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ENGAGING DOCTORS IN LEADERSHIP: REVIEW OF THE LITERATURE

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Contents

Executive summary.....	1
1. Introduction	4
<i>Box 1: Berwick's (1994) eleven worthy aims for clinical leadership of health system reform.....</i>	<i>6</i>
<i>Figure 1: Reinertsen et al's (2007: 4) Framework for engaging doctors in quality and safety</i>	<i>8</i>
2. Health care organisations as professional bureaucracies.....	9
3. Medical engagement and performance in the NHS	16
<i>Box 2: Business process re-engineering at Leicester Royal Infirmary.....</i>	<i>17</i>
<i>Box 3: Modernisation Agency's 10 High Impact Changes for service improvement and delivery (2004)</i>	<i>18</i>
<i>Box 4: The National Booked Admissions Programme</i>	<i>19</i>
<i>Figure 2: Factors enhancing or inhibiting the implementation of booking systems.....</i>	<i>20</i>
4. Medical leadership and leadership styles	23
5. Networks, collective leadership and clinical microsystems	29
<i>Box 5: Kaiser Permanente and medical leadership.....</i>	<i>31</i>
6. Implications of research evidence.....	35
6.1 <i>Engagement and performance</i>	<i>35</i>
6.2 <i>Definitions.....</i>	<i>35</i>
6.3 <i>Metrics to measure engagement</i>	<i>37</i>
7. Conclusions	39
8. References.....	40
Appendix.....	47

'Significant change in clinical domains cannot be achieved without the co-operation and support of clinicians. . . . Clinical support is associated with process redesign that resonates with clinical agendas related to patient care, services development and professional development. . . . To a large degree interesting doctors in re-engineering involves persuasion that is often informal, one consultant at a time, and interactive over time . . . clinical commitment to change, ownership of change and support for change constantly need to be checked, reinforced and worked'

(Bowns and McNulty, 1999, 66–7)

Executive summary

This review has been produced as part of the “Enhancing Engagement in Medical Leadership” project commissioned by the NHS Institute for Innovation and Improvement. In contribution to this project the aims of this report are to review the literature in order to:

1. Examine the use of the term medical engagement and the existence of any empirical evidence for its linkage to organisational or clinical aspects of performance.
2. Identify any approaches to measurement of levels of medical engagement suggesting whether an existing index could be used or whether the project should seek to devise its own metric.
3. Explore the meanings attached to the use of the term ‘medical engagement’ to support the development of a working definition in the Enhancing Medical Engagement in Leadership project.

Within the time and resources available a full systematic review of the literature was not possible. We therefore adopted an approach designed to be exploratory, rather than systematic and comprehensive. Searches of key bibliographic databases were made using several key words and grey literature from a range of international sources was also sought. The appendix to this report contains more information on the methods used.

Main findings

Historically, the NHS has been characterised – like other professional bureaucracies – as valuing professional autonomy. However, since the early 1980s the NHS has simultaneously become more centralised and has required doctors to become more accountable for making resource allocation decisions via clinical directorates and other mechanisms.

Both these changes run counter to the cultural values which are usually ascribed to doctors with their strong sense of clinical autonomy and accountability to patients. Some commentators have suggested that these changes have broken the psychological contract between doctors and healthcare systems and have served to create tensions between doctors and managers.

The evidence reviewed here shows that, by virtue of their power and position, doctors are able to block or confound the efforts of managers or politicians to impose change via top-down mechanisms. However, by engaging doctors with change processes, improvements in performance may be achieved.

This includes appointing doctors to leadership roles, and working with clinicians who are influential as a result of their personal credibility. The evidence suggests that more attention needs to be given to medical leadership roles and the support that is provided to doctors taking on these roles.

The complex nature of health care organisations as professional bureaucracies means that leadership is needed at different levels and not simply at the top. One of the characteristics of these organisations is the existence of dispersed or distributed leadership, requiring a large number of leaders from professional backgrounds

Of particular importance are clinical microsystems with which health care professionals, including doctors, often identify. Research suggests that team leadership of microsystems is a key factor in achieving high levels of performance.

There is also evidence that constellations of leaders are needed at different levels when major change programmes are undertaken. Improvement is likely to be confined to microsystems and teams unless there is alignment between top level leadership, and those working in other parts of the organisation.

The literature shows that effective leaders require followers to implement change. The development of 'followership' is therefore just as important as the development of leadership.

Evidence from evaluations of quality improvement programmes in health care indicates that several conditions need to be met for these programmes to be implemented. Key factors include top level leadership by chief executives and boards, receptive organisational contexts, supportive organisational cultures, team and microsystem development, preparation and training for change, and establishing and maintaining a consistent vision to guide change programmes. Medical leadership in this context is best seen as a necessary but not sufficient condition for bringing about improvement.

Few definitions of medical engagement in leadership were discovered by the review. However, understanding engagement as a social process suggests that it is about more than simply appointing people to particular positions. Rather it is about recognising the diffuse nature of leadership in health care organisations, and the importance of influence as well as formal authority.

How medical engagement in leadership is defined clearly has important implications for how it is measured. A key message from the literature accessed for this review is that although some studies indicated various ways of measuring engagement, there appears to be no operational metric which is widely in use. Any metric which is employed must clearly reflect the definition of medical engagement in leadership that is adopted.

This review underlines the complexity of bringing about change and improvement in health care organisations. Enhancing medical engagement in leadership is one of the factors that is consistently identified as contributing to improvement but is insufficient in itself and other factors are also important.

1. Introduction

The past quarter century has witnessed a surge in public sector reforms (Pollitt & Bouckaert, 2000). The changing demographic make-up of the UK, rapidly evolving technological infrastructures and increased expectations of citizens are all demanding that public services improve in terms of quality and cost. Public sector service provision is becoming ever more dynamic and diverse (Kooiman, 1993), yet simultaneously facing intense pressures to become more effective and efficient. The NHS itself is two-thirds of the way through a ten-year programme which was formally outlined in *The NHS Plan* (Secretary of State for Health, 2000). Alongside unprecedented investment in the NHS, the government has outlined the need for the overhaul of the health system to ensure that services are driven by cycles of continuous improvement.

Within this modernisation strategy the issue of leadership is cited as imperative. Milward and Bryan (2005: xiii) argue that the majority of the government's recent health reforms have an implicit notion inbuilt that:

'integrated multi-professional care is only possible to the extent that professional and directorate barriers are broken down, and a culture of shared clinical governance is cultivated in which staff are empowered to accept responsibility and accountability at all levels of the hierarchy'.

Internationally, medical leadership and the engagement of clinicians have been characterised as key within the improvement agenda.

Gruen *et al* (2004: 97) emphasise medical leaders and clinicians as being very effective change agents, suggesting:

'physician groups have been particularly effective agents of change in institutional issues, local community matters, legislative action, and much broader issues, such as civil and human rights, prevention of nuclear war, and the banning of landmines'.

In a UK context, in a recent review Sir Ian Carruthers (2007) has outlined the importance of clinical leaders being engaged in the service improvement process:

'Where clinical leaders genuinely develop and support proposals, they play a vital role in building public and patient confidence...Those areas that do not have such strong clinical and frontline leadership face criticism that proposals are driven solely for financial or managerial reasons rather than patient safety or service improvement' (p. 6-7).

Clinical leadership is not only imperative for public support though, but is also important in engaging other staff. Lord Hunt (2000) suggests:

'Good clinical leadership is central to the delivery of the NHS plan. We need leaders who are willing to embrace and drive through the radical transformation of services that the NHS requires. Leaders are people who make things happen in ways that command the confidence of local staff. They are people who lead clinical teams, people who lead service networks, people who lead partnerships, and people who lead organisations'.

In the international context, clinical engagement is seen as particularly important in improving medical practice. Berwick (1994: 797) remarks that:

'The rhetoric of 'health care reform' often mentions change, but most of the changes proposed are not really in the ways we give health care; they are instead changes in the environment of health care – the regulations, the payment, and the corporate structures under which the work is done. It is as if we were trying to improve skiing by changing the

rules of competition, the color of the medals, and the location of the hill without spending much time at all on changes in skiing itself.'

Berwick suggests that the result of this situation is that doctors and clinicians feel less in control of changes that are being made around them. Although governments can make changes to the external environments surrounding care, Berwick argues that if physicians, nurses, pharmacists, clinical technicians, operating managers, and others at the front line of care do not wish to make specific changes to their own work to better meet society's needs for better outcomes – *'then no one outside the health care system can be powerful or clever enough to make them do so'* (p. 797).

Berwick suggests 11 promising improvement aims for medical-led reform (see Box 1). He argues that clinicians have the opportunity to exercise significant leadership in these areas and create a system which will offer better outcomes, greater ease of use, lower cost and more social justice in health status.

Box 1: Berwick's (1994) eleven worthy aims for clinical leadership of health system reform

1. Reducing inappropriate surgery, hospital admissions, and diagnostic tests.
2. Reducing key underlying root causes of illness (especially smoking, handgun violence, preventable childhood injuries, and alcohol and cocaine abuse).
3. Reducing caesarean section rates to pre-1980 levels.
4. Reducing the use of unwanted medical procedures at the end of life.
5. Simplifying pharmaceutical use, especially for antibiotics and medication of the elderly.
6. Increasing active patient participation in therapeutic decision making.
7. Decreasing waiting times in health care settings.
8. Reducing inventory levels in health care organisations.
9. Recording only useful information only once.
10. Consolidating and reducing the total supply of high-technology medical and surgical care.
11. Reducing the racial gap in infant mortality and low birth weight.

David Blumenthal and Ann Scheck reported on the application of total quality management to hospitals in the United States, drawing on the work of various researchers to highlight the potential contribution of TQM while also acknowledging the challenges of engaging physicians in so doing (Blumenthal and Scheck, 1995). Ferlie and Shortell (2001) also emphasise the role of medical leadership for improving the quality of healthcare, but do so in a broader context. These authors argue that medical leadership is an important, but not exclusive, contribution to the effort to lead quality improvement in healthcare, and needs to be used alongside other interventions if sustainable improvements in care are to be implemented. Specifically, they emphasise the influence of organisational culture, team and microsystem development (see below), and information technology.

In so doing, they echo the findings of other research that has identified a range of factors that influence the impact of quality improvement programmes. An example is Walston and Kimberley's (1997) review of the literature on re-engineering in United States hospitals which summarised facilitators of change as:

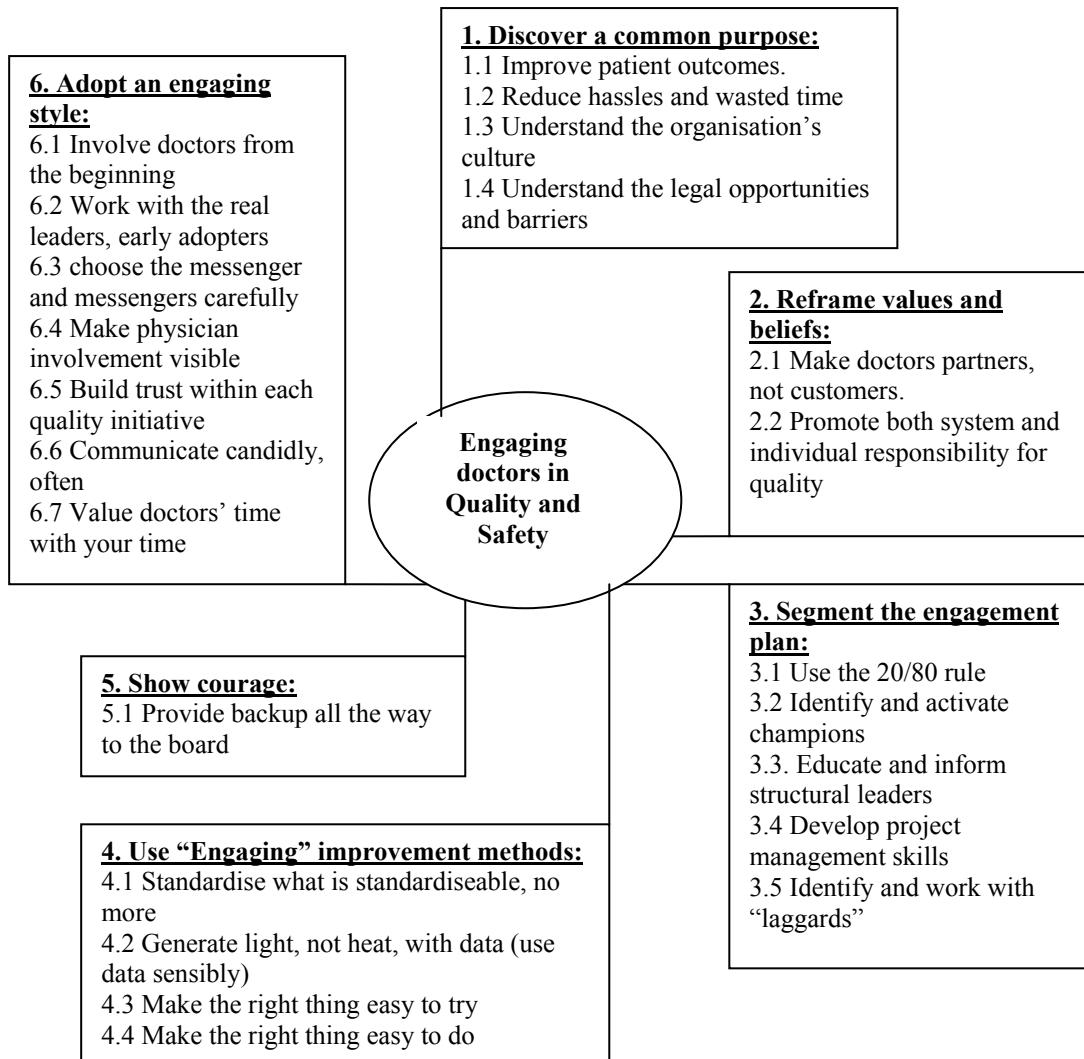
- establishing and maintaining a consistent vision
- preparing and training for change
- planning smooth transitions in re-engineering efforts
- establishing multiple communication channels
- ensuring strong support and involvement
- creating mechanisms to measure progress
- establishing new authority relationships, and
- involving physicians

These authors emphasised that *'in an overall strategy for change these factors have to be linked and to be managed simultaneously'* (p. 16).

Reinertsen *et al* (2007) summarise a number of these positions within their report for the IHI on engaging doctors in leadership. In so doing, they emphasise the complexities and difficulties in the relationship between doctors and managers. In part, these complexities result from the systems and structures of healthcare, and in part they stem from the differing values, cultures and beliefs of these groups. Reinertsen and colleagues point out that doctors tend to have an individualised focus on patients, which may be at odds with most managers' views and improvement programmes which tend to take a more systems wide view.

These authors stress the importance of dialogue and of engaging doctors. Because of their power within the healthcare system, change will not happen if doctors do not engage with this process. Figure 1 illustrates Reinertsen *et al*'s (2007: 4) framework for engaging doctors in quality and safety initiatives. This framework comprises six primary elements, which are made up of a range of components and is based on the researchers' experience from "best-in-the-world laboratories". The framework is intended as a tool to assist hospital leaders to develop and execute written plans to improve medical engagement in quality and safety initiatives.

Figure 1: Reinertsen et al's (2007: 4) Framework for engaging doctors in quality and safety



2. Health care organisations as professional bureaucracies

Over a quarter of a century ago, Mintzberg (1979) noted that a key feature of professional organisations is that professionals have a large degree of control. Therefore, as outlined in the Introduction, the ability of managers, politicians and others to influence decision-making is more constrained within these organisations than in others. Mintzberg calls this type of organisation a 'professional bureaucracy'. An important feature of professional bureaucracies is that they are oriented to stability rather than change

Jobs in professional bureaucracies are highly specialised but minimally formalised (Mintzberg, 1980; Friedson, 1986). Such organisations are characterised as relatively decentralised and training for these jobs is extensive with grouping into collegial forms a concurrent function of this process. As a result, collegial mechanisms (i.e. collective decision making processes by equal peers) are important within professional organisations and leaders from professional backgrounds can have an important role in bringing about change. Such organisations are characterised as having strong horizontal linkages, and therefore change must be influenced in a bottom-up way and not just through the top-down application of formal authority.

The NHS has traditionally been an example of a professional bureaucracy, where doctors undergo extensive training and have strong horizontal linkages with their peers. Doctors share large amounts of specialised knowledge which outsiders (including non-medical managers and leaders) often have little access to. Friedson (1986) has written extensively of the implications of systems such as Mintzberg's professional bureaucracy in terms of specialised knowledge and power. Drawing on work of theorists such as Foucault, Friedson argues that formal knowledge shapes the way human institutions are organised and human behaviour is conceived. Under this reading, doctors' power derives from their specialised knowledge, and those seeking to change clinical practice have to work with this reality.

Of course, health care organisations are not the sole examples of professionalized bureaucracies, and a number of other commercial and public organisations (for example, universities, law firms, accounting firms etc) are composed of highly skilled individuals with specialised knowledge. Archetype theory has been used to characterise and compare professional organisations with very different aims and objectives and analyse the ways in which decision-making and control operate within these settings.

Greenwood and Hinings (1993: 1052) define an organisational archetype as 'a set of structures and systems that reflect a single interpretive system'. In other words, organisational structures are shaped by deep underlying values that are shared by organisational members. How organisations are shaped and structured relates to a number of the values which are held by the organisation. Archetype theory suggests that organisational change will not succeed if it is not implemented in a way that is seen as consistent with the overall direction of the interpretive scheme, or with an alternative set of values that are gaining legitimacy.

Greenwood *et al* (1990) chart how in the 1960s to the 1990s there was a consistent picture of the classical professional organisation where professional experts retain power and managers administer facilities and support professionals. This classical professional archetype is known as P² and, much as Mintzberg's professional bureaucracy, is characterised by little hierarchy and relatively high vertical and horizontal differentiation. Cooper *et al* (1996) argue that due to pressure induced by competitive markets, and the need to adopt more corporate and managerial modes of operation in order to increase efficiency, professional organisations have shifted from the P² archetype to the Managed Professional Business (MPB).

The MPB retains some aspects of the P² form, but with a superimposition of managerial structures or business values. It is claimed that the ascendancy of the MPB form has undermined the effectiveness of 'traditional' modes of professional organisation that may no longer fit this changing and more dynamic environment. This shift in archetype has echoes within the recent

history of the NHS (see below), although the resilience of the classical professional bureaucracy should not be underestimated, as research summarised later in this paper amply demonstrates. It is therefore premature to claim that new kinds of professional organisations have gained the ascendancy.

What reports of the roles of professionals within a range of different industries such as health care suggest is that change may rarely be imposed on professionals. As Guthrie (1999) describes:

'Many issues [that] face our health care institutions...require physician involvement, understanding, acceptance, constructive criticism, and design. Physicians are the only professionals legitimately permitted to implement most of the changes required to make our medical care superlative...their capability and intelligence must be harnessed to achieve our organisation objectives and improve the health of our communities.'

Looking historically at the NHS, there is some evidence of these accounts being reflected in practice. The Department for Health and Social Services (DHSS) explained why clinical autonomy was so central to the notion of the NHS in evidence to the Normansfield Inquiry:

'At the inception of the NHS, the Government made clear that its intention was to provide a framework within which the health professions could provide treatment and care for patients according to their own independent professional judgement of the patients' needs. This independence has continued to be a central feature of the organisation and management of health services. Thus hospital consultants have clinical autonomy and are fully responsible for the treatment they prescribe for their patients. They are required to act within broad limits of acceptable medical practice and within policy for the use of the resources, but they are not held accountable to NHS authorities for their clinical judgements. (Normansfield Report, 1978: 424-5)

Clinical autonomy was based on the negotiations that took place at the formation of the NHS and the concessions the government made to the British Medical Association to secure the support of the medical profession. Rudolf Klein has described the deal that was struck in the following way:

Implicit in the structure of the NHS was a bargain between the State and the medical profession. While central government controlled the budget, doctors controlled what happened within that budget. Financial power was concentrated at the centre; clinical power was concentrated at the periphery. Politicians in Cabinet made the decisions about how much to spend; doctors made the decisions about which patient should get what kind of treatment (Klein, 2006, 61).

Strong and Robinson argue that as a result of this deal the NHS was 'fundamentally syndicalist in nature' (1990, p. 15) in that the medical profession was able to control and regulate its own activities without interference from politicians or managers.

In the first phase of the NHS, between 1948 and the early 1980s, managers possessed little influence with respect to doctors. Harrison (1988: 51) suggests:

"Managers neither were, nor were supposed to be, influential with respect to doctors. The quality of management (like the quality of the service itself) was judged by its inputs. Managers in general worked to solve problems and to maintain their organisations rather than to secure major change."

As Harrison and Pollitt note, in the period up until 1982 managers were cast in the role of diplomats and were expected to 'to provide and organise the facilities and resources for professionals to get on with their work' (1994, p. 36). A watershed occurred in 1983 with the report of the inquiry into NHS Management (Griffiths Report, 1983) recommending the introduction of

general management into the NHS. The Griffiths report suggested that management by consensus, while a useful tool, would not prove to be sufficiently effective and dynamic enough in the long term and would fail to ensure the best quality of care and value for money for patients. The Griffiths report also acknowledged the need to involve clinicians in the running of the NHS and suggested that they should be held responsible for their use of resources. The report stated that hospital doctors, '*must accept the management responsibility which goes with clinical freedom*' (p. 18) and participate fully in decisions about priorities. The government supported the report's view that doctors should be involved in management and should have responsibility for the management of budgets.

Post Griffiths, the main organisational mechanism for management at the clinical level in hospitals has been the Clinical Directorate. This is a device aimed at directly engaging doctors in the management process and has resulted in the creation of the combined 'doctor-manager' (McKee *et al.*, 1999). Within the UK, this model was first adopted by Guy's Hospital in London and it has since (with modifications) been diffused around the rest of the UK. Clinical directors tend to be senior doctors who keep their clinical duties, but also have responsibility for a unit of management. They are also normally part of a directorate management team which includes a nurse manager and a business manager, known as a 'triumvirate' (Buchanan *et al.*, 1997; Hunter, 1992).

McKee *et al* (1999) studied clinical directorates in Scotland and argue that although they may have a similar structure, in practice they are markedly different in the way they conduct their business (p. 93). Three major directorate types were identified. The dominant type was described as 'traditionalist' and this was characterised by a strong focus on operational issues and limited scope for innovation and change. Relationships between clinical directors and clinical colleagues remained embedded in a collegiate clinical network and were based on consensus building and facilitation.

The second type was described as 'managerialist' and was characterised by a business oriented approach more in line with the philosophy of the Griffiths report. Clinical directors in managerialist directorates had direct links with top managers in the hospital and were better placed to influence overall strategy and direction than those in traditionalist directorates. The third type was described as 'power-sharing' and involved clinical directors working across established specialty boundaries and operating as a team with the business manager and nurse manager. McKee and colleagues suggest that directorates were overwhelmed by a sense of continuity and a lack of change with the status quo prior to implementation, as is typically the case in professional bureaucracies.

Although some clinicians had demonstrated a potential for inspirational leadership and engagement on a number of levels, others had continued along a similar vein as previously. They further note that if more senior doctors are to be engaged they will require sufficient incentive to do so and the clinical legitimacy of doctor-managers will need to be safeguarded. That is, it cannot be presumed that just because these management positions are available that doctors will want to take them on – there needs to be some incentive for the doctors to assume the often challenging aspects of such a role (see also Guthrie, 2005; Ham, 2003). There also need to be sufficient resources in the system to enable clinical directors and their colleagues to function effectively.

Further confirmation of the persistence of established relationships comes from Kitchener's study of the impact of quasi-market reforms on NHS hospitals (Kitchener, 1999). Drawing on Mintzberg's writings, Kitchener hypothesises that the NHS reforms are an attempt to replace the professional bureaucracy with the quasi-market hospital archetype. In this new archetype, the hospital is based around clinical directorates and medical cost centres, and a more businesslike approach to management is adopted, centred on medical cost centres and using enhanced management information systems. Kitchener found that in practice the impact of this new archetype was limited and warns that:

'The fact that some hospital doctors have accepted medical-manager roles within a more integrated formal structure should not...be conflated with either a loss of their professional autonomy or a replacement of key elements of the PB (professional bureaucracy) interpretive scheme' (p. 197).

He concludes that the notion of the professional bureaucracy continues to provide an appropriate basis for understanding the nature of hospitals as organisations.

Davies *et al* (2003) report that although clinical directorate structures attempted to integrate clinicians into management, they have led to disenchantment among clinical directors. These researchers conducted a postal questionnaire across acute trusts in Great Britain and found that clinical directors were *'the least impressed with management and the most dissatisfied with the role and influence of clinicians'* (p. 627). Clinical directors responded more negatively to statements about doctor-manager relationships, and for all positive statements at least a quarter of clinical directors disagreed. Overall Davies and colleagues maintain that clinical directors are the most disaffected group of the managers they received opinions from, suggesting that the clinical director role may produce a number of difficulties in the attempt to marry management and clinical roles. This conclusion echoes other work which concluded that clinical directors and other doctors in leadership roles occupied a 'no man's land' between the managerial and clinical communities (Marnoch, McKee and Dinnie, 2000). We return to discuss both the importance and the challenges of those occupying hybrid roles later in the paper.

Summarising the mixed experience of clinical directorates, Marnoch concluded his assessment in the following way:

'The means of controlling the operational performance of hospital doctors have advanced somewhat since the introduction of general

management in the 1980s. Nevertheless, the Griffiths-inspired drive to push resource-consuming decisions down to the level where they could best be made is far from complete. A traditional centralized style of management has been used to make the internal market work. This form of control remains constrained in its influence over clinical behaviour. At worst, medical directors and clinical directors will be used as go-betweens in a familiar book-balancing exercise that involves closing wards periodically, not filling vacancies and cancelling operations. At best they are the basis for a new strategically led style of corporate management in the NHS' (Marnoch, 1996, p. 61)

3. Medical engagement and performance in the NHS

Empirical evidence on the engagement of doctors in leadership and the impact on performance can be found in a number of studies that have evaluated quality improvement initiatives.

One of the earliest examples was the introduction of Total Quality Management (TQM) in the NHS in a major three-year pilot programme initiated by the Department of Health in 1990. The programme was independently evaluated by a research team that also examined the application of TQM in two private sector organisations (Joss *et al.*, 1994; Joss, 1994; Joss & Kogan, 1995). The evaluation found that the impact of TQM varied across the pilots and that only two sites made 'considerable progress' (Joss & Kogan, 1995: 106). The reported reasons for the limited overall impact included a range of factors.

For the purposes of this study, what was of interest was the engagement of staff. The evaluators noted that the application of TQM to the NHS had to be done in a way that made sense to staff, and they attributed its limited impact in part to the failure to involve doctors fully in its implementation. *'While one of our sites had achieved a 30 per cent attendance of consultants at TQM training events, the other sites had an attendance of less than 1-5 per cent'* (Joss, 1994: 6). One implication of this might be to suggest that variation in progress is related to the ability to engage doctors in change programmes. These findings have been echoed in other studies of improvement programmes in the NHS (see Boxes 2 and 3 for examples).

Box 2: Business process re-engineering at Leicester Royal Infirmary

The LRI was chosen because it was felt to be a relatively well-performing organisation, which would be receptive to the application of reengineering techniques. The BPR initiative was championed by the LRI's chief executive and medical director and endorsed by the reengineering guru Michael Hammer. In seeking dramatic improvement in organisational performance within two years, the intention was to realise the classic BPR model (Hammer & Champy, 1993). Initial work focused on two core processes: outpatients and diagnostics. Following reported successes, attention turned to the core processes for "emergency entry" and "patient stay".

As the work was implemented, concerns were increasingly voiced about the integration and coherence of the plurality of projects under way and the major differences in rate and pace of change across the different specialties that had become apparent. Conflicts emerged between reengineering personnel and clinical staff, particularly emphasised in A&E services where the objective was to reduce waiting times for the large majority of the patients attending with minor injuries, known as the 'walking wounded'. Clinical triage protocols were introduced allowing the transfer of responsibility from doctors to nurses for a limited range of x-rays and treatments and a single queue was introduced for A&E patients. Quantitative analysis confirmed that the BPR project in the A&E department had no positive impact on waiting times. Several factors contributed to the failure of the A&E project. Critically, the focus on the high volume walking wounded was contentious, with doctors perceiving this focus as damaging to the project's credibility.

This situation illustrates the potential for conflict associated with different definitions of quality. Hence, the BPR's initiative in the A&E department was flawed in terms of failing to propose meritorious interventions, secure a consensus for its objectives, or assess the capacity requirements for the implemented working practices. In contrast to the experience of BPR in the A&E department, the BPR project to reduce length of stay for elective gynaecology patients illustrates the potential for constructive partnership between clinical staff and reengineers. A unique feature of this BPR project was that savings arising from the initiative were ring-fenced for the new women's hospital. This was viewed as '*an extremely powerful incentive for change*' (McNulty & Ferlie, 2002: 189). Furthermore, the clinical director '*quietly acted as a higher-level 'umbrella' and 'unblocker' for the project, persuading clinical colleagues to buy into the new process*' (*ibid* p. 195). The BPR acted as a catalyst for change, within a receptive context provided by a long-standing national trend to reduce inpatient stays for elective gynaecological surgery.

From the Leicester experience of business process reengineering, McNulty and Ferlie (2002) conclude that the local variation across the clinical settings was down to the high degree of control that doctors held over work practices and which the reengineers found difficult to reshape over short time scales. The authors go on to note that *'the power base of professional workers – here doctors – remains a crucial factor in the organisational context of change within the health care sector'* (p. 2). Despite the fact that there was top management support for the BPR programme, this was an insufficient condition for widespread organisational change.

This empirical study is important as it demonstrates the capacity for social and organisational practices to be reproduced even during supposed periods of 'transformation', thereby confirming Mintzberg's observation that professional bureaucracies are oriented to stability rather than change. Stability is the norm because *'At operational levels of hospitals much real power remains with a loose coalition of clinicians engaged in incremental development of their own service largely on their own terms and conditions'* (McNulty & Ferlie, 2002: 332). Thus, senior management were unable to impose change; change was only enacted once clinicians could see the power of the concept in changing their behaviours.

Box 3: Modernisation Agency's 10 High Impact Changes for service improvement and delivery (2004)

This document suggests 10 changes that could be made across the NHS and achieve dramatic improvements in services: *'if these changes were adopted across the NHS to the standard already being achieved by some NHS organisations, there would be a quantum leap improvement in patient and staff experience, clinical outcomes and service delivery – and waiting lists would become a thing of the past'* (p. 8). These are evidence-based improvements which have been demonstrated to have significant impacts on services through major initiatives such as the Improvement Partnership for Hospitals and the Collaborative programmes. A number of these changes outline the importance of clinical leadership for their implementation. For example, one of the changes is to increase day surgery rates – suggesting that there is evidence that where there is an identified clinical lead, the commitment to improve these rates is increased. Similarly, improved access to key diagnostic tests and improving the 'flow' of patients through systems is demonstrated as a product of the use of some basic redesign tools *in addition* to strong clinical leadership and the active engagement

of clinical teams. In this way, the changes are seen as a useful but insufficient condition for improvement on their own; they require implementation alongside strong clinical and managerial leadership and the active engagement of clinical teams in the majority of cases.

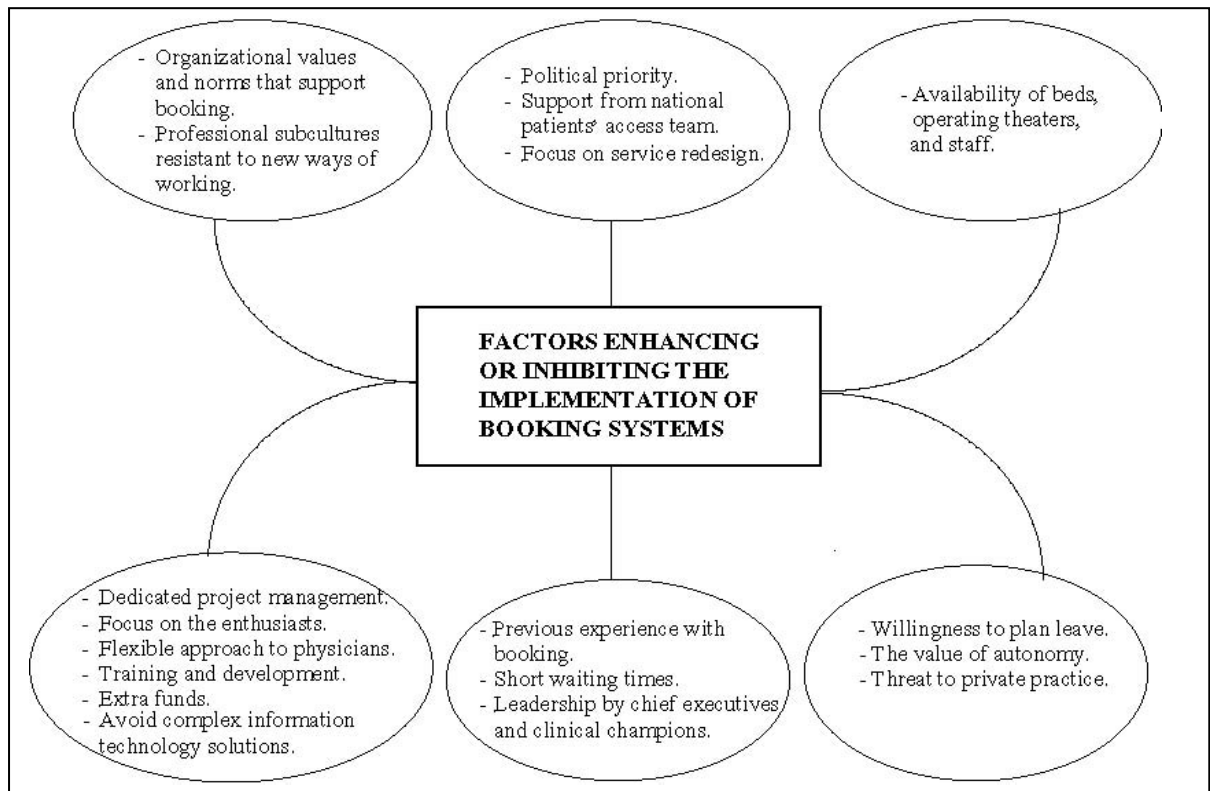
Box 4 summarises the results of another study of a quality improvement programme where medical leadership and clinical engagement were identified as key factors affecting the implementation of the programme. As in other studies, the evaluation of the National Booked Admissions Programme found that medical leadership and clinical engagement were necessary but not sufficient conditions for improvement to occur. A range of other factors were also relevant as illustrated in figure 2, including receptive national and local contexts, organisational cultures and values that support change, dedicated project management, training and development, and leadership by chief executives.

Box 4: The National Booked Admissions Programme

The national patients' access team (NPAT) was formed in 1998 by the Department of Health to tackle the problems of waiting for treatment. One of the NPAT's first programmes was the national booked admissions programme. The aim of the programme was to enable patients to book a time and date for their appointment instead of being placed on a waiting list. Although seemingly a small change, this meant that medical specialists would have to give over control of their work to nurses and admin staff who would schedule the appointments and the treatment lists. The programme ran 24 pilots in different parts of the NHS to test the feasibility of offering booked hospital appointments.

Ham *et al* (2003) evaluated the progress of these pilots and found substantial variation in progress between the sites. Some areas were more receptive to change than others and the most successful pilots were those with a combination of a Chief Executive who made it clear that booking was a high priority for the organisation and medical champions who were willing to lead by example and exert peer pressure on reluctant colleagues. Furthermore, demonstrating benefit to those staff affected by changes was reported to be important in making these changes e.g. by showing that booking reduced failures to attend appointments and cancelled appointments. Without benefits such as these, professionals such as doctors may be reluctant to change established practices.

Figure 2: Factors enhancing or inhibiting the implementation of booking systems



In an extensive review of the literature on change agents, Fitzgerald and colleagues (2006) suggest that there is sufficient evidence to demonstrate that clinical leaders can play an influential role as promoters and inhibitors of changes (e.g. Pettigrew *et al.*, 1992). Fitzgerald and colleagues emphasise the potential influence of those occupying hybrid roles, like clinical leaders, in bringing about change, while also noting the slow development of such roles, particularly in primary care. In comparison with previous work, they note *'some modest developments in the proliferation of clinical and medical director roles and the establishment of the British Association of Medical Managers as a professional association'* while observing that clinical managers *'do not yet have a coherent work identity or credentialised knowledge base'* (p. 170).

From the point of view of this review, the following extract from the report prepared by Fitzgerald and colleagues is particularly apposite:

'Externally, there is no recognition of clinical management as a specialty, with limited educational opportunities or credentials – and an unwillingness to undertake major training. Other medical professionals do not consider clinical management to represent a medical specialty – rather clinical managers uncomfortably span the managerial/clinical divide and are not full or influential members of either occupational group' (p. 170)

Summarising their findings, these authors comment that *'management training and development of clinical, hybrid managers and clinicians is very under developed'* (p. 176), and they conclude that the Department of Health and professional bodies need to work in a focused manner to develop these clinical hybrid roles because of the instinct of established organisations to maintain roles within current professional and occupational boundaries.

In the context of these comments, it is important to note the work conducted by the British Association of Medical Managers (BAMM) to support doctors in taking on leadership roles and in developing training programmes. In a report

commissioned by the Department of Health, BAMM reviewed the development of medical management roles in the NHS, and set out a proposed career structure for medical managers such as medical directors, clinical directors and associate medical directors (BAMM, 2004). The report emphasised the need to properly reward and recognise the part played by medical management, and to make it an attractive career option for skilled and motivated doctors. The significance of these recommendations is in addressing the slow development of clinical and medical director roles noted by Fitzgerald and colleagues in their review, and in beginning to establish a framework for the emergence of medical management as a discipline in its own right. As others have noted, recognition of the importance of clinical leadership needs to go hand in hand with training and development, appropriate incentives, and explicit career structures (Ham, 2003).

4. Medical leadership and leadership styles

The previous section presented a range of empirical data that had been drawn mainly from NHS experience of change and improvement programmes and drew out the implications of engagement in medical leadership from these studies. This section draws on a wider evidence base considering international research on the link between engagement in medical leadership and performance.

Quality improvement programmes from other industries have long highlighted the importance of senior managers demonstrating leadership and constancy of purpose in the achievement of successful CQI/TQM programmes (Deming, 1986; Juran, 1989). In their study of hospital improvement programmes, Weiner *et al* (1996) discovered that the type of physicians who were engaged in the governance boards of hospitals had an impact on support for CQI/TQM adoption, whilst management involvement did not significantly predict adoption. Thus, *'active staff physician involvement in governance showed a significant positive affect on board activity in quality improvement, even after controlling for the positive effect that this type of physician involvement has on the decision to adopt CQI/TQM'* (p. 409).

These authors hypothesise that top management leadership stimulates board leadership for quality. That is, personal participation in CQI/TQM activities significantly increases the extent of both board quality management and board activity in quality improvement. There is a strong evidence base from the US that physicians are reluctant to participate in CQI/TQM due to various factors (Blumenthal & Edwards, 1995; Shortell *et al.*, 1995) but this study demonstrated that physicians who participate in strategic planning, policy making, and related governance activities champion rather than resist CQI/TQM.

Shortell (1991) suggests that physician involvement in governance may not only improve communication among physicians, managers, and boards but

also build trust by assuring clinical staff that their professional values and goals are represented in policy decisions (Shortell, 1991). In other words, within a current context where the NHS is characterised as undergoing a frantic pace of change and reform, this improved communication assures clinical staff that their views are being represented in decision-making processes and change is not simply being enacted as a 'distraction' or means of 'gratification' (Braithwaite *et al.*, 2005). There is also a growing body of research into social identity which demonstrates that when a given social identity is salient, individuals are more likely to act in ways that serve to advance group interests - often at the expense of their own personal motives (see Haslam *et al.*, 2003 for a review of this literature).

Firth-Cozens and Mowbray (2001) suggest that leaders are able to directly affect the safety of their teams' actions and outcomes - which are both clearly important for quality of patient care. The researchers cite studies from areas such as airline safety (e.g. Chidester *et al.*, 1991) that illustrates the importance of leader personality type and how this impacts upon culture. Further, there is an established evidence base from high-reliability industries (e.g. Weick, 1987; Reason, 2000; Ojha, 2005) which point to the role that leadership plays in forming organisational culture, and the consequences of this for safety. In a healthcare context, Edmonson (1996) demonstrated that in terms of medication errors and quality of teamwork in nursing good teams recorded more errors than bad teams - where the bad teams tended to be led in a dictatorial and hierarchical manner and individuals were afraid of reporting errors.

Leadership style is also cited as impacting upon quality of care in other ways. Firth-Cozens and Mowbray (2001) cite a number of studies which demonstrate links between stress of staff in teams and the quality of patient care. The authors argue that team functioning impacts upon stress levels and that leaders play an important role in the production of effective teams.

Corrigan *et al* (2000) demonstrated these links directly in a study of leadership style in 31 mental health teams where clients were asked to rate satisfaction

with treatment programmes and quality of life. The researchers suggested that the ratings by leaders and staff members independently accounted for about 40 per cent of variance in client satisfaction. Thus, the style of leadership adopted within mental health teams was thought to contribute greatly in terms of impact on service users.

In a study of community health centres, Xirasagar *et al* (2005) found that there was a significant association between transformational leadership and effectiveness in achieving organisation-wide changes in clinical providers' practice behaviours. Xirasagar *et al* go on to identify which leadership styles more successfully influence doctors to achieve measurable clinical goals. The researchers found that doctors were much more likely to be influenced by medical leaders who adopted a transformational style. In other words, doctors are less likely to be influenced by someone who simply occupied a particular hierarchical position, and more likely to respond to individuals who influence others through their personality and power of persuasion

These points on leadership style are important to note considering that one approach to leadership which has been popular within the NHS in recent years is the transactional / transformational distinction of leadership. For example, the national leadership qualities framework (Department of Health, 2001) is underpinned by the transformational model (see Davidson & Peck, 2005), and other key figures within the improvement movement have also stressed the virtues of transformational approaches (for example to service re-design, see Bevan, 2005).

One of the prominent theorists in UK public service leadership suggests:

'Leadership has experienced a major reinterpretation from representing an authority relationship (now referred to as management or Transactional leadership which may or may not involve some form of pushing or coercion) to a process of influencing followers of staff for whom one is responsible, by inspiring them, or pulling them towards the vision of some future state...this model of leadership is referred to as

Transformational Leadership because such individuals transform followers. Although this model of leadership is still hierarchical, it nevertheless recognises that leaders are seen as having to 'earn' their influence from staff and colleagues...The new model of Transformational Leadership represents a paradigm shift, from a model of leadership in which followers are seen as relatively passive recipients of the leadership process, to one in which they are perceived as constituents of the leader' (Alimo-Metcalfe, 1998: 7)

According to this distinction, transformational leadership is about changing the behaviours of followers and changing organisations by influencing, rather than by the direct exertion of authority in a traditional sense. This would seem to be potentially a more effective form of influencing doctors given the professional power issues raised in the previous section. Having made this point, it is also relevant to note the finding from Xirasagar and colleagues' study that effective transformational leadership is often based on a record of transactional leadership.

Peck *et al* (2006) illustrate that transformational models stress the central importance of the interpersonal exchanges between a leader and an individual follower, almost regardless of organisational context. Yet despite the importance afforded to followers within this model of leadership, few studies within the area of leadership as a whole have empirically considered the issue of followership (Collinson, 2006). Nevertheless, it is clear from the evidence reviewed here that engaging staff and doctors not in formal leadership roles is a critical success factor in evaluations of quality improvement programmes, as captured in the quotation from Bowns and McNulty at the beginning of this paper. This suggests that the development of followership is just as important as the development of leadership in health care organisations.

Downton (2004) echoes these findings, suggesting that leadership is ultimately a social function (see also Bryman, 1986; Denhardt & Denhardt, 2003) and that within healthcare systems *'leadership roles are not defined in hierarchical*

management of reporting lines, but rather as overseeing components within a complex of related subsystems forming the wider healthcare business and social ecology' (p. 653). Cook (1999: 306) further suggests that a clinical leader can be defined as an *'expert clinician, involved in providing direct clinical care, who influences others to improve the care they provide continuously'*. Thus, although it would seem that engagement in formal organisational roles is a useful and symbolic mechanism, the complex sub-cultures in health care organisations and the role of informal leaders are also important.

A study of medical leadership in English primary care reached similar conclusions. Sheaff *et al* (2003) examined the implementation of clinical governance in a number of primary care groups and trusts, focusing in particular on the informal techniques that primary care organisations use to engage GPs in the process of clinical governance in the absence of direct formal powers to do so. These researchers found that GPs who took on the role of clinical governance leads played an important part in the development of this policy. Managers exercised influence over primary care by proxy by working with and through GP clinical governance leads. The latter used a range of soft governance techniques, most importantly the threat of external intervention by non-clinicians to persuade GPs to become involved in clinical governance activities. Sheaff and colleagues observe:

'local professional leaders...act as a 'boundary' stratum, both transmitting managerial imperatives and priorities from lay managers to their fellow-professionals yet also attempting to conserve a degree of autonomy for their profession. Such influence as local medical leaders have on their colleagues is exercised through a combination of knowledge-management, collective self-organisation and the innuendo of political threats rather than overt financial, administrative or regulatory controls' (p. 421).

Sheaff *et al* use the term 'soft bureaucracy' to describe primary care groups and trusts, adding that:

'Some English GPs now exercise a soft governance over others through a gradual introduction of managerial techniques and rather subtle individual incentives, the latter being moral rather than material incentives and a specific set of legitimations of the concomitant working practices' (p. 425).

What this suggests is that if leadership is about the process of influence - rather than purely relating to formal hierarchical appointment - the range of individuals who might be considered leaders needs to be extended beyond those in formal positions. Mohapel and Dickson (2007) reflect these findings, suggesting that because of the complexity of healthcare systems in differences in perceptions, cultural and systemic senses, effective leadership must act at three different levels:

- Leadership of self
- Leadership of others (teams, direct reports)
- Leadership of organisations within systems

Leadership of self or personal leadership refers to the levers of influence that one has to change oneself. Change must appeal to doctors at an individual level in order to change the behaviours of clinicians. Leadership of others relates to concepts of supervisory leadership which may relate to both formal structural leadership positions and also less formal, influential processes. That is, leadership in a structural sense may be symbolic as well as practical but individual personality traits are also important in persuading and inspiring others, and both may combine to influence cultural factors. Leadership of organisations effectively refers to strategic leadership. Mohapel and Dickson suggest that strategic leadership is one of the key elements in increasing physician engagement, but is insufficient without the other two aspects.

5. Networks, collective leadership and clinical microsystems

Bate's (2000) empirical study in an NHS hospital demonstrates the resilience of professional bureaucracies, and the role of professional networks within these bureaucracies. As such, it provides a link to a wider body of work on the importance of collective leadership in health care organisations, and the part played by clinical microsystems. A related theme is the need for there to be constellations of leadership in place to support major change programmes.

In Bate's research, consultants did not accept the legitimacy of management within the hospital, and as a result were able to undermine managerial power. Bate reports that the hospital had developed into one which was characterised by sub-cultures which existed in isolation from each other. This was highlighted as particularly problematic when change processes needed to be invoked involving more than one department, as this inevitably led to tensions and often a situation of 'grid-lock' between these departments and their associated sub-cultures. Within this system there was a disincentive for doctors to cooperate with other departments as this would involve them having to give up some of their power.

Doctors and managers were perceived as being at loggerheads, where the managers should have had degrees of latitude to make changes, but in practice, due to the way the organisation functioned, it tended to be the doctors who held the power and the managers were afraid to challenge this too far lest they should face a vote of no confidence. As doctors refused to accept the legitimacy of the management system, they were able to confound it.

Bate suggests that this was not a problem that could be dealt with solely by structure (and as archetype theory suggests, structures are often the result of the underpinning values of an organisation) – for doctors were already undermining current structures and refusing to be controlled in a hierarchical fashion. Instead a *networked community* was worked towards; where doctors

became involved as they could see that the costs of not being involved would outweigh the costs of being involved. Importantly for this review, Bate notes that a decision was taken at the same time to abolish clinical directorates because they were '*seen as a failed experiment in clinical management*' (p. 509).

In emphasising the role of networks rather than hierarchies, and of partnership between doctors and managers in a loose framework, Bate is echoing other work that highlights the importance of involving a large number of people at all levels of the organisation, not just those in formal positions of authority (Hewison & Griffiths, 2004; Woolnough & Faugier, 2002). This is further reinforced by Ferlie and Shortell (2001: 291-292) who suggest, '*we believe that sole reliance on the charismatic individual as a source of leadership is a mistake, especially in multiple-stakeholder-based systems such as health care, where different groups may expect different management styles*'. Notions of collective leadership and team leadership seem to be crucial to engagement in medical leadership as outlined in the previous section (in relation to the notion of professional self-organising groupings).

Denis *et al* (1999) argue that teams or operating units form the *de facto* elementary structures of healthcare organisations. This concept has been developed under the 'microsystem' label, and has emerged as a focus for clinical quality improvement work (Institute of Medicine, 2001; Nelson *et al.*, 2002). Microsystems are the smallest replicable unit within an organisation, having their own human, financial and technological resources (Quinn, 1992). Ferlie and Shortell (2001) note that while the potential of teams as a lever for change has been recognised for some time (Pettigrew *et al.*, 1992), the microsystem concept has emerged as the focus for much health quality improvement work. In a health care context, a microsystem '*has clinical and business aims, linked processes, and a shared information environment, and it produces performance outcomes*' (Nelson *et al.*, 2002: 474).

Much of the evaluation literature surrounding clinical microsystems has come from a US context, where the Dartmouth Hitchcock Medical Centre has

produced a series of nine papers based almost exclusively on two studies. The authors draw quite strong conclusions, particularly given that they studied just 20 sites out of the 'tens of thousands' (Nelson *et al.*, 2002: 486) of clinical microsystems which operate across the US. Nevertheless, Nelson *et al.* (2002) argue that clinical microsystems are key to creating high-performing health care organisations.

Within this context, the role of leadership is regarded as crucial. The research team suggest that in most of the high-performing microsystems they studied, there was not a single leader, but two or three co-leaders (Batalden *et al.*, 2003). Most often this took the form of a physician leader, a nurse leader and/ or an administrative leader (in a similar form to the model clinical directorate triumvirate). By acting together, formal and informal leaders worked to engage all members of the health care teams in ongoing improvement processes. Therefore, microsystems are thought to be effective where they are able to engage staff members at all levels through a process of collective leadership. One example of a healthcare organisation that encourages group responsibility for patient care is Kaiser Permanente (see Box 5).

Box 5: Kaiser Permanente and medical leadership

Kaiser Permanente comprises the Kaiser Foundation Health Plan, Kaiser Foundation Hospitals, and the Permanente Medical Groups (Feachem *et al.*, 2002). The Permanente Medical Groups have a mutually exclusive relationship with the health plan and this generates a high degree of commitment on the part of physicians to Kaiser's performance and success. This relationship means that the fate of the medical groups and the plan is intertwined, and there is therefore a strong incentive for working in partnership.

A high proportion of doctors take on leadership roles in the medical groups and these groups are in effect self managing medical guilds working under contract to the health plan. It is within the medical groups that agreement is reached on how care should be delivered to patients. Change and improvement occur through the commitment of physicians to deliver the care they believe to be appropriate, rather than compliance with an externally imposed standard (Ham, 2005).

The result is a culture in which the most powerful staff group has taken responsibility for the performance of the organisation. Peer accountability for performance is emphasised within this culture and doctors are expected to engage with their colleagues in reviewing practice and performance. A substantial commitment is made to career long education and professional development in order to sustain this way of working (Crosson, *et al.*, 2004 and 2003).

There is a degree of self selection in the medical groups which tend to attract doctors who prefer working within an organised framework rather than in office based practice. Part of this organised framework is a commitment to team working and to practising in collaboration rather than competition. After serving an 'apprenticeship', doctors are elected by their peers into membership of the medical groups, at which point they become shareholders in the groups.

Permanent physicians are paid market rates and some of their income is in the form of bonuses based on performance in areas like quality outcomes and patient satisfaction. The remuneration package on offer creates an incentive for doctors to stay within the groups for their entire career with pension entitlements being enhanced as retirement is reached. There is a strong feeling of all physicians working together and with managers in the organisation.

This idea of collective or united leadership has further been reflected in other studies and a growing body of literature proposes that effective change in health care depends on constellations of leadership (Pettigrew *et al.*, 1992; Denis *et al.*, 1996; Brooks, 1996). Within small team-based systems and organisational forms typified by more horizontal and network types of organisations, traditional leadership roles and the exertion of power based on hierarchy are weakened. This goes some way to explaining why clinical directorates in themselves are insufficient.

Drawing on empirical research in Canadian hospitals, Denis and colleagues (e.g. 1996;2001) suggest that periods of change in organisations are characterised by shared and ambiguous leadership roles, divergent objectives and diffuse power and depend on a collective leadership group with members who play fluid and interlocking roles. Denis *et al* (1996;2001) have conducted a number of in-depth and long term case studies into change processes within a number of hospitals in Quebec and note that '*periods of major substantive change tend to be associated with complementary and united leadership constellations*' (Denis *et al.*, 2001: 824). That is, the research team suggest that successful change was able to take place when hospital leadership was diffuse through the CEO, Board and Medical Council Executive.

However, these constellations are dynamic and fragile, with the team outlining three sources of fragility and their associated forms of coupling which are important in ensuring constellation viability in the long term:

- *Strategic coupling* – the internal harmony between members of the constellation.
- *Organisational coupling* – the support to the leadership constellation from its organisational base. This refers to the perceived conformity between the objectives that it is pursuing and the interests of the key organisation members.

- *Environmental coupling* – the degree of coherence between a leadership constellations vision and aspirations and the demands and constraints of its environment.

Under this thesis, leadership constellations are successful where they draw on the different strengths of the types of leaders to accommodate variations and take actions with respect to these different areas of potential fragility. In this way, engaging doctors in leadership within such a constellation is viewed as important in order to balance out the tensions inherent in a typical change process.

This emphasis on constellations of leadership and collective leadership is reflected elsewhere in the literature. Within the context of hospital reform in Australia and the UK, Degeling *et al* (1998 and 2003) found that whereas lay managers were more receptive to concepts of change and would more readily support change, responses of medical and nursing managers were rather different. Whilst medical and nursing staff were willing to recognise concerns of the health authority, they nevertheless wanted to preserve '*what they regarded as being essential for maintaining the vocational, intersubjective and normative orientations of their involvement in patient treatment*' (p. xi). In this case, and of the BPR example outlined above, medical staff had sufficient power and autonomy by virtue of their roles to block or support change as they saw appropriate. This illustrates the complex sub-cultures which different medical staff are also a part of. Leadership at the very top level is not sufficient and middle managers and clinical managers specifically are imperative in leading reform through social processes (Degeling *et al.*, 1998; Degeling *et al.*, 2001; Degeling *et al.*, 1999).

Degeling is one of few researchers identified during this review who overtly considers the leadership-followership dialectic in clinical settings. He acknowledges that leadership is not purely a result of some sort of official authority or position of hierarchy but relates to the ability of individuals to 'perform' their roles in a manner which appears as culturally efficacious to the sub-culture. Moreover, leadership and followership are partial social processes – a leader is not simply a leader due to an official status, but due to

their ability to influence and change behaviours of others. Although Degeling and colleagues recognise the importance of engaging doctors in leadership on an individual basis, they acknowledge that this is an insufficient condition for reform.

These authors highlight the important role which senior management and policy makers also play in setting the scope for middle management to act within. Senior management define what is institutionally possible and may potentially undermine the actions of middle managers. Medical leaders will only be able to change a sub-culture if their actions are legitimated by the wider system. Therefore, although doctors might be engaged in leadership at certain levels, any processes take place within limits of scope which are set by the institutional system. That is, leadership is not a purely individual trait which is influenced by the characteristics of a person, but involves a complex process between different systems, cultures, sub-cultures and complex mixes of accountabilities.

This clearly stands as a quite different stance towards leadership than those cited by Firth-Cozens and Mowbray (2001) where the leaders are solely those within official positions of authority, and suggests would require quite a different approach to leadership development (i.e. developing an individual's ability to influence others not necessarily via a top-down demonstration of power, but through other processes). Examples such as those from Denis and colleagues, the Kaiser model, Degleing *et al* and the clinical microsystems studies suggest that leadership is a social process and leaders influence followers through social processes. Leading change is a complex and dynamic process, but medical leaders might influence followers by resonating with and drawing upon certain aspects of culture and identity (such as aspects of professional identities).

What this also suggests is that due to the strong professional underpinning of the majority of clinical identities that this process of transformation may be more successful if those leading change efforts are medical leaders themselves. However, such leadership will be insufficient because effective

leadership involves a constellation of leaders from various backgrounds and at different levels who might influence a range of sub-cultures in different ways – albeit within a context where there is top management leadership and support. The importance of effective followership is again underscored by this analysis. Silversin and Kornacki (2000) similarly emphasise the critical role of followers in their analysis of physician leadership in the United States.

6. Implications of research evidence

6.1 Engagement and performance

This review has shown that by enhancing the engagement of doctors in leadership there is potential for positive impact on both clinical and organisational performance. Due to the power and control which doctors possess they may block potential change efforts and confound improvement initiatives. However, by engaging doctors within these change processes, significant differences may be achieved which enhance performance.

The review has also demonstrated that engagement is a social process – it is not an ‘on-off’ switch and may be difficult to sustain over a prolonged period. In isolation, engaging doctors in leadership is likely to be insufficient to improve performance. The greatest impact on performance may be felt when constellations of leadership are engaged or where a balance is struck between employing top-down and bottom-up processes of change. Such a view of medical leadership has significant implications for the definition of engagement in medical leadership.

6.2 Definitions

Although a number of commentators have suggested that engaging doctors in leadership is essential in securing effective improvement approaches (as outlined above), few have defined what is meant by engagement in medical leadership. Of those that do, Gruen *et al* (2004: 94) suggest it is ‘*advocacy*

for and participation in improving the aspects of communities that affect the health of individuals'. Thus, Gruen and colleagues' definition of engagement relates to acting on behalf of a population group / individuals and actively participating in some form of change.

The NHS Alliance (2003: 24) describes engagement as *'involvement which is two-way between health professionals and the PCT, with that involvement at a level that influences decision making. It is involvement at the beginning and as an integral part of the decision making process, rather than as an add-on or after thought once the decisions are more or less in place'*. The key points here are that involvement is two-way and is ongoing and active in influencing decision making.

Empey and colleagues (2002: 191) identify a range of medical leadership roles which are formally engrained within the acute sector of the NHS, including:

- Clinical lead
- Divisional director
- Medical director
- Assistant or associate medical director
- Director of education
- Clinical tutor
- Postgraduate dean
- Director of research and development
- Clinical network director
- Clinical governance lead
- Chief executive
- Chair of research ethics committee
- Risk management
- Infection control

Under this definition, clinical leadership is constructed as the provenance of those who wield some form of hierarchical executive power. Similarly, in terms of primary care professionals, the NHS Alliance (2003) recognises medical leadership at the Professional Executive Committee and Subcommittee level as one form of engagement – and again one that is linked to some form of formal governance structure.

In the Canadian context, Mohapel and Dickson (2007) quote a Conference Board report (2006) which suggests that engagement is about more than an intellectual or structural activity – it is about an individual's attachment to their work. They identify three factors that are crucial:

- Intellectual commitment.
- Emotional attachment
- Interpersonal outcomes.

Under this reading engagement is about more than simply appointing people to particular positions. Rather it is about recognising the diffuse nature of leadership in health care organisations, and the importance of influence as well as formal authority. Although a range of different medical leadership positions have been outlined by Empey and others (as seen above), these tend to be more formal roles within organisations. Yet, within professions such as medicine a range of leaders will also exist who might not be official leaders in the eyes of the organisation, however they might be influential for other reasons amongst their peers.

6.3 Metrics to measure engagement

How medical engagement in leadership is defined clearly has important implications for how it is measured. If leadership is defined in a largely hierarchical fashion, then it might be measured by looking at the range of medical leadership roles who are involved in certain projects. For example, Weiner *et al* (1996) measured physician involvement in governance as

independent variables in a study into quality improvement in US hospitals. The team measured two variables; the number of active-staff physicians on the board, and the number of physicians-at-large on the board. Within the second measurement, the team looked at the number of hospital management personnel on the board (excluding the CEO), the nature of the CEO role on the board, and the length of the CEO tenure. By examining the number of clinicians involved within the formal governance arrangements, and the lengths of this involvement, the authors were able to make statements about their engagement with the quality improvement programme.

In a UK study, Buchanan *et al* (1997) examined medical involvement in hospital management processes using an interview approach. This process-based approach examined, for example, the impact and influence that clinical leaders felt that they had on the hospital management process. In this setting leadership is defined as a social process, rather than by virtue of formal position. Engagement in medical leadership is defined by the degree to which clinicians were able to influence change in hospital management processes. This clearly contrasts to the study by Weiner *et al* (1996) who suggest measurement of engagement in medical leadership by virtue of a place on a governance board. In the Buchanan *et al* (1997) study, engagement is measured by the degree of influence the individual has, thus it is a measurement of active effect by individuals which plays out through institutional processes, rather than a presumption of activity by virtue of the position an individual holds.

As highlighted above, the importance of cultures enhancing or blocking engagement in medical leadership has been highlighted by some commentators. There are a number of quantitative measures of organisational culture that have been validated and used in healthcare settings or appeared to have potential for use in such settings (see Scott *et al.*, 2003 for overview) and which could be adapted to analyse levels of engagement. Mohapel and Dickson (2007) illustrate a physician engagement leadership tool which is distributed to clinicians and asks them to rate their feelings and behaviours on a 1 to 4 likert scale against a series of attitudinal

statements. The scores are aggregated for three leadership competencies (Personal leadership, Supervisory leadership and Strategic leadership) and give a rating of functioning of either low, moderate and high. Organisations may self assess and identify areas which require improvement and which particular competencies may be used to develop other areas.

A key message from the literature accessed for this review is that although some studies indicated various ways of measuring engagement, there appears to be no operational metric which is widely in use. Any metric which is employed must clearly reflect the definition of medical engagement in leadership that is adopted.

7. Conclusions

Engagement in medical leadership has been outlined as central to the current NHS modernisation agenda. This review has analysed a wide range of literature pertaining to engagement in medical leadership and found a number of studies which have considered this phenomenon and which demonstrated that there was an association between engagement in medical leadership and clinical and organisational performance. However, this link is not straightforward and the complex environments of healthcare organisations mean that there is no 'magic bullet', but that constellations of engagement at different levels of the organisation seem to be required to effect change and improvement.

Engagement in medical leadership is currently a crucial issue within a range of international healthcare systems and not just an issue within the UK. Although there can be a number of benefits from engagement in terms of clinical and organisational performance, it is by no means an easy thing to 'get right'. A number of different levels must be considered - individual, team and systemic. Moreover, although structures are important, so too are team, professional and sub-cultures and values. Structures do not exist in isolation from the values which underpin organisations. Individual values and perceptions, team and microsystem cultures and wider systemic factors must be aligned in order to produce effective engagement in medical leadership.

Despite the fact that engagement in medical leadership is a key issue internationally, it tends to be discussed uncritically – with the review uncovering only a handful of definitions. One key factor though seems to relate to the idea of leadership as a social process, rather than being purely a product of virtue of position within an organisation. The review was unable to uncover any operational metric which is widely in use that measures levels of engagement in medical leadership.

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Methodology

Within the time and resources available a full systematic review of the literature was not possible. In addition, it was felt that much of the literature relating to this area might also be more closely related to the 'grey' literature than located within mainstream academic literatures. Therefore, the review adopted an approach designed to be exploratory, rather than systematic and comprehensive.

The first stage of the project surveyed a number of bibliographic databases. The databases HMIC, Medline, Assia, Proquest, EBSCO, Social Services Citation Index, Social Services Abstracts and EMBASE were searched using the key terms 'medical engagement', 'medical leadership', 'clinical leadership' and 'medical managers'. The search was not restricted temporally, but only articles in English language were sought.

This initial search indicated a total of 1359 items. These were searched by one of the team (HD) for those items which considered any of the key aims of the review (as outlined in the previous section). Items were included in the review if they critically considered the issue of medical engagement or leadership engagement (including any potential metrics that might be used to measure engagement), or studies were included where they pertained to organisational or clinical performance and made reference to medical engagement or leadership engagement.

Of the abstracts obtained, only 31 items met these criteria. These items were read and references to any further studies which might consider similar issues were followed up. This initiated an iterative cycle of snowballing for data sources and a further 41 items were obtained. In total, 72 items were obtained in full for the review.

In addition, the authors of this review used their own knowledge of the literature to identify other relevant studies, and these were supplemented by publications suggested by colleagues at the NHS Institute.