional cultures are moving towards more open and collaborative ways of working; evidence of improvements in practice and patient care though trusts lack robust ways of assessing this.</li> <li>However, implementation of clinical governance is patchy between trusts, within trusts and in the different components of clinical governance (eg, risk management is more robust than newer strands like knowledge management, including sharing of good practice).</li> <li>Trusts assessed the CHI reviews as having the greatest impact on them, but progress in meeting the action plans seems slow.</li> <li>Trusts identified barriers to clinical governance as: lack of resources; cultural difficulties; conflicting priorities (especially waiting-times targets); organisational changes and mergers; the size, spread and heterogeneity of trusts; and the lack of organisational direction and impetus for clinical governance.</li> </ul>
<p>Newton <i>et al.</i> (2003) ‘Receptivity to change in a general medical practice’</p>	<p>Data from a three- year evaluation of a Personal Medical Services pilot, using Pettigrew <i>et al.</i>'s concept of receptive and non-receptive contexts for change (Pettigrew <i>et al.</i> 1992)</p>	<ul style="list-style-type: none"> <li>The practice did not seem to have felt under any pressure to make their application: the driver seemed to be one individual general manager.</li> <li>The changes ushered in by the PMS pilot had generated resentment among many staff (especially nurses who felt that the GPs were the only stakeholders whose commitment had been sought).</li> <li>Practice staff were positively oriented towards change, and the pilot was implemented at a clinical level, but managerial and organisational change were prevented by the dominant culture of the medical partnership.</li> <li>By the end of the fieldwork, the context was strongly antipathetic to the pilot.</li> </ul>

<p>Renshaw and Ireland (2003) 'Specialty audit leads – has this concept been effective in implementing clinical audit in an acute hospital?'</p>	<p>emi-structured interviews with 30 audit leads (clinicians) in a large acute trust</p>	<ul style="list-style-type: none"> <li>• Many specialties did not see audit as a tool to address day-to-day problems and believed that many problems in the trust were only resolvable with extra funding.</li> <li>• Many clinicians gave audit a low priority compared to the other requirements placed on their time.</li> <li>• Problems identified included lack of protected time, limited understanding of quality improvement, and limited multi-professional communication.</li> <li>• The authors comment that smaller changes that are within the specialty's control and that do not impinge on others' clinical freedom do seem to be implemented, as long as the message is continually reinforced, but that real breakthrough improvements are rare.</li> </ul>
<p>Sheaff <i>et al.</i> (2003a) 'A subtle governance: soft medical leadership in English primary care'</p>	<p>emi-structured interviews in 2000 with 49 key informants at PCG and PCT level (including chief executives, clinical governance leads and lay informants), together with documentary review to assess how general managers and professional leaders said they were attempting to lead local GPs</p>	<ul style="list-style-type: none"> <li>• In English primary care, governance over rank-and-file doctors is exercised by local professional leaders rather than by general managers.</li> <li>• Local professional leaders used the threat of an end to professional autonomy and self-regulation, rather than the threat of competition, to encourage involvement in clinical governance.</li> <li>• There were almost no means for exercising hierarchical authority.</li> </ul>
<p>Walshe <i>et al.</i> (2003) 'The implementation of Clinical Governance: A survey of NHS trusts in England: Final report'</p>	<p>Postal survey completed by clinical governance leads and/or chief executives in 270 NHS acute trusts; final section of questionnaire was completed by 254 chief executives</p>	<ul style="list-style-type: none"> <li>• Chief executives' views on barriers to clinical governance largely matched those of clinical governance leads: availability of time and other resources, especially in relation to other priorities; problems with culture, attitudes and behaviour of staff (particularly clinical professionals and often doctors) and the organisation; difficulties caused by the pace and scale of organisational change in the NHS (especially in relation to NHS trust mergers, reconfigurations and dissolutions).</li> <li>• Respondents' descriptions of progress since 1999 suggest that an improvement in staff attitudes and motivation towards clinical governance has been observed.</li> </ul>

<p>Audit Commission (2004) 'Information and Data Quality in the NHS: Key messages from three years of independent review'</p>	<p>Summarises lessons from all of the Audit Commission's work (in acute and primary care in England and Wales) in this area since 2001, including the 2003 spot checks on data quality</p>	<ul style="list-style-type: none"> <li>• Data quality is largely perceived by trusts as an IT rather than a corporate issue.</li> <li>• There is limited involvement of clinicians in validating data; medical staff in other studies have reported low involvement in validating clinical data, and in 62 per cent of trusts, IT managers reported that no clinical staff attend data quality meetings.</li> </ul>
<p>Checkland (2004) 'National Service Frameworks and UK general practitioners: street-level bureaucrats at work?'</p>	<p>Qualitative case studies in 2002 and 2003 in three practices in one PCT in England: documentary review, observation and semi-structured interviews with doctors, nurses, practice managers and other staff with managerial or clinical responsibilities (average of 15 interviews in each practice)</p>	<ul style="list-style-type: none"> <li>• Participants in all three practices had a positive attitude and active approach towards the use of guidelines, but National Service Frameworks (NSFs) had had very little practical impact.</li> <li>• NSFs were generally accepted as an idea, but reactions to the actual NSFs were more negative: NSFs were perceived to offer no practical help and instead to be a burden, failing to address important issues that could not be measured.</li> <li>• None of the practices had a plan for their systematic evaluation and implementation, and few staff had read even the summary versions; there was no clear locus of responsibility for taking action on NSFs within the practice.</li> <li>• Interviewees felt that the documents were too long and too complex.</li> <li>• Practices saw themselves as conscientious and already striving to provide a high standard of care, so there was a feeling that 'NSFs are not directed at us.'</li> </ul>

<p>Crilly and Le Grand (2004) 'The motivation and behaviour of hospital trusts'</p>	<p>Survey of 1500 consultants and managers plus statistical analysis of the behaviour of 100 trusts over three years (up to 1994/5) to examine the hypotheses that consultants are interested in production or service (volume and quality), that managers are primarily interested in financial break-even and that in the long run, consultants will dominate</p>	<ul style="list-style-type: none"> <li>• Consultants valued production goals over financial break-even, but put quality higher than volume.</li> <li>• On average, managers had break-even as the primary goal, but quality ranked as the main priority among those managers closest to service delivery (compared to board members and corporate managers).</li> <li>• Both groups perceived that the objective of trusts was the single-minded pursuit of financial targets consistent with government requirements, but managers or consultants did not act upon or own this strong and unequivocal goal : 'Nobody allied themselves with the Trust, which was perceived as aiming for financial targets above all else.' (p 1819)</li> <li>• Service expansion (defined as FCEs, Finished Consultant Episodes) was achieved more often than meeting financial targets; the authors suggest that consultants' objectives therefore dominated those of managers.</li> <li>• Consultants emerged as a relatively homogeneous group, whereas managers differed between the corporate and service levels of the organisation.</li> </ul>
<p>Dean <i>et al.</i> (2004) 'Quality improvement in general practice: the perspective of the primary health care team'</p>	<p>Questionnaire survey of 327 members of 17 primary healthcare teams taking part in a facilitated QI initiative; 202 responses (61 per cent response rate), of which 166 respondents (56 GPs, 26 nurses, 25 AHPs, 59 managerial and administrative staff) provided responses to the open-ended items in the questionnaire</p>	<ul style="list-style-type: none"> <li>• Views on quality improvement were generally favourable but with conditional statements and anxieties.</li> <li>• Concerns were raised about the impact of initiatives on individuals and teams, and anxieties were expressed that quality improvement might be a waste of time and resources.</li> <li>• Constraints reflected doubts about team functioning, the relevance of initiatives adopted and consequent wasted effort, and concerns were expressed about the adequacy of practice resources, especially time.</li> <li>• GPs and administrative staff expressed concerns about the understanding and implementation of the quality initiatives, whereas nurses and AHPs expressed more concerns about teamwork.</li> <li>• In common with previous studies, funding and time were recognised as two major constraints, particularly by GPs but also among other team members.</li> </ul>

<p>Freeman and Walshe (2004)          'Achieving progress through clinical governance? A national study of health care managers' perceptions in the NHS in England'</p>	<p>National cross-sectional study, Board level and directorate managers in English acute, ambulance and mental health/learning disability trusts. 1177 out of 1916 respondents (61 per cent response rate) scored the importance of, and their organisation's achievement against, various statements about organisational competencies in clinical governance</p>	<ul style="list-style-type: none"> <li>• Greatest achievement and importance was perceived in the assurance-related areas of corporate accountability and risk management, whereas much less achievement (and importance) was perceived in areas of quality improvement and leadership and collaboration.</li> <li>• Directorate-level managers had significantly lower perceptions of achievement than did their board level (executive and non-executive) colleagues on all domains except improving performance.</li> <li>• There was more perceived progress in areas concerned with quality assurance than with quality improvement.</li> <li>• Respondents prioritised the assurance agenda and appeared to have concentrated their efforts on the structural changes for clinical governance and focused less on process and outcomes.</li> </ul>
<p>Gollop <i>et al.</i> (2004)          'Influencing sceptical staff to become supporters of service improvements: a qualitative study of doctors' and managers' views'</p>	<p>Semi-structured qualitative interviews with 19 clinicians and 19 managers who hold national and regional roles in two national programmes of service improvement (National Booking Programme and Cancer Services Collaborative)</p>	<ul style="list-style-type: none"> <li>• There was scepticism and resistance among all staff groups, especially doctors.</li> <li>• Reasons included personal reluctance to change, misunderstanding of the aims of programmes, and dislike of the ways programmes have been introduced.</li> <li>• The authors conclude that healthcare professionals can be influenced to support service improvements, but that the process takes time and support can be fragile.</li> </ul>

<p>Gysels <i>et al.</i> (2004)          'What methods do stakeholders prefer for feeding back performance data: a qualitative study in palliative care'</p>	<p>Semi-structured face-to-face and telephone interviews with 36 stakeholders with clinical and non-clinical roles in palliative care and the wider healthcare system</p>	<ul style="list-style-type: none"> <li>• In general, box plots were received more positively than league tables (as being able to represent a variety of factors in more detail), but there were reservations about validity; box plots were seen as a simple and visual tool but one that needed an explanation of what the components represented. Both tools were seen to require additional contextual and methodological information to enable them to be used for important policy decisions (eg, resource allocation) and were thought to be most useful as a stimulus to further discussion and debate.</li> <li>• Qualitative information was regarded as more appropriate than box plots.</li> </ul>
<p>Macfarlane <i>et al.</i> (2004) 'RCGP Quality Team Development Programme: an illuminative evaluation'</p>	<p>34 semi-structured interviews with participants and assessors from 12 practice and four primary care organisations</p>	<ul style="list-style-type: none"> <li>• Practices liked the formative, participative and multi-professional nature of the programme and especially its emphasis on peer review.</li> <li>• Primary care organisations liked the programme as a means of delivering on national policies and promoting collaboration between organisations.</li> <li>• The main concerns were about the heavy workload involved, especially for assessors.</li> </ul>
<p>Meal <i>et al.</i> (2004)          'Forging links: evolving attitudes of clinical governance leads in general practice'</p>	<p>Two sets of semi-structured interviews conducted one year apart with clinical governance leads (mainly GPs, but also some practice nurses and practice managers) from 19 practices</p>	<ul style="list-style-type: none"> <li>• Most interviewees had been initially reluctant to take on the role of clinical governance lead.</li> <li>• In the later interviews, clinical governance leads perceived that their role was extending beyond quality in the practice to involve a link role between their practice, other practices and the primary care organisation.</li> <li>• Clinical governance leads perceived that barriers to the role were lack of time and a lack of support from the primary care organisation.</li> </ul>

<p>Michie <i>et al.</i> (2004)          'Evidence into practice: a theory-based study of achieving national health targets in primary care'</p>	<p>Interviews with 16 London GPs: eight 'high implementers' (having met five or six National Service Framework milestones for coronary heart disease) and eight 'low implementers' (met one or two milestones) matched for practice size across the groups</p>	<ul style="list-style-type: none"> <li>• Low implementers expressed less belief in evidence-based guidelines as the basis of their practice; they were more concerned about lack of ownership of the guidelines and loss of autonomy; and they perceived more negative consequences for themselves and for patients.</li> <li>• Three psychological constructs: 'beliefs about evidence-based practice', 'professional role and identity' and 'beliefs about consequences' were key in understanding the reasons why some GPs did not meet National Service Framework milestones.</li> </ul>
<p>Murray <i>et al.</i> (2004)          'What do NHS staff know and think about clinical governance?'</p>	<p>Postal survey of 1318 clinical and administrative staff in three NHS trusts in one region; 539 responses (41 per cent response rate)</p>	<ul style="list-style-type: none"> <li>• The majority (92 per cent) of respondents regarded clinical governance as useful rather than useless, although many respondents also thought it was complex and tiresome.</li> <li>• The response rate across the five directorates differed considerably.</li> <li>• The authors suggested that limited knowledge of clinical governance was part of a wider ignorance: a significant number of respondents did not know who their line manager was and did not know the trust guidelines on confidentiality.</li> </ul>
<p>O'Donnell (2004)          'Attitudes and knowledge of primary care professionals towards evidence-based practice: a postal survey'</p>	<p>Postal questionnaire to general managers, clinical governance leads, lead nurses and public health workers in local healthcare co-operatives in Scotland; 289 respondents (66 per cent response rate)</p>	<ul style="list-style-type: none"> <li>• All professional groups supported evidence-based practice.</li> <li>• Nurses and public health professionals were more likely than doctors to identify that they lacked skills in appraising evidence.</li> <li>• Doctors used a narrower range of journals; only nurses and public health practitioners appeared to have any understanding of qualitative research terms.</li> <li>• The major perceived barrier to using evidence was lack of time.</li> <li>• Professional groups other than GPs also cited inter-professional boundaries as a barrier.</li> </ul>

<p>Richens <i>et al.</i> (2004) 'Getting guidelines into practice: a literature review'</p>	<p>Literature review of studies reporting implementation of guidelines in clinical practice</p>	<ul style="list-style-type: none"> <li>Guidelines are more likely to be implemented if practitioners value them as a knowledge source; and can access them and develop implementation strategies.</li> <li>It is not yet clear whether single or multifaceted interventions are more effective.</li> </ul>
<p>Roberts <i>et al.</i> (2004) 'A prospective study of the practical issues of local involvement in national audit of COPD'</p>	<p>Survey of clinicians and audit staff from 30 centres, carried out after an eight-week audit study</p>	<ul style="list-style-type: none"> <li>This pilot for a national audit achieved a 63 per cent voluntary participation rate of randomly selected trusts.</li> <li>Practical barriers to successful implementation included: difficulties working with the audit department (staffing, respective roles); incomplete or inaccurate data; and problems obtaining data on death after discharge from GPs.</li> <li>A large majority of sites (21) felt that an ongoing year-on-year audit of this type would help them to measure local performance. Those that disagreed gave pressure of work or duplication of existing local audit as reasons. All sites commented that protected time would be needed.</li> <li>Around a third of sites said that staff regarded an audit of this kind as an extra burden in the light of potential benefits; some commented that it would be justified if clinical benefits resulted.</li> <li>Verification of case accuracy remains at a very primitive level in many trusts.</li> </ul>
<p>Rycroft-Malone <i>et al.</i> (2004) 'An exploration of the factors that influence the implementation of evidence into practice'</p>	<p>Two focus groups of practice development nurses followed by semi-structured interviews with 17 key informants from two sites (nurses, managers, one occupational therapist, two Modernisation Agency representatives)</p>	<ul style="list-style-type: none"> <li>Nurses use a broad definition of 'evidence' in delivering patient care.</li> <li>Nurses perceive a range of barriers to using research in practice eg, lack of organisational support; lack of skills or motivation; poor fit with organisational or practice issues; problems with multi-professional relationships; lack of time and other resources.</li> <li>Nurses perceive that they lack the authority to bring about change.</li> </ul>

<p>Savage and Scott (2004) 'The modern matron: a hybrid management role with implications for continuous quality improvement'</p>	<p>Postal survey of modern matrons in 10 trusts (176 replies; 69 per cent response rate); semi-structured interviews with 21 matrons and colleagues in eight trusts; survey of patients and carers (123 respondents)</p>	<ul style="list-style-type: none"> <li>• There was evidence that matrons were starting to make an impact on quality improvement but that their effectiveness was limited by lack of forethought about where they should be located in the organisation.</li> <li>• Matrons were increasingly identified as key people to help with quality improvement initiatives, but in some trusts there were tensions between clinical and operational or corporate priorities: between their employer's expectation that they would work to a top-down quality agenda (eg, national performance targets) and their own wishes to adopt a bottom-up approach, based on their existing knowledge of the local situation in their own clinical domain.</li> </ul>
<p>Sheaff <i>et al.</i> (2004) 'Soft governance and attitudes to clinical quality in English general practice'</p>	<p>Postal survey in 2000/2001 of GPs attitudes in six PCGs and six PCTs; 437 replies (52 per cent response rate)</p>	<ul style="list-style-type: none"> <li>• GPs in the 12 study sites were generally more likely than English GPs to accept the legitimacy of clinical governance and to report that it had improved the quality of their practice.</li> <li>• Overall, 58 per cent scored their attitude to clinical governance as positive, 13 per cent as negative and 29 per cent as neutral.</li> <li>• Nearly all responses about Government or general management involvement in clinical governance were negative (eg, political dogma, blame culture).</li> <li>• 98 per cent said that their practice had changed as a result of clinical governance; 48 per cent said it had made no difference to their quality of care.</li> </ul>
<p>Stevenson <i>et al.</i> (2004) 'Do physiotherapists' attitudes towards evidence-based practice change as a result of an evidence-based educational programme?'</p>	<p>Intervention study: 17 physiotherapists received an evidence-based educational programme; 13 physiotherapists formed a control group. Changes in attitudes were assessed using a self-administered questionnaire at baseline, and at three months and six months following the intervention</p>	<ul style="list-style-type: none"> <li>• Throughout the study, physiotherapists rarely used literature, journals and research to inform clinical practice and reported that they mainly relied on courses and in-service training.</li> <li>• The intervention group demonstrated small changes in attitudes (increased support of evidence-based practice) but gave a low priority to literature searching and using research.</li> <li>• The majority of physiotherapists in the study did not have confidence in undertaking literature searches and found journals hard to understand.</li> </ul>

<p>Thomson <i>et al.</i> (2004)  'UK Quality Indicator Project (UK QIP) and the UK independent health care sector: a new development'</p>	<p>Description of the implementation of the UK Quality Indicator Project in the independent healthcare sector</p>	<ul style="list-style-type: none"> <li>• By September 2003, 143 independent hospitals were enrolled (approximately two-thirds of the total); however, not all of the sector is currently convinced about the value of the project.</li> <li>• Knowledge and understanding of the use of indicators varied widely across the sector before the project.</li> <li>• Participants welcomed the flexibility of the project and its responsiveness to its users.</li> <li>• Tensions exist between the use of the data for quality improvement purposes and demands for public accountability.</li> </ul>
<p>Wallace <i>et al.</i> (2004)  'Organisational change through clinical governance: the West Midlands three years on'</p>	<p>Semi-structured interviews with clinical governance leads in 33 out of 40 NHS trusts (three years after the study reported in the paper by Wallace <i>et al.</i> 2001b)</p>	<ul style="list-style-type: none"> <li>• The comparison of responses from both time periods suggests a modest positive perception of progress.</li> <li>• Respondents felt that cultural change was occurring, with closer working between clinicians and managers, but it appears that this is being held back by structural changes and poor information systems that limit knowledge management and organisational learning within and between organisations.</li> <li>• Clinicians were mainly very positive about closer working between clinicians and managers, with only three respondents (all doctors) being critical of how clinical governance has affected these relationships or has been a product of incompetent management.</li> <li>• Strategies for change showed a reliance on mainly educative, audit and protocol-driven approaches (ie, opt in, rather than trust-wide).</li> </ul>

<p>Ferlie <i>et al.</i> (2005)          'The nonspread of innovations: the mediating role of professionals'</p>	<p>Examination of the careers of four different innovations; qualitative case studies using 119 semi-structured interviews in acute and primary care, predominantly with medical staff, nurses and medical managers (three non-medical general managers)</p>	<ul style="list-style-type: none"> <li>• In one case study practice, the social boundaries between doctors in different practices and between doctors and nurses were overcome in numerous ways.</li> <li>• In another case study, the boundaries existed between hospital staff, primary care staff and new professional groups (health service researchers and IT systems designers): thus, there were more social and cognitive boundaries in this case.</li> <li>• Inter- and intra-professional boundaries were key in all four cases; in only two cases, were health managers important.</li> <li>• Across all four cases, local implementation depended on effective relationships and co-operation between different health professions.</li> <li>• Professional communities of practice have particular characteristics that can act as a strong barrier to the adaptation of innovations: multi-professionalisation is seen as a retarding influence on the spread of innovations.</li> <li>• Hospital doctors and primary care doctors had differing approaches to their definition of scientific evidence, as did doctors and other health professionals (nurses and AHPs).</li> <li>• Such professional communities of practice develop internal learning and change but block externally oriented sources of change and learning.</li> </ul>
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<p>Mannion <i>et al.</i> (2005)          'Impact of star performance ratings in English acute hospital trusts'</p>	<p>Multiple case-study design: purposeful sampling of four 'low' performing trusts and two 'high' performing trusts; 8–12 senior managers and clinicians interviewed in each trust</p>	<ul style="list-style-type: none"> <li>• There was a general view across the trusts that star ratings did not represent a rounded view of their own organisation's performance and that many areas of excellent practice (especially clinical aspects) were overlooked.</li> <li>• Star ratings were perceived not to take local contingencies and mitigating factors into account.</li> <li>• There was a widespread belief that the data used to calculate star ratings were often incomplete and inaccurate and that trusts manipulated data.</li> <li>• Some managers viewed the ratings as useful in enabling the trust to align internal performance management and reporting systems with key national targets or in helping to lever changes to entrenched clinical practice and traditional modes of working.</li> <li>• Unintended and dysfunctional consequences for organisations and staff included: tunnel vision; a distortion of clinical priorities; bullying and intimidation; reduced public trust and staff morale; ghettoisation (staff reluctant to join low-star organisation); the creation of disincentives for improvement.</li> <li>• Previous studies suggested that hospital staff are often unaware of or ignore performance ratings; all staff in this study were highly aware (although they were senior).</li> </ul>
<p>McDonald <i>et al.</i> (2005)          'Rules and guidelines in clinical practice: a qualitative study in operating theatres of doctors' and nurses' views'</p>	<p>Semi-structured interviews and participant observation of 14 surgeons, 12 anaesthetists and 15 nurses</p>	<ul style="list-style-type: none"> <li>• Doctors' views on clinical guidelines in relation to patient safety differed from nurses' views: there were deeply ingrained different beliefs about what constitutes professional conduct.</li> <li>• The doctors rejected written rules and instead adhered to the unwritten rules; to the nurses, following the guidelines was synonymous with professionalism and they criticised the doctors for not complying.</li> </ul>

<p>Guven-Uslu (2006) 'Uses of performance metrics in clinical and managerial networks'</p>	<p>Study in three acute hospitals in one NHS region: 35 semi-structured interviews and 40 questionnaires with a range of managers, healthcare professionals and others (eg, trust accountants)</p>	<ul style="list-style-type: none"> <li>• Comparative data were used to drive strategic planning but were not used at the operational level.</li> <li>• Service managers and clinicians perceived that they were detached from strategic planning and were merely implementers of decisions taken at higher levels.</li> <li>• Clinicians regarded themselves as the guardians of professional standards and best clinical practice.</li> <li>• There appeared to be a strong divergence between managers (privileging cost) and clinicians (privileging patient care).</li> </ul>
<p>Royal College of Physicians (2006) 'Engaging Clinicians in Improving Data Quality in the NHS: Key findings and recommendations from research conducted by the Royal College of Physicians iLab'</p>	<p>Study explored the potential use of Hospital Episode Statistics (HES) and the Patient Episode Database Wales (PEDW) to support appraisal and revalidation of consultant physicians. Questionnaire survey of 1331 consultant physicians regarding current use of, validation and attitudes towards HES/ PEDW Randomised smaller group study of consultant physicians' own clinical data using the iLab as the intervention</p>	<p>The study supported the existing view that longstanding clinical disengagement from the validation and use of these datasets is one of the reasons for poor data quality.</p> <ul style="list-style-type: none"> <li>• When physicians were involved as part of this study in validating and using the data held in their name, significant improvements were seen in attitudes and in the subsequent intention to monitor the quality of data locally.</li> <li>• Hospitals should routinely share clinically relevant analyses of local activity data with consultants to increase their involvement in data collection, validation and use.</li> <li>• Education and training of medical students and junior doctors needs to provide a better understanding of how health information is managed and how it can improve patient care.</li> </ul>

Tan (2006) 'Clinical practice guidelines: a critical review'	Literature review of 57 studies (from a range of countries), assessing compliance with clinical practice guidelines	<ul style="list-style-type: none"><li>• Factors that affect compliance with clinical practice guidelines include: the perceived validity and reliability of the guideline; its clarity and applicability; the degree of clinical flexibility it allows; the uniformity of guidelines used across healthcare institutions; patient factors (eg, patient preferences or lifestyle, desire to preserve a good doctor–patient relationship); and physician factors (both intrapersonal and interpersonal).</li><li>• System and practice-setting factors also influence compliance (eg, time, peer support, influence of opinion leaders).</li><li>• The current perception in the literature is that there is no magic solution that can be used to improve or sustain professional compliance with recommended practice.</li></ul>
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