The Future of Clinical Leadership: The Critical Role of Front-Line Doctors

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Abstract: While people usually associate leadership with people with formal authority over organizations, front-line doctors play critical leadership roles today. We survey empirical studies in top management journals that speak to the role of front-line doctors in the implementation of service improvement initiatives. Front-line doctors can both drive and block change from within their organizations. In addition, doctors play critical roles in leading across professional groups, coordinating the input and work of different professionals. The leadership roles of front line doctors can impact whether and how health systems improve and learn, and how they perform. Harnessing the productive leadership potential of front-line doctors today is critical to creating a high performing, sustainable health care system.

What are the new findings?

- Generates knowledge of how front-line doctors play leadership roles in health care organizations
- Highlights two leadership roles that front-line doctors play: driving and blocking organizational changes, and playing roles as leaders across professional groups in the context of service improvement initiatives
- Offers suggestions backed by qualitative research of how people in formal leadership roles and front-line doctors themselves can harness the leadership potential of front-line doctors to improve health care organizations

How might it impact on clinical practice in the near future?

- By offering suggestions of how the leadership potential of front-line doctors can be harnessed, it has the potential to enable or inspire doctors to make changes in their organizations that can positively impact clinical practice

Colloquially, we usually associate the word leadership with people in positions of formal authority—senior executives whose job is to lead an organization. This colloquial meaning reflects a long research tradition focused on the traits, style, or transformational capabilities of individual leaders [1]. In health care, this colloquial meaning is evident in in research and editorials advocating that more doctors should take on formal leadership roles in healthcare [2 3].

As a result of this focus on formal leadership roles, clinical leadership on the front-line—i.e. leadership exercised by doctors in clinical practice who do not necessarily have a formal leadership role and who do not have senior management roles—has gone unnoticed or unaddressed. This is a mistake. Front-line doctors individually continue to have a great deal of autonomy over their work. In addition, they have status and authority that influences their interactions with other health professionals. Collectively, front-line doctors have a great deal of influence over the organizations in which they work [4 5]. As a result, thinking about clinical leadership on the front-line is critical to understanding the future of clinical leadership more broadly.

We adopt a relational leadership perspective to think about the role of front-line doctors as clinical leaders. A relational leadership perspective views an organization as a dynamic network where members participate, cooperate and lead the organization collectively in their day-to-day work. In this view, the work of leadership is distributed throughout the organization [6-8]. This perspective resonates with the insight that service improvement in healthcare involves effort and leadership at multiple levels, including the individual and team levels, as well as at the level of the organization and healthcare system [9]. While front-line doctors can play important roles in defining strategic directions and initiating strategic change [10 11], we focus specifically on the role of front-line doctors in implementing organizational change oriented towards service improvement—including efforts to improve the quality, safety, or efficiency of health services.

We surveyed major management journals published over the last 15 years for empirical articles on service improvement in healthcare that could speak to the leadership roles of front-line doctors. We also consulted 'classic' articles that have inspired significant subsequent research in diverse settings. Because of our interests in front-line doctors, most of the studies we found used ethnographic or case-study methods.

Management research in health care settings shows that clinical leadership from the front-line is particularly important in processes of service improvement two ways. First, front-line doctors can block or lead change from within their organizations. As a result, front-line clinical leadership will be a critical determinant of the effectiveness of any larger policy initiatives to transform or improve health care [8 12]. Second, front-line doctors are critical leaders across professional groups. Because service improvement almost inevitably involves coordination across specialties and professional groups, doctors' approach to working with other health professionals and coordinating their efforts can be critical in shaping how service improvement unfolds [5 13].

FRONT-LINE CLINICAL LEADERS CAN BLOCK OR LEAD CHANGE

Because of the influence they have over their organizations and the autonomy they have over their own work, front-line doctors have the ability to effectively block or lead organizational change [4 5]. For example, researchers have shown how Canadian primary care doctors were able to lead an initiative to introduce a new inter-disciplinary care model in their own practice [14]. Others have shown how doctors who are informally recognized as leaders by their peers can promote the adoption of clinical guidelines and other quality improvement

initiatives [15-17]. Similarly, researchers offer evidence that consultants played critical roles as a key players within larger constellations of people involved in multiple service improvement initiatives in the UK and in Ireland. In service improvement initiatives focused on cancer care and cardiology, consultants, clinical leads, and nursing managers worked with others in the absence of directives from senior managers [8 10].

On the flip side, researchers have shown that front-line doctors have the ability to block organizational changes—as evidenced by research citing the lack of physician engagement in explaining the failure of service improvement initiatives [5 9]. For example, surgeons in one elite teaching hospital in Massachusetts were able to block the implementation of a new law regulating working hours for doctors-in training, with the goal of improving patient safety. In contrast, leadership by front-line surgeons in a different elite teaching hospital helped effectively implement working hour restrictions [18 19]. Similarly surgeons and anesthetists in seven Canadian hospitals were able to block consideration of a wide range of changes that were intended to enhance perioperative efficiency, while at the same time leading efforts to initiate other changes [20].

Three factors shape whether and why doctors either block or lead change. First, doctors' perceptions of how a change will impact goals that they care about will influence whether they act to drive or block change. Mostly, they care about addressing pragmatic goals that directly relate to their work, though they also care about more abstract goals such as patient care quality or community health. In the context of a facilitated initiative to increase perioperative efficiency in Ontario hospitals, surgeons and anesthetists were motivated to make changes that addressed problems that they experienced in their day-to-day work. In contrast, doctors blocked changes when they did not address problems relating to the goals they directly cared about [20 21]. In the UK, doctors, pursuing goals relevant to their own clinical specialties, were critical in facilitating the implementation of initiatives that would improve services within their own clinical domain. Their focus on goals relevant to their own clinical area, however, made it more difficult to implement changes that cut across clinical specialties or organizational boundaries (e.g. between acute and primary care) [5].Others similarly offer evidence that doctors championed changes when they perceived that they addressed goals that were important to them, but blocked changes that addressed goals that they did not perceive as important or relevant [14 19 22].

Second, doctors' perceptions of how a change will impact their status or identity can also shape whether they will drive or block change. For example, the Canadian primary care doctors discussed above were motivated to make changes in part because they viewed these changes as supporting an identity focused on coordinating the holistic care of their patients [14]. In contrast, many surgical trainees in the elite teaching hospitals in Massachusetts resisted changes that they perceived would threaten the 'iron man' identity that was deeply entrenched in the culture of elite surgical departments in the United States [18 19 23]. Similarly doctors in multiple NHS trusts blocked the implementation of an expanded role for genetics nurses as part of an initiative to mainstream genetics care in the UK, in part because of their medical identity and their expectations of a more traditional working relationship with nurses [24].

Third, political dynamics between doctors can ultimately shape the outcome of a change initiative. In the two elite teaching hospitals in Massachusetts, political dynamics between reformers and defenders ultimately shaped the adoption/ non-adoption of working hour reforms [18 19 23]. Similarly, in the case of the perioperative efficiency initiative in Canadian hospitals, political contestation between front-line doctors often determined whether a proposed change initiative was pursued or dropped. Here, political dynamics involved efforts to either focus

attention on how a change might advance a broad but valued goal, such as meeting community health needs, or to convincingly show at least some doctors that a change might advance a more pragmatic goal that was important to them [20 21]. Political dynamics between doctors also shaped the implementation of eight service improvement initiatives in both acute and primary care settings in the NHS [5], as well as the implementation of clinical commissioning processes within a single UK region [25].

Taken together, these studies offer evidence highlighting that front-line doctors, and the leadership that they exhibit, can be critical in determining whether change advances. When doctors are convinced that a change advances important goals, or that it enhances their professional role or identity, they can take the lead in promoting changes that can the improve quality, safety or efficiency of care.

FRONT-LINE DOCTORS LEAD CHANGE ACROSS PROFESSIONS

In addition to playing a key role in advancing or blocking change, front-line doctors also play a critical role leading change across professional groups. Doctors occupy a high-status position in health care settings. As a result, other health professionals often defer to doctors as de-facto leaders. Doctors' effectiveness as leaders across professional groups can be critical in shaping their success in promoting service improvement – which almost always involves coordinated action across professions [8 13 22 24 26-29].

Status hierarchies across professions in health care can inhibit learning and change. This happens when status differences inhibit the sharing of knowledge and information. Doctors, as high status professionals, often discount the knowledge or perspectives of lower-status team members, while low status professionals may refrain from speaking up or voicing divergent views [27 30]. The effect of status differences on learning and change leading to service improvement, however, can be mitigated by psychological safety—team members' shared belief that the team is safe for taking interpersonal risks such as speaking up or asking for help [27 31].

Doctors' actions as leaders of multi-professional change initiatives can play a critical role in creating a sense of psychological safety, and ultimately shaping the success or failure of service improvement initiatives. For example, in a qualitative study of 16 cardiac surgery teams implementing a radically new surgical technology—minimally invasive cardiac surgery—researchers identified a set of leadership behaviors on the part of the surgeons that increased learning and performance [26 28]. Surgeons improved learning leading to service improvement when they created psychological safety. They did this by minimized power differences in a way that invited participation and active contributions to team-level learning on the part of lower status professionals. Minimizing power differences involved taking action based on others' inputs, communicating the importance of other team members' input, communicating a sense of humility, and refraining from over-reacting to other team members' errors [26]. A follow up study of 1400 staff members in 23 neonatal intensive care units showed that non-physician staff members' perceptions of leader inclusiveness—the perception that the doctor in charge encourages nurses to take initiative, that doctors ask for the input of people from other professional groups, and that doctors value the opinions of others equally—increased both their sense of psychological safety and their participation in quality improvement initiatives [27]. These findings focused on psychological safety were echoed in a wide range of studies. For example, psychiatrists were able to facilitate the implementation of a new process of inter-professional care in a Canadian mental health center when they promoted the equality of all professional groups, including lower status counsellors, social workers, and nurses, and kept the group focused on common patient care outcomes [32]. Consultants, collectively, were able to

implement changes to improve prostate cancer care in an acute care trust in the UK when they worked together in collaboration with nursing managers as part of a clinician-led nurse partnership. This involves sharing leadership, and respecting and incorporating the input of nursing managers into their shared service improvement efforts [22].

Taken together, these studies show that doctors, playing the part of leaders of inter-professional change initiatives, already play an important leadership role. Front-line doctors who are more inclusive of other professional groups and able to work effectively across occupational boundaries can play an important role in improving the functioning and performance of the health care system.

WHY ALL DOCTORS NEED TO BE LEADERS

Healthcare organizations are complex organization where change and service improvement involves coordination across clinical specialties, professional groups, between managers and professionals, and at times across organizational boundaries [5 7-9]. As a result, it is crucial for all members within this network to bring their knowledge and insight to bear in determining how change can best be accomplished. Front-line doctors, in particular, as professionals who can drive or block organizational change, and whose inclusiveness can impact other professionals' engagement, play an important role in shaping whether and how health care systems perform and improve.

This raises a number of questions and challenges for people with formal leadership roles in the health care system, and for doctors throughout the health care system. For people with formal leadership role authority in health care systems, the challenge is to come up with ways to productively engage the leadership capacity of front-line doctors. It involves thinking about how to frame change initiatives in ways that connect with the concerns and goals of front-line doctors—including pragmatic goals (e.g. how a change will improve a doctors' working life) and more abstract goals (e.g. how a change will tangibly connect to the goal of delivering high quality care). For doctors at all levels and in all positions in the health care system, the challenge is to start pro-actively playing leadership roles today. This can involve acting more humbly and inclusively across professional boundaries. It can also involve building coalitions of peers to work towards a productive change in your own organizations.

Both people in formal leadership roles and front-line doctors can and will think of ways of acting that are not outlined here. The important thing is that they recognize the important leadership roles that front-line doctors play today, and that they will continue to play in the future. Energizing and harnessing the leadership potential of all doctors is the only way to achieve a high performing and sustainable health care system.

REFERENCES

1. Bryman A. Leadership in Organizations. In: Clegg SR, Hardy C, Nord WR, eds. Handbook of Organization Studies. Thousand Oaks, CA: Sage, 1996:276–92.
2. Darzi A. A time for revolutions—the role of clinicians in health care reform. New England Journal of Medicine 2009;**361**(6):e8
3. Goodall AH. Physician-leaders and hospital performance: is there an association? Social science & medicine 2011;**73**(4):535-39
4. Currie G, Lockett A. Distributing leadership in health and social care: concertive, conjoint or collective? International Journal of Management Reviews 2011;**13**(3):286-300

5. Ferlie E, Fitzgerald L, Wood M, Hawkins C. The nonspread of innovations: The mediating role of professionals. Academy of Management Journal 2005;**48**(1):117-34
6. Uhl-Bien M. Relational leadership theory: Exploring the social processes of leadership and organizing. The leadership quarterly 2006;**17**(6):654-76
7. Denis J-L, Lamothe L, Langley A. The Dynamics of Collective Leadership and Strategic Change in Pluralistic Organizations. Academy of Management Journal 2001;**44**(4):809-37
8. Fitzgerald L, Ferlie E, McGivern G, Buchanan D. Distributed leadership patterns and service improvement: Evidence and argument from English healthcare. The Leadership Quarterly 2013;**24**(1):227-39
9. Ferlie EB, Shortell SM. Improving the quality of health care in the United Kingdom and the United States: A framework for change. Milbank Quarterly 2001;**79**(2):281
10. McDermott AM, Fitzgerald L, Buchanan DA. Beyond acceptance and resistance: entrepreneurial change agency responses in policy implementation. British Journal of Management 2013;**24**(S1)
11. Edmonstone J. Clinical leadership: the elephant in the room. The International journal of health planning and management 2009;**24**(4):290-305
12. NHS England. Five year forward view, 2014.
13. Finn R, Currie G, Martin G. Team work in context: institutional mediation in the public-service professional bureaucracy. Organization Studies 2010;**31**(8):1069-97
14. Chreim S, Williams BB, Hinings CB. Interlevel influences on the reconstruction of professional role identity. Academy of Management Journal 2007;**50**(6):1515-39
15. Lomas J, Enkin M, Anderson GM, Hannah WJ, Vayda E, Singer J. Opinion leaders vs audit and feedback to implement practice guidelines: Delivery after previous cesarean section. The Journal of the American Medical Association 1991;**265**(17):2202-07
16. Chaillet N, Dubé E, Dugas M, et al. Evidence-Based Strategies for Implementing Guidelines in Obstetrics: A Systematic Review. Obstetrics & Gynecology 2006;**108**(5):1234-45
17. Flodgren G, Parmelli E, Doumit G, et al. Local opinion leaders: effects on professional practice and health care outcomes. The Cochrane Library 2011
18. Kellogg KC. Making the cut: Using status-based countertactics to block social movement implementation and microinstitutional change in surgery. Organization Science 2012;**23**(6):1546-70
19. Kellogg KC, Breen E, Ferzoco SJ, Zinner MJ, Ashley SW. Resistance to change in surgical residency: an ethnographic study of work hours reform. Journal of the American College of Surgeons 2006;**202**(4):630-36
20. Nigam A, Huising R, Golden B. Explaining the Selection of Routines for Change during Organizational Search. Administrative Science Quarterly 2016;**61**(4):551-83
21. Nigam A, Huising R, Golden BR. Improving hospital efficiency a process model of organizational change commitments. Medical Care Research and Review 2014;**71**(1):21-42
22. Buchanan DA, Addicott R, Fitzgerald L, Ferlie E, Baeza JI. Nobody in charge: Distributed change agency in healthcare. Human Relations 2007;**60**(7):1065-90
23. Kellogg KC. Operating room: Relational spaces and microinstitutional change in surgery. American Journal of Sociology 2009;**115**(3):657-711
24. Currie G, Finn R, Martin G. Role transition and the interaction of relational and social identity: new nursing roles in the English NHS. Organization Studies 2010;**31**(7):941-61

25. Wiedner R, Barrett M, Oborn E. The Emergence of Change in Unexpected Places: Resourcing across organizational practices in strategic change. Academy of Management Journal 2016
26. Edmondson AC. Speaking Up in the Operating Room: How Team Leaders Promote Learning in Interdisciplinary Action Teams. Journal of Management Studies 2003;**40**(6):1419-52
27. Nembhard IM, Edmondson AC. Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. Journal of Organizational Behavior 2006;**27**(7):941-66
28. Edmondson AC, Bohmer RM, Pisano GP. Disrupted routines: Team learning and new technology implementation in hospitals. Administrative Science Quarterly 2001;**46**(4):685-716
29. Nembhard IM, Alexander JA, Hoff T, Ramanujam R. Why does the quality of health care continue to lag? Insights from management research. Academy of Management Perspectives 2009;**23**(1):24-42
30. Lichtenstein R, Alexander JA, McCarthy JF, Wells R. Status Differences in Cross-Functional Teams: Effects on Individual Member Participation, Job Satisfaction, and Intent to Quit. Journal of Health and Social Behavior 2004;**45**(3):322-35
31. Edmondson A. Psychological safety and learning behavior in work teams. Administrative Science Quarterly 1999;**44**(2):350-83
32. Huq J-L, Reay T, Chreim S. Protecting the Paradox of Interprofessional Collaboration. Organization Studies 2017;**38**(3-4):513-38