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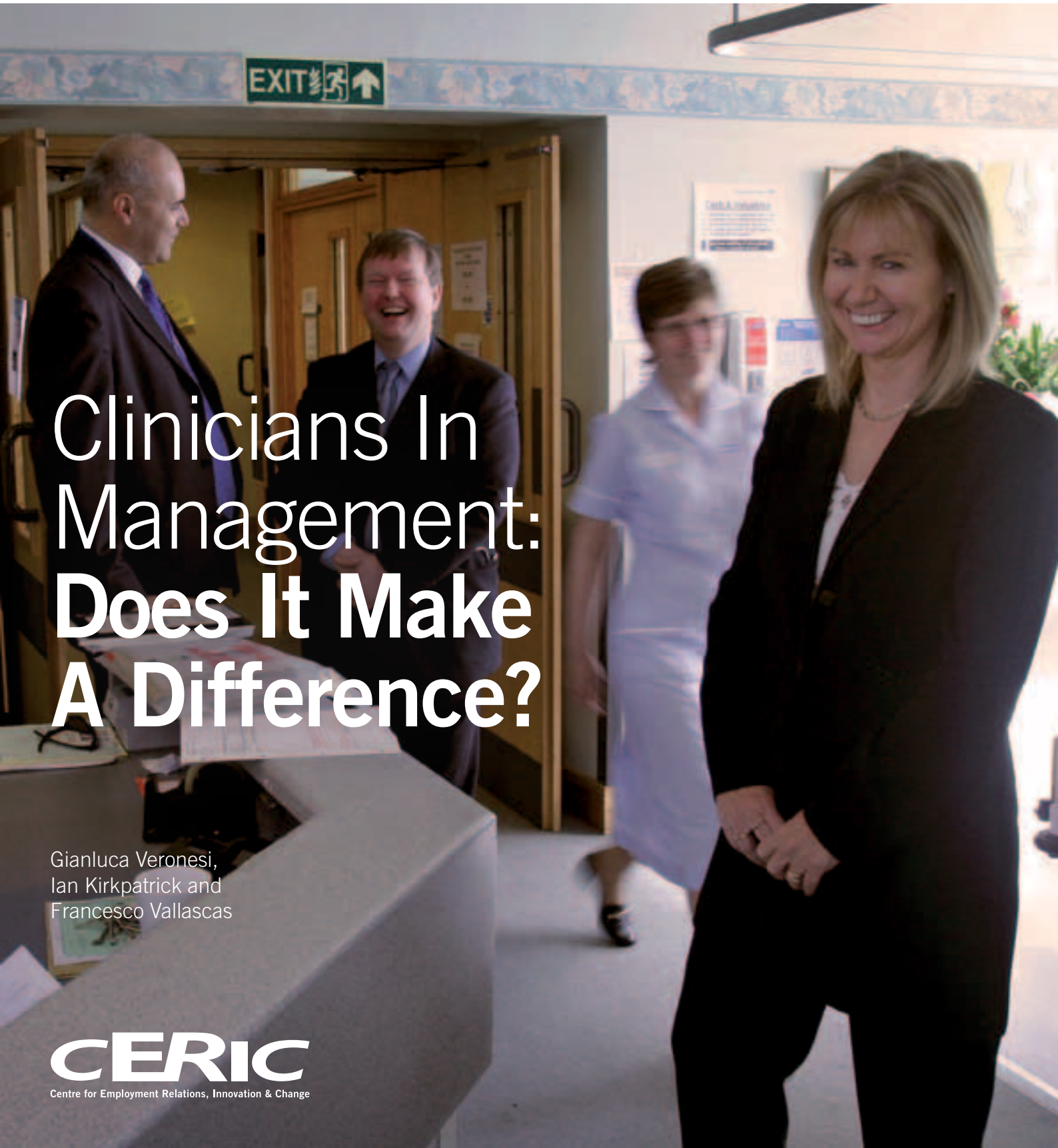

Clinicians In Management: **Does It Make A Difference?**

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Executive Summary

This report adds to the evidence base to support the benefits of clinical leadership by focusing on the strategic governance of NHS hospital trusts in England. Using information provided on trust websites, a data-base was constructed of the qualifications of board members over three years (2006/7-2008/9), distinguishing between clinical and non clinical backgrounds. For the final year, 2008/9, 102 trusts were represented. Tests were then conducted to establish whether the mix of qualifications of board members had any impact on performance outcomes. The latter included: Annual Health Check ratings published annually for trusts by the Healthcare Commission (now Care Quality Commission) focusing on 'Quality of services' and 'Use of resources'; the hospital standardised mortality ratio, published by Dr Foster; and patient satisfaction measures included in the national patient survey.

Research highlights:

1. Clinical participation in board level management is low by international standards. On average clinicians make up just over a quarter of all board members (26.03%) and doctors, 14%, in English NHS hospital trusts. Numbers have however increased slowly between 2006-9.
2. More clinicians are likely to be on the boards of trusts where the CEO has a clinical background.
3. Increasing the number of doctors on boards significantly increases quality assessed in terms of Health Commission trust ratings, lower morbidity rates and increased patient satisfaction.
4. There is evidence of a positive, but not clearly significant relationship between doctors on the board and financial ratings.
5. The number of board members with nursing and allied health professional backgrounds is less clearly associated with improved performance outcomes.

Introduction

In most countries there has been a trend to extend the participation of doctors and other clinical professionals in the management of health services. In the UK this has been an explicit policy goal since the publication of the Griffiths report in 1983. Twenty years later the NHS *Next Stage Review* [1] commissioned by Lord Darzi concluded: 'Leadership has been the neglected element of the reforms of recent years. That has to change'. Accordingly there have been attempts to create a 'mixed economy' of clinical and non-clinical senior managers in the NHS with doctors on the shortlist for all future Chief Executive Officer (CEO) appointments [2]. The medical profession itself has also supported change, requiring that all undergraduate and postgraduate courses incorporate a new 'Medical Leadership Competency Framework'. As one influential report published by the Royal College of Physicians put it, the time has come to acknowledge the 'corporate responsibility' of doctors and foster 'complementary skills of leadership and 'followership' at all levels [3].

Most recently, pressure to deliver change has intensified with moves to make doctors responsible for commissioning services, through new Clinical Commissioning Groups. A programme to deliver £20bn of extra productivity by 2014-15 has also been set in motion, known as QIPP – quality, innovation, productivity and prevention. This will involve significant changes in the work of doctors and much greater investments in clinical leadership at all levels to make it happen [4].

This enthusiasm for clinical leadership rests on the assumption that doctors and nurses will bring 'increased understanding and credibility and better communication' [5]. In terms of understanding, clinical managers, with expert knowledge of the core business of health services and a deeper awareness of what patient care involves should make better informed decisions regarding service design and resource allocation. These managers are also likely to have greater legitimacy and the ability to leverage support for change.

Notwithstanding these benefits of stronger clinical leadership progress has been slow. The UK still has one of the lowest proportions of clinically qualified managers of any health system: 58 per cent compared to 74 per cent in the US and 93 per cent in Sweden [5]. Obstacles to persuading clinicians to take on management roles, such as weak (or non-existent) incentives, a lack of training and administrative support also continue to be significant.

Until recently efforts to boost clinical leadership have also been hampered by the lack of a strong evidence base. In some quarters this has fuelled scepticism about the wisdom of having well trained doctors take on management roles that might distract them away from the core business of patient care. However, increasingly this view is hard to sustain. A survey conducted by McKinsey & co. and the London School of Economics of 1200 (public and private) hospitals across seven countries (UK, US, Germany, France, Italy, Canada and Sweden) found that hospitals with the most effective 'management practices' tended to be those with higher proportions of medically qualified managers [5]. A study by Goodall [6] of the top 100 US hospitals in the US also finds a link between the medical qualifications of CEOs and the higher ranking of hospitals. It would seem therefore that clinical leadership is not just about controlling professionals and turning 'poachers into gamekeepers'. It may also have real, quantifiable benefits for those who use our health services.

The aim of this report is to extend and deepen this evidence base by exploring, for the first time, the impact that clinical professionals might have on strategic decision-making. Specifically, we look at whether it makes a difference if NHS trust hospitals involve a greater number of nurses and doctors on their governing boards. Will this lead to greater performance and, if so, how much and in what areas?

In what follows we firstly outline the main questions that guided our study, before describing the main data sources used. The report then reviews the findings and implications for policy. As we shall see, there is compelling evidence to show that increasing the number of doctors on hospital trust boards does have marked positive consequences for quality, assessed in terms of Health Care Commission (HC) trust ratings, the Dr Foster Intelligence hospital measure and the patient satisfaction data also provided by the HC in collaboration with the Picker Institute.

Questions informing the study

The study reported here draws inspiration from a wider literature on corporate governance in the private sector [7]. This research highlights the importance of the membership and dynamics of executive and non executive boards for the performance of large firms. In particular it is has been found that board directors contribute most when they have specialised experience and expertise relevant to the domain (or sector). Because technology, regulations and structural changes are normally highly path dependent, prior knowledge of a given sector is of considerable value in helping to quickly process information and solve complex problems [8].

Such findings of course beg the question of whether similar conclusions might be drawn about public organisations such as hospitals. While hospitals in the UK continue to be publicly owned many are now have boards on the corporate model with degrees of autonomy (and accountability) to manage their own affairs [9, 10]. But does this mean that board level decisions will have a similar impact on performance outcomes such as service quality? Might one also expect the specialist expertise of board members will be significant, especially of clinicians with their deep understanding of the core business of health care?

Given these debates our primary research question was to focus on how far (if at all) the presence of clinicians on the boards of hospital trusts makes a difference to performance outcomes. As we noted earlier, the belief that they will is strongly assumed in much recent policy thinking in the UK and elsewhere [11]. However, clearly much will also depend on the skills and motivations of clinicians who take on senior management roles and the extent to which they are able to make their voices heard. The latter is especially true in the NHS given what Edmonstone [12] refers to as a 'unitary' and 'command and control' managerialist viewpoint which 'denies the legitimacy for clinical leadership and emphasises instead a single source and locus of control (general management)'.

A further question regards which performance measures? Will stronger clinical leadership impact on performance understood broadly to include quality outcomes and financial efficiency or just the former? On the one hand it might be argued that clinical managers will contribute most to quality outcomes given their particular motivations and expertise. It has been suggested however that doctors and nurses in management roles may well contribute to meeting efficiency goals [5], especially in those contexts where there is extensive training and support (see for example, the case of Finland [13]).

Lastly is the question of whether the positive outcomes of clinical leadership derive from the participation of all clinicians in management (including nurses and allied health professions) or only doctors? The latter follows from much of the academic literature which emphasises the dominance of medicine and the key influence doctors have over the means and ends of service provision. In this respect, while nurses and allied health professions might help shape strategic decisions, it is doctors who will ultimately have most impact. However, against this is the observation that nursing knowledge tends to be more population focused, 'systematized' and team-based (as opposed to individualistic) [14]. This fact may make nurses better suited for management roles and more able to reconcile clinical with organisational and financial priorities.

Research design and methods

To address these questions our study focused on the governance of NHS hospital trusts in England. In 2008/9 this sector consisted of 169 acute care trusts, with a total budget (including community services) of £51.5 billion: approximately 64% of the total budget for all NHS front line services. Because there is no central repository of information on hospital governance it was first necessary to construct our own unique dataset by manually working through the websites and annual reports of individual trusts. Where information was available we observed the composition of the board and, for all members, gathered information on their professional qualifications (for example, doctors, nurses, accountants etc.) and job titles. Only trusts which offered full information in terms of board membership were included, resulting in a final sample comprising 240 observation points over three years: 2006/7 to 2008/9. In the final year, 2008/9, 102 trusts were represented.

Over this period we also collected information on trust performance and outcomes, derived from three main sources:

- Annual Health Check ratings published annually for trusts by the Healthcare Commission (now Care Quality Commission) between 2005/6 and 2008/9 focusing on 'Quality of services' and 'Use of resources',
- Patient outcome data in the form of the hospital standardised mortality ratio, published by Dr Foster Intelligence.
- Patient satisfaction data from the annual national patient survey.

As noted earlier, our objective was to test whether or not there was any relationship between these output and outcome indicators and the presence of clinicians in strategic leadership roles. To do this we first distinguished between directors with a clinical background and those with a non-clinical qualification or expertise. We then further differentiated between the clinical backgrounds of directors, segmenting the population in two categories: doctors and nurses and other allied health professions. Following this regression analysis was used to test whether any relationships existed (that were statistically significant) between these board member qualifications and various outcome/performance measures.

To ensure our findings were robust we tried, as far as possible, to rule out other factors that might influence performance outcomes, such as hospital size, status (Teaching, Foundation Trust), number of admissions, length of stay, percentage of bed occupancy, number of staff and the average age of patients, by including these in the model. Additional tests were also conducted to discount the possibility that high performance levels were explaining the presence of clinicians on boards rather than the other way around.

In what follows we describe the results of this analysis looking first at the overall profile of the sample in terms of governance arrangements and then at the relationships between board membership and performance outcomes.

Findings

The governance of UK hospital trusts

In terms of overall profile we find that the average size of trust boards was 12.45 directors in 2008/9, the largest having 17 directors. This is roughly the average size of corporate boards in the private sector. As we expected, non-executive directors made up around 51% of board membership, while, as Table 1 indicates, the average percentage of female directors was 35%.

Table 1: General profile of NHS hospital trusts: 2006/7 to 2008/9

	AVERAGE	LOWEST	HIGHEST
% of non executive directors	51.29	31.25	63.64
% of female directors	34.72	7.14	80.00
% of foundation trusts	73	-	-
% of teaching trusts	42	-	-

Unsurprisingly, the results of our analysis confirm the impression that clinicians make up a minority of board members in English NHS hospital trusts. Table 2 presents a summary of the results from all three years. From this it can be seen that on average clinicians make up just over a quarter of all board members (26.03%). However, when further broken down it transpires that doctors represent approximately 14% of board members while nurses and the other allied professions account for another 12%. In total, 22% of the chief executive officers (CEO) had a clinical background, with roughly an equal ratio of CEOs being classified as doctors or nurses and other allied professions.

Hence, while clinical professionals are represented at strategic levels in NHS hospital trusts, they are still a minority. Other professionals with an accounting or finance background are almost as well represented, making up 20.33% of board membership and 10.6% of CEO posts in 2008/9. Those with a 'business' or non-NHS specific background (for example, civil servants) are even more numerous, accounting for just over half of board membership.

Notwithstanding these overall trends the study did reveal marked variations between trusts in the numbers of doctors and nurses who sat on boards. It is notable for example that for 2008/9, in 23.53% of acute trusts (24 out of 102), clinicians made up more than 30% of board members, well beyond the statutory roles of nurse and medical director. The majority of these posts (over 90%) were on executive boards, including CEOs and other roles such as Director of Operations. Looking at trends over time, it is also worth noting that clinical participation in management has increased, albeit slowly. Indeed, there are strong signs that when a trust appoints a clinician as a CEO this, in turn, has positive consequences for the overall proportion of board members who are nurses and doctors - possibly indicating a virtuous circle over time.

Table 2: Clinical involvement in the boards of English NHS trust hospitals: 2006/7 to 2008/9

	AVERAGE	LOWEST	HIGHEST
% of clinicians on the board	26.03	6.25	60
% of doctors on the board	13.84	0	50
% of nurses and other allied professions on the board	12.19	0	40
% of clinicians CEOs	22	-	-
% of doctors CEOs	10	-	-
% of nurses and other allied professions CEOs	11	-	-

Impact on performance

Turning to the matter of performance outcomes our first test focused on the quality of services, as indicated by the ratings of hospital trusts - from 1 (weak) to 4 (excellent) - published by the Healthcare Commission (HC) in the Annual Health Check. This quality score rates the care and treatment provided assessing compliance with a series of core standards (67 in total in 2008/9). These standards concentrated on four main areas: health and well-being, clinical effectiveness, safety and patient focus and ease and equity of access. Information was also collected on waiting times for inpatients and outpatients, referrals to treatments and infection rates.

The results of this analysis revealed a very strong relationship between HC quality ratings and clinical involvement on trust boards. As can be seen from Table 3, an increasing presence of clinicians on boards results in progressively superior quality ratings. Trusts that achieved the highest ratings were also those that, on average, had the highest shares of clinicians (27%) on their boards. Further tests revealed that these links are statistically significant.

Table 3: The Relationships between Health Commission Quality Ratings and Clinical Board Membership

Quality Rating Class	N	%	Average % of Clinicians	Average % of Doctors	Average % of Other Clinicians
1	8	3.33	21.42	11.09	10.33
2	33	13.75	23.38	12.51	10.87
3	117	48.75	26.31	13.59	12.72
4	82	34.17	27.14	15.01	12.13
Total	240	100	26.03	13.84	12.19

To ensure that these findings were robust a second test was carried out using an alternative indicator of quality, namely, the hospital standardised mortality ratio (HSMR) published by Dr Foster. Here again our results were statistically significant, with lower HSMR values being recorded in those hospital trusts that had a higher proportion of clinicians on their boards. As noted earlier, we also took into consideration the views of patients on their overall experience with the care received. Once again, hospital trusts with a greater ratio of clinical directors were those achieving the higher satisfaction scores from their patients.

Which clinicians have most influence?

Given the questions posed earlier, further tests were also conducted to explore which clinicians had most impact. Here it soon became apparent that when different clinical categories were looked at separately, it was the share of doctors that made most difference. As can be seen from Table 3, while hospitals with 1 trust rating had an average of 11.09% doctors on their boards, those with 4 ratings averaged 15.01%. By contrast, the pattern is more ambiguous where nurses and other allied health professions are involved with no statistically significant findings either for the HC trust ratings or HSMR scores.

An additional test (marginal effects) was conducted to quantify the benefits of having a higher share of doctors on boards (see Figure 1). This showed that if the proportion of doctors increases by roughly 10% the probability that a hospital trust will achieve the maximum score of four is increased by 7.34%. Likewise, increasing the presence of directors with a medical background by 10% also considerably reduces the likelihood that a hospital trust will receive lower ratings. *In short, it would seem that having only a few extra doctors participating in a hospital board can make a significant difference to performance.*

Which performance outcomes?

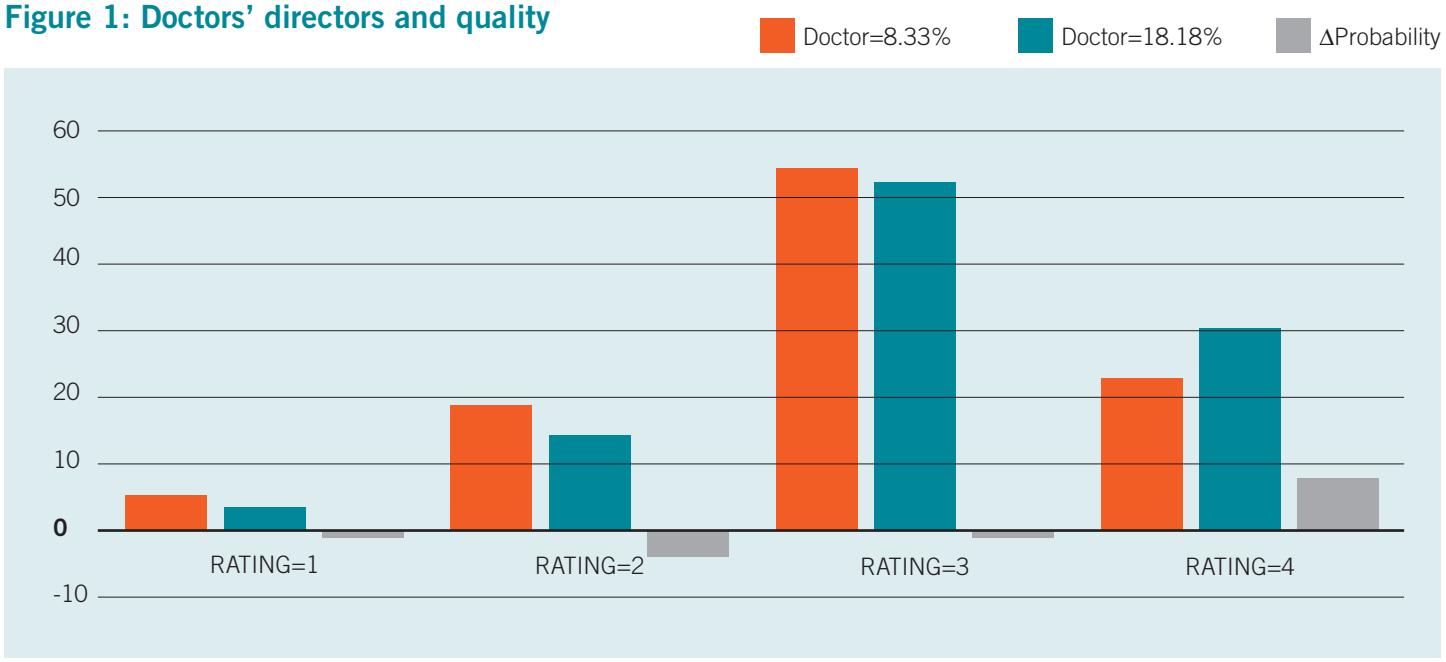
Lastly, we focused on the importance of different performance outcomes. While one might expect the presence of clinicians to have some impact on quality outcomes, is this also the case where financial and efficiency outcomes are concerned? To explore this matter we used HC financial score grades. This data is taken from the work of other regulatory bodies including Monitor for Foundation Trusts and the Audit Commission (now abolished) and local auditors for acute care trusts.

To summarise, the results of this analysis were far more ambiguous. As can be seen from Table 4 below, there does appear to be a positive relationship between having a higher number of doctors on trust boards (in executive roles) and financial ratings. However, although statistically significant, this relationship is far weaker than for quality outcomes. This weak relationship also only applies to doctors and not to nurses and allied health professionals.

Table 4: The Relationships between Health Commission Financial Ratings and Clinical Board Membership

Quality Rating Class	N	%	Average % of Clinicians	Average % of Doctors	Average % of Other Clinicians
1	6	2.50	20.48	10.75	9.74
2	21	8.75	28.13	11.72	16.42
3	58	24.17	25.28	14.31	10.96
4	155	64.58	26.24	14.07	12.16
Total	240	100	26.03	13.84	12.19

Figure 1: Doctors' directors and quality



Conclusion and recommendations

The objective of this study was to contribute to the evidence base to support clinical leadership. Although we have only focused on a small sub-set of medical managers the results are significant. Those NHS hospital trusts with larger proportions of doctors on their boards are also those which are most likely to achieve quality ratings of four, lower morbidity rates (according to Dr Foster) and higher levels of patient satisfaction. The participation of doctors in strategic management also seems to have a positive impact on the financial efficiency scores of NHS trusts, although here the findings were less conclusive.

At face value these results offer strong support for those who have called for enhanced clinical leadership and the assumptions underlying Lord Darzi's review of the NHS. For the first time it is possible to quantify the benefits for patients and taxpayers of having greater medical involvement in management. Indeed, if anything, one might say that previous claims about the contribution of clinical leadership may have been understated. What our results show is that even a modest increase in the number of doctors on boards (10%) can have marked consequences for performance.

Of course there are limitations of this study. Our focus is only on clinical leadership roles at the most senior levels and not on what happens lower down, say within clinical directorates. Nor is it possible to explain from this data why having more doctors involved in executive boards makes such a difference. We can predict that this will have much to do with the expertise and credibility - helping to improve both the content of decisions and the likelihood they will be implemented. – but clearly more work is needed. Further research would also be useful to understand how these relationships play out in primary care where, if anything doctors are now being asked to take on greater strategic responsibilities (for commissioning).

These caveats aside our findings are important as a key first step in building a more robust evidence base for clinical leadership. More tentatively, they have implications for policy. Currently in the NHS, the focus is on the (largely untested) assumption that increasing competition and choice will drive up standards. Our research does not discount this possibility. What it does however is point to a far less costly and disruptive ways in which it might be possible to improve the quality of health services: simply by increasing the role of doctors in strategic decision-making.

Thinking ahead it is useful to consider two key interventions that might advance this objective:

a) Talent management and human resource planning. If having more doctors in executive roles on the boards of NHS trusts makes such a difference then more attention needs to be placed to ways of getting them into these roles. Supporting this activity means giving more attention to training and development, succession planning and the career development of junior doctors. Greater thought must also be given to the incentives and rewards associated with clinical leadership.

b) Managing organisational cultures. Arguably having doctors in management roles is only part of the story. Also needed are supportive organisational cultures and long-term 'policies aimed specifically at supporting and strengthening joint working between doctors and managers…to bring about more productive and more harmonious relationships' [15]. As was recently highlighted by our own National Inquiry into Medicine and Management [16], such policies include: a stronger focus on clinical business; more space for local innovation; increased devolution and improved communication at all levels.

Primary responsibility for delivering on these changes must of course lie first and foremost on the senior management teams of NHS trusts. This is especially true given recent moves to increase the autonomy of Foundation Trusts and to apply a lighter touch in terms of their regulation. However, it is clear that other actors in the system might also contribute to the goals of strengthening clinical leadership capabilities. As we have already indicated, professional bodies play a key role here in terms of shaping the education, training and general preparedness of doctors for management roles. In so far as regulatory bodies such as monitor will set targets in future, these might also give more attention to the priorities of creating an environment in which the voice of clinicians is heard. Lastly, there is clearly an important supporting role here for commissioning bodies, not least by incorporating these expectations in the new CQUIN standards.

To conclude, it has already been noted that clinical leadership has moved in recent times from the dark side to centre stage [17]. What this report shows is that this shift in expectations and priorities is well founded given the very tangible performance gains that follow from having doctors more involved in senior management. However considerable work remains to realise these benefits and to fully exploit the significant contribution clinical professionals can make to the direction of our health services.

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