QUALITY IMPROVEMENT

How organisations contribute to improving the quality of healthcare

OPEN ACCESS

Naomi Fulop and Angus Ramsay argue that we should focus more on how organisations and organisational leaders can contribute to improving the quality of healthcare

Naomi J Fulop professor of healthcare organisation and management, Angus I G Ramsay NIHR knowledge mobilisation research fellow

UCL Department of Applied Health Research, London, UK; Correspondence to: N J Fulop n.fulop@ucl.ac.uk

Key messages

The contribution of healthcare organisations to improving quality is not fully understood or considered sufficiently
Organisations can facilitate improvement by developing and implementing an organisation-wide strategy for improving quality
Organisational leaders need to support system-wide staff engagement in improvement activity and, where necessary, challenge professional interests and resistance
Leaders need to be outward facing, to learn from others, and to manage external influences. Strong clinical representation and challenge from independent voices are key components of effective leadership for improving quality
Regulators can facilitate healthcare organisations’ contribution by minimising regulatory overload and contradictory demands

Improving the quality of healthcare is complex.12 Frontline staff are often seen as the key to improving quality—for instance, by identifying where it can be improved and developing creative solutions.14 However, research and reviews of major healthcare scandals acknowledge the contributions of other stakeholders in improving quality, including regulators, policy makers, service users, and organisations providing healthcare.56 Policies on the role of organisations in improving quality have tended to focus on how they might be better structured or regulated. However, greater consideration is required of how organisations and their leaders can contribute to improving quality: organisations vary in both how they act to support improvement7 and the degree to which they provide high quality healthcare.9

Some earlier studies suggest that high performing organisations share several features reflecting organisational commitment to improving quality. These include creating a supportive culture, building an appropriate infrastructure, and embedding systems for education and training.1011 Subsequent reviews of quality inspections12 and reviews of evidence on factors influencing quality improvement,9 and board contributions13 indicate that organisational leadership is crucial in delivering high quality care.

We discuss how organisational processes such as development of a strategy and use of data can be used to drive improvement, the characteristics of organisations that are good at improvement, and what to consider when thinking about how organisations can help improve quality of healthcare and patient outcomes.

We present evidence on the role of organisations in improvement drawn from acute hospital settings in the UK and other countries. Although contexts may vary—for example, in whether health policy is made at regional or national level, or in the form and function of healthcare organisations—the lessons have potential relevance to all settings.

Placing healthcare organisations in their context

Health systems operate at three inter-related levels: macro, meso, and micro (box 1). Research suggests that an organisation—through its leadership and processes—can bridge these levels to influence the quality of care delivered at the front line.1416

Box 1. Levels of health systems

Macro

National health system policies

Regional health system policies

Meso

Regional health system organisations

Local health system organisations

Micro

Clinical teams and individual healthcare professionals

Service users and carers

No commercial reuse: See rights and reprints http://www.bmj.com/permissions
Subscribe: http://www.bmj.com/subscribe
Published: 02 May 2019. Downloaded from http://www.bmj.com/ on 15 May 2019 by guest. Protected by copyright.
A key macro influence on organisations performing their role in improving quality is the way the healthcare system is governed and regulated. Regulation provides accountability to the wider system and therefore has a potentially strong influence on how healthcare organisations approach improvement. For example, multiple regulators in healthcare systems, as is the case in England, can lead to “regulatory overload,” making it hard for organisations to focus on quality improvement rather than quality assurance because of the need to respond to different (and potentially conflicting) regulatory approaches, priorities, incentives, and sanctions.7,19,20

**How can organisations contribute to improving quality?**

Organisations can use various levers and processes to translate external inputs (such as policy and regulatory incentives) and internal inputs (such as local assurance systems providing data on performance and capacity) to support quality improvement.7,16,21 Organisations can facilitate improvement by developing and implementing an organisation-wide quality improvement strategy7,22,23 that includes the following actions:

- Using appropriate data to measure and monitor performance20,22
- Linking incentives (both carrot and stick) with performance on quality18,22
- Recruiting, developing, maintaining, and supporting a quality proficient workforce21
- Ensuring sufficient technical resources and building a culture that supports improvement.8,16

Many of the key organisational activities important to improving quality, such as setting strategy and agreeing performance measures, are defined at organisational level by the board.13 Bottom-up, clinician-led improvement is often seen as the answer to the quality challenge, and it is an important part of successful quality improvement.7,24 However, relying solely on frontline staff to lead improvement is risky because professional self-interest can shape or limit the focus of improvement activity.22,25,26 Furthermore, lack of system-wide or organisation-wide agreement on objectives might result in variations at system level, reflecting localised priorities rather than what is likely to provide the best care for patients. As well as empowering staff and supporting system-wide staff engagement in activity around improving quality, organisational leaders must challenge localised professional interests, tribalism, and resistance to change.18,22

The reorganisation of acute stroke services in the UK (fig 1) shows how leadership can play a pivotal role in managing professional and organisational resistance to changes that aim to improve quality of care. Importantly in this case, leaders cited external organisations’ priorities and public consultation responses when holding the line against local resistance to change.25

The culture of organisations is commonly considered important in improving quality, as discussed elsewhere in this series.20,29,30 Although the relation between culture and quality is complex, organisations can use formal and informal managerial processes to influence culture and thus improve quality of care.30

**What helps organisations contribute to quality?**

As set out in box 1, the relationship between a healthcare organisation and its external environment (especially regulators) is important in that organisation’s contribution to quality.18,23 A qualitative study of hospitals and their external environments in five European countries showed how some were better able to align multiple financial and quality demands.7 Figure 2 shows contrasting organisational responses to external demands and the features of both the external demands and the organisations that contributed to these different responses.

Organisations can also contribute to improving quality through participation in (or leading) major system change, working beyond their own catchment areas across their local system—for example, integrating health and social care services44 or centralising specialist acute services across multiple hospitals in a given area.12,23 Evidence suggests that how such changes are led and implemented influences the impact of the changes, including on patient outcomes (fig 1).

**What do organisations that do well in improving quality look like?**

Research suggests that organisations that deliver high quality care show high commitment to improving quality, reflected for instance in how organisations are led (eg, senior management involvement) and managed (eg, use of data and standards). As an illustration, fig 3 contrasts the approaches taken by US organisations with high patient mortality from acute myocardial infarction with those that have low mortality. Some recent research has developed the concept of maturity in relation to how boards of organisations govern for quality improvement and what organisational processes accomplish and sustain it.18

More mature boards tend to use data to drive improvements in quality rather than merely for external assurance.18,26 and they combine hard quantitative data on performance with soft data on personal experiences to make the case for improvement.22 They also engage with relevant stakeholders (including patients and the public), translate this into strategic priorities,8,18 and have processes for managing and communicating information with stakeholders.8,9,18 They value learning and development7,22,34—for example, drawing on external examples of good practice to achieve initial improvement then focusing on local, creative problem solving for continued improvement.34
Finally, these organisations are outward facing, engaging with and managing their wider environment, including payers and other provider organisations.13 23 34

By contrast, organisations with lower levels of such capabilities (such as lack of coherent mission, high turnover of leadership, and poor external relationships) appear to slow or limit improvement.13 36 38 Some interventions have been identified to help organisations struggling to improve quality.39 Furthermore, research on organisational leadership turnaround provides evidence of organisational leaders harnessing such crises, such as major safety issues or financial difficulties, to drive radical change and improvement.36 38 Key changes to turn round organisations have included refocused accountability systems (eg, making quality a key performance indicator, devolving accountability to clinical teams11 36 38), introducing processes to facilitate improvement (eg, dedicated improvement roles,36 38 increased training opportunities, and sharing timely data on quality and cost with clinical teams11 36 38), supporting culture change (eg, increasing collaboration between clinicians and management11 36 38 with clinicians leading on quality and management supporting them), and learning from the experience of other organisations.11 36 38 However, for such interventions to have a chance of success, organisations need both sufficient space to think and the people to make change happen.31

The composition of senior leadership seems to influence how well organisations deliver on quality. Having clinicians on the board has been associated with better organisational performance,21 36 through enhanced decision making, increased credibility with local clinicians (facilitating frontline uptake of policy), and making organisations more likely to attract talented clinicians.39 Active discussion of strategy is enhanced by independent challenge by non-executives who are well versed in quality issues; this is likely to enhance focus on quality at board level, ensuring it is at the heart of an organisation’s vision and strategy.32 As noted elsewhere, focus is growing on service users guiding improvement.61 However, it has been challenging to involve service users meaningfully at senior leadership level.12

What can we conclude?

Although organisations are central to improving quality, there is much variation in how they contribute, both locally and at system level. We have described ways in which organisations can contribute to improvement in terms of their processes (such as how they develop strategy and use data to drive improvements in quality), their leadership (such as how leaders engage with and manage both their external context and local professional interests), and underlying features (including coherence of external demands and leadership stability). Box 2 summarises these themes. However, the balance of priorities among these is unclear: organisations will want to analyse how they can maximise their contribution to improving quality taking account of their particular context.

Regulators and policy makers also need to consider how they can better facilitate healthcare organisations’ role in improving quality. Organisations are more likely to deliver quality improvement effectively if externally set objectives are clear and manageable, and there is time and resources with which to meet these. Regulators should seek to avoid generating regulatory overload and contradictory demands; and they should strengthen organisational leadership’s hand by giving them headspace to look beyond compliance and prioritise improving quality.

Competing interests: We have read and understood BMJ policy on declaration of interests and declare that NJF is an NIHR senior investigator and was in part supported by the NIHR Collaboration for Leadership in Applied Health Research and Care (CLAHRC) North Thames at Barts Health NHS Trust. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR, or the Department of Health and Social Care.

Contributors and sources: Both authors made substantial contributions to the conception and design of the work; to the acquisition, analysis, and interpretation of data; and to drafting the work and revising it critically for important intellectual content. NJF is the guarantor.

This article is part of a series commissioned by The BMJ based on ideas generated by a joint editorial group with members from the Health Foundation and The BMJ, including a patient/carer. The BMJ retained full editorial control over external peer review, editing, and publication. Open access fees and The BMJ’s quality improvement editor post are funded by the Health Foundation

Box 2: What helps organisations contribute to quality?

Organisational process

- An organisation-wide quality strategy to shift from external assurance to prioritising improvement
- Combine hard and soft data to drive quality
- Engage and communicate with stakeholders, including patients and carers, staff, and external partners
- Build culture of trust, supporting innovation and problem solving

Organisational leadership

- Support system-wide staff engagement in improving quality
- Be outward facing, to learn from and manage external context
- Challenge local professional interests where necessary
- Feature a strong clinical voice and independent challenge, especially on the board

Underlying features

- Space to think about improving quality
- Resources to implement improvements
- Coherent external requirements: avoid regulatory overload and contradictory demands
- Stability of leadership

3 Atwood D, Fisher R, Warburton W, Dixon J. Creating space for quality improvement. BMJ 2018;361:k1924. 10.1136/bmj.k1924 29775987
4 Braithwaite J. Changing how we think about healthcare improvement. BMJ 2016;352:i3014. 10.1136/bmj.i3014 37779537


19 Walsh K. The rise of regulation in the NHS. BMJ, 2002;324:967-70. 10.1136/bmj.324.7343.967 11964345


Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to http://group.bmj.com/group/rights-licensing/permissions. This is an Open Access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.
## Figures

### Table 1

<table>
<thead>
<tr>
<th>Response to external demands</th>
<th>Characteristics</th>
<th>Underlying features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate cost saving measures</td>
<td>Management prioritises financial targets over quality (unless quality targets were linked to financial incentives) Lower investment in quality - training cuts, cancelling study leave, and vacancies frozen, resulting in no time for staff to focus on improvement</td>
<td>Less likely</td>
</tr>
<tr>
<td>Medium term strategies where quality and reducing costs not aligned</td>
<td>Organisations struggled to prioritise between multiple quality demands Staff became overloaded in trying to meet these demands Proposed for redesign were met with resistance (perceived as cost cutting)</td>
<td>Coherence of external demands Management capability to align demands Leadership stability</td>
</tr>
<tr>
<td>Medium term strategies where quality and financial goals aligned</td>
<td>Staff associated service redesign with increases in quality, organisations worked with external bodies to negotiate meaningful objectives balancing finance and improving quality</td>
<td>More likely</td>
</tr>
<tr>
<td>Longer term (at least three years) strategy</td>
<td>Focus on embedding quality and financial objectives in day to day activity Organisations invested in developing a capable quality workforce Ongoing dialogue with external bodies to ensure quality and finance objectives aligned</td>
<td></td>
</tr>
</tbody>
</table>

**Fig 1** Leading and implementing system-wide change across organisations: centralising acute stroke services in London and Greater Manchester.\(^{25,27,28}\)
**Fig 2** How hospitals respond to external finance and quality demands

<table>
<thead>
<tr>
<th>TOP 5% HOSPITALS</th>
<th>FEATURE</th>
<th>BOTTOM 5% HOSPITALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>risk standardised</td>
<td>mortality rate: 11.4 to 14.0</td>
<td>Organisational values and goals</td>
</tr>
<tr>
<td>Common vision: improving quality “the glue” - focus on aligning quality and financial objectives</td>
<td>Senior management involvement</td>
<td>High senior turnover; insufficient resources; intermittent use of data; feedback not reliably used to plan improving quality</td>
</tr>
<tr>
<td>High commitment; use of quality data to guide strategy and accountability; suitable financial and other resources for quality</td>
<td>Staff presence/ expertise</td>
<td>Weak physician presence in quality; nurses not valued reliably; pharmacists had limited involvement in decision making</td>
</tr>
<tr>
<td>High qualification standards; physician champions; empowered nursing staff; pharmacists integrated into care process</td>
<td>Communication and coordination between groups</td>
<td>Constrained information flow (irregular meetings, inefficient IT); inadequate transparency; staff felt isolated</td>
</tr>
<tr>
<td>Staff with shared commitment to communication and seamless transitions in care; recognised interdependencies</td>
<td>Problem solving and learning</td>
<td>Innovation not encouraged; challenging to get buy-in; inadequate focus on learning from elsewhere</td>
</tr>
<tr>
<td>Adverse events used to learn and improve; data incorporated into organisation; non-punitive culture; outward focused</td>
<td>Protocols and processes for acute myocardial infarction care</td>
<td>No association with high or low performance</td>
</tr>
</tbody>
</table>

**Fig 3** Contrasting organisational approaches in US healthcare organisations with the top and bottom 5% risk standardised mortality for acute myocardial infarction in 2017