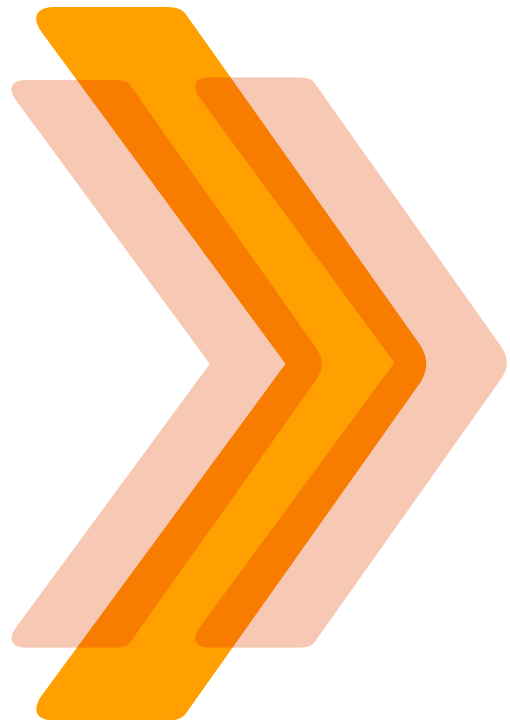


Embedding a culture of quality improvement

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Introduction

About this report

Quality improvement refers to the use of systematic tools and methods to continuously improve the quality of care and outcomes for patients. A growing number of health care providers in England and abroad have begun efforts to embed quality improvement methodologies in their work. This report explores the factors that have helped organisations to launch a quality improvement strategy, and the key enablers for sustaining a focus on continuous quality improvement.

The report draws on a roundtable event, semi-structured interviews with senior NHS leaders and stakeholders involved in quality improvement initiatives, and a literature review. It identifies relevant learning from organisations that have already adopted quality improvement approaches, and focuses on how senior leaders can create the right conditions for quality improvement to emerge and flourish.

The impact of quality improvement work is often greatest when it forms part of a coherent, organisation-wide approach, as opposed to discrete, time-limited projects (Dixon-Woods and Martin 2016). We therefore focus on examples where there have been sustained attempts to embed a culture of quality improvement across a whole NHS provider organisation.

This report is part of a broader King's Fund programme of work on systematic approaches to improve the safety, experience and effectiveness of care. Many of the findings in this report are supported in our earlier reports on quality improvement, including our report on quality improvement in mental health ([Ross and Naylor 2017](#)) and on the need for a coherent approach to quality improvement at a national level ([Ham et al 2016](#)). The case for quality improvement is also made in our report with The Health Foundation on lessons for NHS boards and leaders ([Alderwick et al 2017](#)).

The next section of this report looks briefly at the rationale for embracing quality improvement approaches in health care. The third and fourth sections explore the evidence from participants in our roundtable and interviews and from our literature review about how health services can initiate and sustain a culture of continuous improvement. The fifth section considers the wider challenges for developing such a culture in the NHS. The final section summarises the key lessons from this research.

Methodology

The overarching purpose of the study was to capture the narratives and practical lessons from leaders of organisations that are already engaged with quality improvement as a routine way of working. Therefore, we interviewed five chief executives from NHS health, mental health and integrated acute and community trusts. These were primarily those engaged with the NHS Improvement and Virginia Mason Institute partnership (see the next section), but also included one chief executive of a trust that was not part of the programme. In addition, we interviewed two experts in the field of health care quality improvement (from national NHS bodies).

To capture wider views from within the health system, we also convened a half-day roundtable at The King's Fund in July 2017, which was attended by 13 senior local and national NHS leaders, to understand their roles in driving quality improvement. Through the interviews and the roundtable, we heard the views of the chief executives of all five trusts involved in the Virginia Mason Institute Partnership programme. Finally, we undertook a rapid review of academic and 'grey' literature relating to quality improvement, with a particular focus on Lean approaches to quality improvement (see the next section).

What is quality improvement and why is it important?

Quality improvement in health care is based on the principle of health care organisations and staff continuously trying to improve how they work and the quality of care and outcomes for patients. This requires a systematic approach based on iterative change, continuous testing and measurement, and the empowerment of frontline teams (Ross and Naylor 2017). Fundamental to the principle of quality improvement is an understanding that those closest to complex quality problems (frontline teams, patients and carers) are often best placed to find the solutions to them.

Quality improvement methods have their roots in industries such as car manufacturing (The Health Foundation 2013; Young *et al* 2004). Methods such as Lean, which focuses on ensuring that products flow through a delivery system with minimal mistakes and waste, have become increasingly influential in health care too. Studies have shown that quality improvement methods can play a key role in improving health care (Alderwick *et al* 2017), and a review of studies where Lean thinking had been applied in health care settings found positive results for patients, staff and the organisation. The most common improvements included:

- time-savings
- an improvement in the timeliness of service provision
- cost reductions
- productivity enhancements
- a decrease in the number of errors or mistakes, improved staff and patient satisfaction, and reduced mortality (Mazzocato *et al* 2010).

Other reviews of quality improvement have noted that more robust analysis is needed of the impact of quality improvement approaches on patient and staff experience, and how time and resources saved through quality improvement have been redeployed (Mazzocato *et al* 2010). However, one consistent lesson from the published literature on quality improvement is that the delivery of more efficient and higher-quality patient-centred care requires a significant long-term commitment and cultural change based on quality improvement principles; quality

improvement approaches involve far more than the introduction of a new set of management tools or training events.

Many NHS organisations have started to explore quality improvement through discrete projects focused on specific clinical services. A smaller but growing number have developed more systematic, organisation-wide programmes to ensure that continuous improvement happens at scale and as part of their standard way of working.

Quality improvement approaches in the NHS have been supported in the past by both national and regional bodies, and by local initiatives led by individual organisations. For example, the North East Transformation System was established in 2006 to bring together health care organisations in the north east of England to develop a collaborative quality improvement programme based on Lean principles.

More recently, NHS Improvement has partnered with the Virginia Mason Institute and five NHS trusts to support them to develop a Lean culture of continuous improvement. This five-year programme of support is intended to give leaders and clinicians from across the five trusts a wide range of quality improvement tools and hands-on support in Lean techniques. At the core of the partnership is a commitment for the trusts to share learning and experience with each other as well as the wider NHS, to help drive improvements further and faster ([NHS Improvement 2016](#)). This report contributes to that commitment.

The Virginia Mason Institute

In 2002, at the start of a journey to provide the perfect patient experience, Virginia Mason created the Virginia Mason Production System® (VMPS), a Lean management methodology based on the principles of the Toyota Production System. In 2008, Virginia Mason founded the Virginia Mason Institute to help health care organisations around the world to create and sustain a Lean culture of continuous improvement.

([Virginia Mason Institute 2017](#))

The NHS is currently facing the challenge of delivering high-quality care at a time of severe financial restraint, rising demand for services and significant workforce pressures. The King's Fund has argued that the solutions to this challenge will not come solely from large-scale reforms or from the 'top-down' imposition of

targets, or even from external forces such as inspection and regulation (Ham 2014). It will come from the type of improvement and 'reform from within' that is based on commitment rather than compliance, and supported by investment in staff to enable them to achieve continuous quality improvement in the long as well as the short term (Ham 2014).

Although quality improvement approaches are not a panacea for the challenges facing the health and care system, by adopting these approaches the NHS can find ways of improving the quality of care and increasing productivity. This report identifies relevant learning from NHS provider chief executives who have already engaged in quality improvement, and focuses on how to create the right conditions for quality improvement to emerge and flourish.

Issues to consider before starting quality improvement

In the previous section, we noted that adopting a quality improvement approach involves significant and sustained cultural change within organisations. Given the investment in time and resources this requires, we asked participants in our study why they had pursued a quality improvement approach, and what considerations other organisations should bear in mind before embarking on a quality improvement journey. Their responses can be categorised into three themes.

Have a very clear rationale for why a quality improvement approach should be pursued

The participants and literature agree on the importance of NHS organisations having a very clear rationale for why they should commit to the development of a culture of continuous quality improvement.

All of the senior leaders participating in the study could identify a specific moment when they decided to embark on a quality improvement journey and knew that it was the right thing to do. For some organisations, there had been a serious patient safety incident, which created a realisation that fundamental change was needed in how services were delivered:

A serious incident made the leadership of the organisation reflect on how we were functioning. It was a wake-up call because even though we were trying really, really hard, the board was not really in touch with what was going on in the organisation, so something quite serious like that could happen and we were caught unawares.

(NHS provider chief executive)

In other organisations, a quality improvement approach was pursued in response to more general performance pressures, and a growing recognition that existing attempts to improve quality needed greater co-ordination, greater scale, and an underpinning structure or methodology:

We had hit a bit of a plateau on the progress we were making. Lots of good stuff had happened, we had done the basics of looking at staff core training packages etcetera, but we needed to explore other ways of really pushing ourselves to the next level.

(NHS provider chief executive)

A failure to embed a systematic and cohesive improvement strategy can lead to a fragmented approach, which is likely to be unsustainable without an underpinning quality improvement methodology. As one roundtable participant noted:

About two to three years ago we did have 'service improvement' work at our trust, but it was all rather ad hoc and fragmented across the trust. There were targeted bits of work in parts of the service. It was not systematic. Innovations did work, but were not sustained.

(NHS provider chief executive)

These reasons offered by participants in the study are consistent with the literature, which points to health care systems under immense pressure, and the potential for quality improvement strategies to unlock productivity gains as well as safer, better, higher-quality care. But whether the impetus for change came from a single serious incident, or more general operational pressures, all of the participants were clear that quality improvement approaches should not be pursued as a 'quick fix' or 'turnaround' strategy for the strategic issues facing an organisation.

Assess and ensure that staff are ready for fundamental change

Quality improvement methods require a fundamental change to how organisations approach their work. For this reason, senior leaders should honestly assess whether there is a shared vision that delivering better care for patients and service users is the organising principle of their work, and assess and ensure that there is sufficient staff engagement and enthusiasm for adopting a new way of working.

The importance of staff engagement in quality improvement activities to make systems safer and more efficient is well documented ([Alderwick et al 2017](#); [Taitz et al 2011](#)). It is also important to have a clear, unifying vision for improving quality at multiple levels within an organisation to ensure co-ordination and alignment between teams and individuals ([Alderwick et al 2017](#)). Staff need to be engaged and participate in developing this vision so that it becomes part of an organisation-wide strategy that will stand the test of time. As one provider chief executive noted:

I've been trying to make this point and I've been constantly saying, 'This isn't a fixed point; this is something we'll be doing forever'. And I think probably one of the material things that has made a difference is that we connected our values with this work very clearly from the early days.

(NHS provider chief executive)

This engagement and participation is essential to staff 'buy-in' to the principles of improvement as the underlying 'way of doing things'. One participant noted:

I've always had a firm conviction and belief that deep employee engagement is the route to better performance, better-quality care for patients and financial sustainability. So, the first part of what we did to create the right culture was to work on engagement and to go through the process of being upfront about the challenges and the problems, and allowing frontline teams to speak openly about those, and feeding them back to them. And then really to move into, so what do we do about it and what's our response?

(NHS provider chief executive)

In this participant's organisation, considerable investment was put into engagement and listening events to obtain the candid views of staff prior to pursuing quality improvement methods. This engagement with staff was used for honest discussions to clarify the purpose of the quality improvement methodology. Several chief executives in the study noted that the data-reporting rigour of quality improvement approaches could lead to a perception among some staff members that this was a method for 'checking up on individuals' or addressing individual poor performance. These initial staff engagement sessions helped senior leaders to understand and address some of these perceptions.

Fully understand the implications a quality improvement approach has for the organisation's leadership

As we note in the next section, pursuing a quality improvement approach can often require that the senior leadership team in an organisation adopt a very different leadership style and conception of their role. Quality improvement also reframes the relationships between senior leaders and staff.

The participants in this study noted the transition to a new leadership approach could be an 'uncomfortable' experience that should not be underestimated. As one chief executive said: 'We went through a really, really tough process with the board. On both the executive and non-executive side, there were concerns that adopting a trust-wide improvement methodology would turn us from being person-centred into a factory.' However challenging, participants spoke of the importance of board-level engagement in and commitment to quality improvement: 'We decided that it had to come from the board and it had to start with the board... I think that it's really important that your chair supports you 100 per cent on this' (NHS provider chief executive). Studies have shown that board commitment to quality improvement is linked to higher-quality care, underlining the leadership role of boards in this area (Alderwick et al 2017).

One chief executive recollected how a lack of consistency in leadership and a lack of an overarching strategy meant their organisation felt like it had no sense of purpose, which was a barrier to sustaining quality improvements:

I came into an organisation that had seen just under 10 chief execs in 15 years and had been trying to deliver a strategic business case to reconfigure hospital services for nearly a decade. So the organisation was feeling lost I think really. It was rudderless with lots of well-meaning people working very hard, but no sense of purpose.

(NHS provider chief executive)

Participants agreed that constancy of leadership was particularly important at the outset of the quality improvement journey. Furthermore, they felt that, once a 'critical mass' of staff became engaged with and involved in quality improvement activities, then changes in leadership did not necessarily disrupt the culture of continuous quality improvement that had been established in the organisation. They also suggested that future leaders would be recruited based – in part – on their ability to integrate with the culture.

Quality improvement approaches can help organisations to focus on unlocking productivity gains and delivering safer and higher-quality care. They can also add cohesiveness, scale and rigour to smaller-scale, time-limited improvement projects. However, participants in the study often emphasised that quality improvement is different from generic change management – as one chief executive noted: 'It just requires so much more of your personal energy.'

In the next section, we examine the key enablers that help senior leaders to sustain a quality improvement approach. Many of these enablers echo and build on the themes we set out above on the importance of adopting a new approach to leadership, and a new way of working with staff and patients.

Key enablers for sustaining a quality improvement approach

Leadership, management and organisational culture are critical to productivity and continuous improvement. Indicators of hospital performance, such as mortality rates, waiting times, financial performance, staff satisfaction and the overall rating from the regulators have been found to be favourably correlated with the quality of management practices ([Bloom et al 2010](#)).

The experience of high-performing health care organisations shows the value of leadership continuity, organisational stability, a clear vision and goals for improvement, and the use of an explicit improvement methodology ([Ham 2014](#)). Furthermore, staff at top-performing hospitals often report having an organisational culture that supports the co-ordination of care, shows a willingness to try new projects and has a focus on identifying system errors rather than blaming individuals ([Rumbold et al 2015](#)).

However, quality improvement is not a simple fix, nor just something to add on to existing management practices. Fundamentally, it involves a cultural shift in which senior leaders model the values of quality improvement, demonstrate a constancy of purpose and commitment to quality improvement, as well as influence its spread across the organisation. It also involves empowering staff to understand quality problems, develop effective solutions and put them into practice. Drawing on the research literature ([Ross and Naylor 2017](#); [Dixon-Woods et al 2013](#)) and what we heard from the participants, in this section we set out five key enablers for organisational change, as follows:

- developing and maintaining a new approach to leadership that moves away from the imposition of solutions from the top down, to recognition that frontline teams, service users and their carers are often better placed to develop solutions through a process of discovery
- allocating adequate financial and human resources and time for quality improvement, thereby re-affirming leadership and organisational commitment to quality improvement activities
- ensuring that patients, service users and their carers are central to the quality improvement strategy

- engaging staff in a continued commitment to quality improvement by celebrating successes and ensuring that staff are able to take ownership and feel proud of their achievements
- committing to continuous improvement and fidelity to the method.

Developing and maintaining a new approach to leadership

Fundamental to continuous improvement is the empowerment of and respect for the staff of the organisation, who are uniquely positioned to identify areas for improvement and contribute ideas. Teams learn to identify and solve problems on their own, and leaders therefore become managers of the system rather than problem-solvers (Kaplan *et al* 2014). This change in leadership style was something all the participants had to contend with:

We have to resist the temptation to offer solutions, but rather we frame the questions to expose the risks and issues in the organisation, and then work through a more coaching and facilitative style with those teams around what might they see as being the solutions.

(NHS provider chief executive)

One NHS provider chief executive noted just how difficult – and important – it is to avoid reverting to previous leadership approaches:

Look, it can be really hard to resist saying to staff ‘just do it this way’, because you’re an experienced leader and you can see a solution is right. And sometimes, [if] you wait, frontline teams come up with the same solution. But the difference is now they own it. If you want people to really change their behaviour, you have to let them come up with the solutions. It takes some humility.

(NHS provider chief executive)

This chief executive touched on a crucial point: that empowering staff to innovate and develop alternative solutions to the problems they know exist enhances their sense of ownership of the delivery of quality improvement activities. We heard from one participant how, even in the face of severe day-to-day operational pressures, staff were still ‘doing the improvement work’:

[What we’re] seeing is a much greater level of ownership for those solutions because they’re being created by the very people that are at the front line delivering the care... And the reason it’s sticking [is] it’s not only because it’s

obviously the right thing to do... It's the fact that the staff themselves have designed the delivery model. So it's there, so it's become their baby. So even when we're busy they're still sticking to it.

(NHS provider chief executive)

The participants in the study reflected that adopting a quality improvement approach did not simply give them (or their organisation) a new set of skills or capabilities; it fundamentally changed how they approached their role as leaders. As one chief executive noted:

I don't think you can underestimate how much personal effort you have to put into it. I don't think you can delegate this or think 'I'll get a director for quality improvement' and that's it. In my reading of where these approaches have really taken off, it's been where the chief executive has it in their portfolio.

(NHS provider chief executive)

Leading for quality improvement also requires a shift in the relationship between the leadership team and staff. Often this was described as 'closing the gap' between them, and for leaders to be more visible and 'closer' to frontline teams. The visibility of the leadership team and of their commitment had in some cases enabled a closer working relationship between the two groups – whereby staff felt more confident to raise ideas and discuss problems with the leadership team. Visibility of purpose and commitment from the leadership team was felt to translate into a more engaged workforce: 'I show it's important by doing it myself, by doing Lean for Leaders, by going to training sessions. So, the visibility of my commitment, making sure that I translated the importance of this into language and actions that staff would relate to' (NHS provider chief executive).

Several participants noted a real change in the way they work and how they spend their time. Most notably, chief executives told us how they now spend far more time out in the organisation: 'I know my role has changed quite a bit from that that it was two years ago through this journey. So I find myself spending far more time out in the organisation with the teams.'

By spending more time with frontline teams, senior leaders gain a greater understanding of the complex operational challenges staff face daily. However, the leaders in the study said they also had to change their approach to dealing with these challenges, and move from the 'hero mentality' of problem-solvers to being coaches who build learning teams for long-term improvement (Kaplan et al 2014). The model of 'heroic' leadership by individuals needs to adapt to become one

that uses other models, such as shared leadership both within organisations and across the many organisations, to deliver its goals (**The King's Fund 2011**). One participant noted:

As a chief executive I think my job is to frame the problem. The other part of it is to get the very best out of my staff so that they can help give me the solutions, and it's a slightly different way of looking at it. It's pretty obvious really when you say it like that but I think it's a slightly different way of doing it.

(NHS provider chief executive)

Allocating adequate resources and time

Staff engaged in quality improvement need to gain the skills required to identify quality problems, to test ideas for change, measure their impact and act on the results. So NHS leaders need to invest time and resources in building the capacity and capability required for quality improvement within their organisation (**Alderwick et al 2017**), something that all of the participants in the study talked about.

Ensuring that staff have adequate time to dedicate to quality and safety activities is important for the sustainability of any improvement strategy. Several participants in the study felt it was imperative that resources be found to ensure that staff had time away from their usual 'day jobs' to undertake training and/or participate in quality improvement activities. When asked what their top enablers to developing and maintaining an organisation-wide commitment to quality improvement were, one interviewee felt that the most important enabler is 'time, setting aside dedicated time for people to participate in the improvement work, particularly Rapid Process Improvement Weeks', and that this was a key enabler to the success of their organisation's improvement work. They went on:

It is a challenge but you've got to find a way of backfilling the time that those staff spend [in training]. Because we've had consultants, junior doctors, nurses, porters, cleaners, all involved together in the Rapid Process Improvement Weeks, and it's only by bringing that multidisciplinary group of staff together, you can genuinely crack the problems and the challenges of the patient pathway that touches them all. And you've just got to take it seriously and treat it as a high priority, and find a way of backfilling that and communicating that message to their colleagues on the home team, as they call it, who are there doing the work in their absence.

(NHS provider chief executive)

All participants in our study talked about the importance of allocating adequate resources and time for quality improvement. Before they committed to a quality improvement approach, one organisation developed a programme to identify opportunities for freeing up staff time for quality improvement training. The organisation developed a 'Stop Doing' list with its staff to identify activities of low value. Parts of the clinical audit programme that were agreed to be ineffective were stopped. The trust also decided to provide action points from meetings rather than full minutes. This work became an annual campaign to reduce wasted staff time, and helped to demonstrate the commitment of the trust to freeing up staff time for training in quality improvement methodologies.

Ultimately, however, most senior leaders mentioned a moment when they fully realised the resource requirements of adopting a quality improvement approach, and had to 'hold their nerve'. One chief executive said:

When we started doing improvement workshops, the first time it happened one of my directors said the improvement programme starts on Monday and will take 16 people out of their job for a week. It dawned on me then and I sat in my office thinking, how are we going to cope, without replacing them? And of course, now you just do it. And it just happens automatically, we don't replace anybody and we'll often be running a rapid improvement workshop followed by a Lean for Leaders programme where we've got 40 people on it.

(Roundtable participant)

In addition to building the capacity for quality improvement, provider leaders significantly invested in building their organisation's capability in quality improvement. Studies have highlighted the critical role of educational infrastructure to train staff at all levels in improvement methodologies. These should be complemented by a quality improvement division of specialists with deep expertise and who undertake full-time work focusing on improvement (Kaplan et al 2014). All of the organisations involved in our study have embedded an educational infrastructure to train staff in the tools and techniques of quality improvement methodologies.

Examples of embedded educational infrastructure for quality improvement in practice

Provider organisation A

As part of the trust's improvement method we have several different but complementary training and education interventions. These start from the quarter of an hour at induction that all new starters get, right through to the Lean for Leaders programme, which is a programme for leaders in the organisation – general managers, consultants, clinical directors, heads of nursing, matrons, business managers, estates professionals – who are learning the tools and techniques in-depth of Lean, and are then able to deploy those in their own areas. So far, we've got 3,000 members of staff who have been trained in some respect on our improvement method. That's a decent number. And that will further increase as the training rolls out.

Provider organisation B

We have just under 100 leaders across our organisation now trained in Lean for Leaders. I mentioned that we have 2,000 people that have been trained in our methodology and 500 actively using it every day. This is about the delivery of small incremental changes, so those bush-fire philosophies really that start to trip and trigger a change organisationally.

In essence that is our organisational strategy. We very early on determined that we needed to create an institute here that would be a focal point. So we created a [training institute]; there's a physical building on the site dedicated to that. Trained staff are now actively delivering day-to-day change using our methodologies and combining them with human factors training. And we do something called 'values in practice', which is about how to have crucial conversations. And those elements are now starting to materialise in terms of small continuous changes happening now across the organisation.

Embedding quality improvement through training and development ensures that an organisation has the capacity and capabilities to sustain improvement activities in line with its overarching values. As one participant noted:

The training and development programme starts to shift the paradigm of leadership across the organisation in terms of leaders as coaches, as enablers, and supporting improvement work. So, I think that's crucial in keeping things going. Because you can't just do it from the executive team, you've got to kind of build the capability and the confidence throughout the organisation.

(NHS provider chief executive)

Several participants talked about the importance of training and development to build capacity, but also to sustain engagement with, and the success of, improvement programmes. One senior leader told us how, even after two years of setting up the training and development opportunities for staff, sessions/courses were still oversubscribed:

And as I say, the fact that we've trained so many of our staff, we're always oversubscribed on the training and whether it's Lean for Leaders, advanced Lean training, etc, the staff are always asking for more and more sessions. So, I think the approach seems to be working. It hasn't tempered their enthusiasm two years in.

(NHS provider chief executive)

Ensuring that patients, service users and their carers are central to the strategy

Engaging with patients, service users and carers and listening to their views and experiences are fundamental to quality improvement activities. Participants expressed support and enthusiasm for involving them in quality improvement efforts and when planning changes to services, thereby ensuring that change is 'co-produced'.

Patients have a unique role to play in identifying quality problems (such as duplication and waste), coming up with solutions to address them and ensuring that any change genuinely delivers the outcomes that matter to them (Alderwick *et al* 2017).

In a recent study on quality improvement in mental health, Ross and Naylor (2017) found that a strong emphasis on co-production and service user involvement can be harnessed as a powerful asset in quality improvement work. They found that it was one aspect of quality improvement where there is considerable potential for mental health providers to innovate and to share learning with others across the health system.

In this study, several of the participants noted patient involvement as a key enabler to a successful quality improvement strategy. We heard from one provider who had involved patients in quality improvement by training them in the quality improvement methodology utilised by the trust:

Patients are trained, patients [are] involved in all of our projects and I'm just amazed by their commitment... So we trained over 100 patients in the methodology and they drive a lot of the work... We were a bit afraid of exposing ourselves to patients where we weren't doing things very well but they've been remarkably generous and kind to us...

(Roundtable participant)

The chief executives of NHS provider organisations we interviewed all told us about the importance of patient engagement to their improvement strategy and when planning changes to services. One interviewee described the centrality of patient co-production in developing improved services:

Our vision... is to deliver the safest and kindest care in the NHS through co-production with our patients and families. So that... is our organisational strategy... All our value streams have patients within them as a named stakeholder and they're co-produced by them. And the most recent example of that was the new ophthalmology department that we've built, [which] was co-designed with patients and staff working together on the building as well as the pathways and processes for the services that move into that building. So that's been a really lovely journey of change for us.

(NHS provider chief executive)

However, one roundtable participant raised a challenge that more needed to be done with regards to the inclusion of patients in leading quality improvement:

I think there's more we could do in involving patients and leadership for quality improvement. There's a great example of this in a trust I'm involved in, it's called the Promise Project, and it was led by a patient initially who got a psychiatrist onboard. And it's about the reduction of unnecessary physical restraint [in] services. That has been enormously successful within the trust. It isn't easy to evaluate using the existing routine data, and I think that's a challenge. And I want to pose that as a challenge for us to perhaps make more use of patients in leading quality improvement as well as the clinicians.

(Roundtable participant)

Finally, participants noted that a focus on improving patient outcomes and experience was a way to further engage staff in improvement activities:

You have to build that coalition of people who want to make a difference and who want to change and at the centre of it all keep the focus absolutely on patients and never have a conversation that doesn't involve a patient, because if you do you're in the wrong place because that's the only currency, the language, that staff understand.

(NHS provider chief executive)

Maintaining staff engagement

A significant body of literature associates hospital productivity with the degree of co-operation and engagement between managers and staff. In a review of the US literature on collaboration between staff and leadership teams, Burns and Muller (2008) (taken from [Rumbold et al 2015](#)) reported that a key distinguishing feature between high- and low-performing hospitals was ‘the level of both hospital executives’ and physicians’ behavioural skills’. Accordingly, the participants in our study spent a considerable amount of their time fostering staff engagement in quality improvement activities.

Participants and the literature agreed that there are at least six key drivers to engender staff engagement in quality and safety activities. These include:

- an engaged leadership
- staff compacts
- empowering staff to make changes and innovate
- giving staff adequate time and space to participate in improvement activities as well as methodology skills training
- sharing data on progress
- ensuring that the feedback loop is closed (see [Taitz et al 2011](#)).

Some of these have already been examined in the previous sections; others we examine in more detail below.

Engaged leadership

In [Taitz et al's \(2011\)](#) research, an engaged leadership was the most frequently cited key driver of staff engagement. Many of our participants described how the leadership team in their organisation had personally engaged with staff to develop better engagement between the two. One chief executive told us how he had written to 2,000 members of staff in the trust before he had taken up his position. He used this as an opportunity to introduce himself but also to ask staff what their top three concerns about the trust were. The issues raised by staff included ‘issues about culture, leadership, engagement and a desire to get away from a bang-and-blame, top-down money and targets narrative’. He went on:

[I]t was very clear early on... that [the] lack of engagement was manifesting itself in failure of the trust on quality, finance and performance metrics.

(NHS provider chief executive)

Another chief executive explained how his engagement with, and commitment to improving quality and safety were paramount to engaging with staff:

By doing it myself, by saying if this is important that I'm going to do it. So, publishing my diary so that anybody can see, it's on Twitter. Anybody can see what I'm up to every day. So, they could see that I was out on the gemba [the front line, where improvement work is done] and was doing report-outs, stand-ups, huddles, that I was doing Lean for Leaders, that I was going to training sessions in quality improvement.

(NHS provider chief executive)

Staff compacts

The use of a 'staff compact' is another way in which staff engagement with quality and safety issues can be improved. The literature and participants described the staff compact as an 'agreement' about the roles and responsibilities of both the staff and the organisation, outlining mutual expected organisational and staff behaviours (Clark and Nath 2014) – also known as the 'gives' and 'gets'. It has been described as an essential component to bridging the gap between the old concept of autonomous clinicians protected by the organisation, to the new aim of high-quality, safe care focused on teamwork and patient outcomes (Taitz et al 2011).

One chief executive set out how their trust approached compacts and embedded them into their value streams:

At the same time as we were doing this strategic piece, we needed to have a different leadership approach as well. And we started work, this was being done concurrently, on the compacts... So we have a compact with our physicians, which we've just completed. And we also looked at a leadership compact as well to define the gives and the gets in terms of our approach to that. [We have a practice agreement], which aligns itself to our four value streams. And that also forms part of the curriculum for our newly formed leadership academy...

(NHS provider chief executive)

Sharing data on progress and completing the feedback loop

Several participants cited data on clinical performance and patient experience outcomes, and the use of this data, as an important driver of staff engagement. One chief executive remarked that 'putting experience at the centre of everything was the right thing to do', to get at the 'heart of everything they [clinicians] believe in'. Another chief executive spoke about how the quality improvement approach had changed how their organisation thought about performance measurement:

Run charts [charts that demonstrate performance over time and in the context of expected performance levels] just make you so happy. With pass or fail performance targets, they're either green for good or red for bad. And when you see a sea of red your heart sinks. With run charts you are either happy because performance is heading in the right direction, or if the trend is heading a bit off you get curious rather than scared. It encourages you to ask questions in that way because you're looking at trends and trying to understand why they happen.

(NHS provider chief executive)

Several participants in the study also highlighted the importance of being transparent and open about the progress of quality improvement programmes. One chief executive told us that he celebrated success by communicating with his staff through a regular weekly publication that was focused on improvement work. This feedback loop creates a virtuous circle whereby recognition of achievements encourages others to follow suit:

Every Monday morning we send out [an email newsletter]... which is a sort of newsy publication that goes to everyone's email boxes and goes on the intranet... crucially [it] has a section in there called 'Out and about', which is about photos of staff and the great work that they're doing, and... it exceeded my expectations in the sense that everyone reads it and wants to be in it, because they want to share the work they're doing.

(NHS provider chief executive)

Critically, it is important then to both celebrate success and accept that iterative quality improvement activities are, by their nature, often unpredictable. As one chief executive said:

You have to celebrate attempts to improve processes – call them out, really give them a loud pat on the back for the work. Even sometimes when it's not been as successful, because we've had the odd bump along the road. But again, being clear that it's okay to make a mistake. It's like learning to walk again. We've purposely tried to put a guide rail there so that they don't break their leg when they fall, they just bruise their knee. But this is about saying it's okay. It is okay, it's part of the process, it's part of the learning that some things don't work and we accept that, but there is still learning there.

(NHS provider chief executive)

Committing to continuous improvement and fidelity to the method

At its core, quality improvement is about change, and the large-scale and lasting improvements required in clinical services can only be achieved with active, committed leadership. At the Virginia Mason Institute, for example, the entire executive team, including the board of directors, is required to undergo deep training in the Virginia Mason Production System[®], and to participate in training trips to Japan for in-depth studies of Toyota and other Lean companies. Training and development in improvement methodologies as well as new coaching and facilitation methods for the leadership team are essential to ensure that they are prepared for and committed to continuous improvement. For our participants, training in a quality improvement method was a crucial step to ensure board ownership and leadership of the improvement journey.

Participants also highlighted the importance of visible commitment and championing of improvement methods. Several interviewees emphasised the fundamental nature of leadership support for an organisation-wide strategy for continuous improvement, without which improvement could become 'just an amalgamation of projects'. They felt that this leadership commitment included leadership 'ownership' of improvement at a strategic level, and the need to properly support and resource improvement work. One roundtable participant noted that, as a clinician, the lack of support from their chief executive to imbed a quality improvement methodology had meant that, although many projects were started, 'It was never going to catch fire and become the way we did it, [it was] a total failure on my part... I couldn't persuade the board that this was something we should take on'. Participants agreed that chief executive and board commitment to quality improvement is fundamental to its success in an organisation.

Participants also noted the importance of the leadership team committing to quality improvement as a continuous programme rather than something that provides a 'quick fix' or is a 'turnaround' strategy.

Several participants talked about constancy and commitment to continuous improvement. One chief executive told us how the quality improvement programme at his trust was something he expected to continue long after the end of a 'strategy': 'We are seven years in to a 15-year improvement journey and it will go on beyond that point because at that point we will recalibrate.' Another chief executive told us how, at first, staff were concerned that the improvement programme was a 'passing fad of the [new] chief exec', but that by 'fronting it', by developing inspirational or innovative leaders within the trust and by showing

how the approach was promoting a safer kind of service, staff understood the importance and longevity of the programme. Another chief executive told us how he was continually looking at ways to reinforce the idea that improvement is not a 'fixed point' but rather something they would be 'doing forever'.

There are various methods that NHS organisations can adopt to implement a quality improvement strategy – such as Lean, Six Sigma and Plan-Do-Study-Act (PDSA) cycles. Despite differences in terminology, they all draw on a similar set of tools and principles. The evidence suggests that no single quality improvement method works better than others; what matters more is having a consistent approach – in other words, choosing a model and applying it rigorously in practice (Alderwick *et al* 2017). All participants noted the importance of fidelity to an improvement method, regardless of which one had been selected. In some cases, participants found it useful to adapt the chosen method to connect it to their own organisation and local context.

One chief executive told us that adopting an improvement methodology was key to advancing their organisation's improvement capabilities, by focusing on a single method that 'took that collective sense of engagement purpose, [a] focus on patients and quality, into a transmission belt that reached frontline teams, that gave them the tools and techniques to make improvements'.

Finally, several of the interviewees noted the importance of 'keeping the faith' with regards to any improvement strategy or method and the corresponding work on it, despite 'extraordinary' day-to-day operational pressures and potential setbacks. In many cases, this requires leaders to be brave and to stay 'positive in the face of the ups and downs of improvement work, some of it working, some of it not working, and just not giving up'.

Wider strategic challenges

As previously noted, quality improvement approaches have the potential to support the delivery of greater efficiency and higher-quality patient care. However, there are a range of implementation challenges that must first be identified and addressed. Participants in the study also identified a series of wider strategic challenges that should be considered by organisations embarking on an improvement journey. Quality improvement should take place within organisations; however, to deliver system-wide improvements, thought also needs to be given to what national bodies can do to promote quality improvement, rather than making it more difficult (Ham *et al* 2016).

Evaluating the impact of improvement activities

Improving the quality of health care is complex and takes time to achieve. Analysis of improvements in NHS productivity over the past 30 years shows that progress is typically made through a series of small steps rather than giant leaps forward (Alderwick *et al* 2015). Individual quality improvement initiatives often take considerable time to demonstrate impact, and even the most successful efforts will face obstacles and setbacks along the way. Several of our participants noted the importance of being patient, which can be challenging, and, as noted in the previous section, ‘keeping the faith’ with the approach taken and the improvement work despite operational pressures.

Linked to this idea of ‘keeping the faith’ is a perceived lack of evidence about the outcomes and scalability of improvement projects. Nearly all of the participants in the study noted the challenge of measuring the impact of quality improvement activities. Evaluating and communicating the impact of quality improvement is not straightforward, especially for those who are either not actively engaged in the improvement activity itself, or not close enough to see its incremental impact on how services are delivered. As such, further research is needed to fully understand the impact of quality improvement approaches, and to attribute improvements in performance to the adoption of quality improvement methods (Portela *et al* 2015). As one roundtable participant noted:

First, a lot of improvement projects that have been perceived to have been successful are quite local and they haven't been replicated. So you haven't got a critical mass of evidence. Second, the nature of quality improvement is that it's

a constant interactive struggle requiring adaptive dynamic change, and it is hard to evaluate something that is not a single initiative that you do well and roll out. Perhaps the right question to ask about evaluating improvement approaches is not 'Did this work or not?' but 'What did we learn from this approach?'

(Roundtable participant)

One chief executive noted that the complexity of evaluating the impact of quality improvement methods may delay the spread of these methods across the NHS:

We're just starting to get those metrics to make a very clear connection to those things [improvement activities]. We've got the high-level metrics that are pointing towards an improvement, but we're just making the connection now in a more granular way so that we can evidence it before we would probably want to roll some of them out into other organisations.

(NHS provider chief executive)

Although more work is needed to understand how quality improvement initiatives can be robustly and meaningfully evaluated, participants in the study were already using a series of informal indicators as a guide to whether or not they were on the right track. These included qualitative comments from staff on the quality improvement approach in staff surveys, and the demand for places on quality improvement training courses and subsequent attendance.

Spreading quality improvement methodologies

It's striking how relatively few trusts have a recognisable improvement methodology. Those that do, seem to be thriving. I think we ought to get to the point where it's the norm. How do we get that systematic approach across something as big as England when we have nearly 250 autonomous providers?

(Roundtable participant)

Most of the participants in the study had started on a quality improvement journey within the previous two years. Although their focus remained on improvement approaches within their own organisation, they did note that, in the future, it would be increasingly important to have a coherent strategy for spreading improvement approaches throughout the NHS.

There was broad agreement that this was the right course to pursue, and that adopting a shared and more standardised approach to quality improvement would promote a consistent approach to how care is delivered, and lead to a less 'jarring' experience for staff groups such as junior doctors who often move across organisations.

At our roundtable, there was some discussion of whether sustainability and transformation partnerships could be both the right unit and mechanism for sharing improvement approaches. Some participants noted that the scale of these partnerships might be too large to support improvement activities with the right level of local ownership. Instead, smaller cross-organisation networks with a more clinical focus were suggested as one potential method for sharing and spreading local approaches to improvement: 'It may need to be on a local footprint that makes sense to clinicians' (roundtable participant).

Aligning quality improvement with the wider priorities of the health care system

Participants in the study noted the importance of having a shared understanding, at both national and local levels in the NHS, of what quality improvement can achieve and how it should be integrated with wider measures of operational performance and success.

External performance measurement and management are often used in an attempt to improve the efficiency and quality of health care, with health care systems paying significant policy and management attention to the use of targets, benchmarking, public reporting and rewarding the performance of health care providers.

However, there is mixed evidence on the impact of external reporting in improving the performance of health care organisations. Although the targets and performance management approach can have positive impacts, there are also some negative consequences to be mindful of. In a major review of targets and performance management under New Labour (1997–2010), Ham (2014) found evidence that areas of care not covered by targets may not receive sufficient attention, and that performance management creates a culture of compliance and risk aversion within NHS organisations that can inhibit innovation. At its worst, performance management has the effect of disempowering those working in the NHS and creating an over-reliance on central guidance (Ham 2014), in effect the exact opposite of what is needed for quality improvement.

One challenge raised by some participants was the ‘lack of synergy’ between the timeframe and approach of quality improvement programmes, and current national approaches to monitoring and measuring performance in the NHS. This led one roundtable participant to remark that this could be quite disheartening for providers pursuing quality improvement approaches:

The measurement for improvement piece I think is hugely important. Because this issue of ‘We’re making real progress in trust X, but you’re not hitting the target, so you’re still red rated’, is a problem. The more we can get people to think in a language that says ‘How are we seeing improvement over time?’ the better.

(Roundtable participant)

Other participants noted that there must be realism over what quality improvement approaches can deliver in the face of widespread funding pressures and workforce shortages, and a recognition that quality improvement is a 10- to 15-year journey rather than a quick fix, for example, current performance pressures in an emergency department.

Given the huge operational pressures facing the NHS, providers need to be adequately supported by the national bodies. Several of the participants told us how important NHS Improvement’s support for the Virginia Mason Institute programme had been for them:

I would say that NHSI [NHS Improvement] have been very, very strong in their support for the quality improvement approach... And they’ve kept faith with the approach, despite some saying, ‘this must spread faster and this must be widespread’. And they’ve really kept faith with us... working through all of this.

(NHS provider chief executive)

Another chief executive noted how important it had been to have the ‘bandwidth’ to make progress with their improvement work and that this has been a key enabler to their improvement journey: ‘These things don’t happen quickly and that’s quite challenging. [But] our regulator being patient [has been a key enabler].’

It is also imperative that policy-makers are more realistic about what can be achieved by compliance with external standards, and move towards supporting providers to develop their commitment to improvement and learning (Ham *et al* 2016). This support from national bodies involves (but is not limited to) these bodies giving NHS providers the space and permission to focus on their improvement journey. This may require a new ‘compact’ between NHS providers and the national

bodies, which moves away from performance management to a more supportive relationship about the 'gives' and 'gets'. As one roundtable participant noted:

The relationship between national bodies and senior local leaders must echo the relationships that are being built between these senior local leaders and their own staff. In the future, the job of the national bodies may be to remove barriers to improvement, not to be the organisation that comes in with top-down solutions and tells you how to deliver care. National bodies will also have to accept that there is inherent uncertainty in delivering improvement on this scale, and they will have to hold their nerve when performance trends are not going the right way – because you have to demonstrate trust if you are going to really empower local leaders.

(Roundtable participant)

Conclusion

The potential benefits of a quality improvement approach are considerable. Quality improvement is not an easy option and is not for the faint-hearted but committing to and investing in improvement is the right thing to do for service-users, carers and staff. All of the participants in our study spoke of the need to invest considerable time and resources in improvement work (including their own personal energy and focus), to 'hold their nerve', and to fundamentally alter their perception of the role of a senior NHS leader.

Although a growing number of NHS providers are beginning to embed quality improvement approaches across their organisations, the NHS faces a real challenge in building and sustaining the focus on quality improvement. This challenge has been described as the 'NHS Bermuda Triangle' (Baker *et al* 2010): too many directives from national bodies that are sometimes fragmented and not always connected to operational realities; managers and management looking upwards to comply with directives, rather than at operational realities of the front line; and the imposition of targets, incentives and metrics focused on compliance rather than real operational improvement. Many of the interviewees spoke of these challenges and how they had found ways to overcome them.

In some cases, participants felt that all of these factors (external policy drivers, internal management processes, and the priorities of the organisation itself) could be aligned under one 'umbrella' initiative of quality improvement. This led one chief executive to bundle together initiatives such as 'Getting It Right First Time, Carter, safety huddles, all the CQUINs [Commissioning for Quality and Innovation]' under their organisation's own improvement strategy – he explained that 'Despite the fact that it's not pure Lean, we try to give people a sense that if it's improvement, it's part of our improvement way'.

This report has set out a number of key enablers for sustaining a quality improvement strategy, which should be the focus for any leadership team wishing to embed and sustain a quality improvement method. It has shown that:

- Quality improvement is a systematic approach to continuously improving the quality of care and outcomes for patients, and one which is based on iterative change and continuous testing and measurement.

- Building an organisation-wide commitment to quality improvement requires brave leadership, a sustained focus over time, and efforts to promote transparency, evaluation and shared learning across the organisation and beyond.
- Quality improvement requires a shift in approach from national bodies, from compliance with external standards, to giving NHS providers the space and permission to focus on their improvement journey.

NHS leaders play a key role in creating the right conditions for quality improvement. Those seeking to adopt a quality improvement approach in their organisation should consider the following lessons.

- It is vital to build board-level commitment, from the outset, to the principles of quality improvement and support for the shift in emphasis from assurance to improvement.
- Quality improvement requires leaders to engage directly and regularly with staff and, critically, to empower frontline teams to develop solutions rather than imposing them from the top.
- Ensuring patient engagement and co-production is critical to any quality improvement approach.
- Doing quality improvement at scale requires building an appropriate infrastructure, including a robust support structure for frontline teams and mechanisms to spread learning across the organisation.
- Fidelity to a chosen quality improvement approach/method is critical to sustaining and embedding quality improvement in ways of working and the organisation's culture.

We asked interviewees what piece of advice they would impart to another chief executive who is keen to embed a successful quality improvement strategy and this is what we heard:

Provider organisation

I think it's got to be done for the future. I think that it's really important that your chair supports you 100 per cent on this. And don't underestimate how much personal effort you have to put into it.

Provider organisation

I think you've got to get your strategy clear. You've got to get your sets of priorities clear about what you need to do to improve. You need to engage your staff in the conversation about how that's been in the past and how you might like it to be in the future. And I would say go with the partner that can offer you coaching, leadership development and real-life experience on the shop floor. And [having] a standardised methodology, I think is absolutely key.

Provider organisation

Well, I would say that if you're not going to focus on [one] improvement method or an improvement approach, then you are potentially at risk of being buffeted by all of the forces that are acting on us, without a sort of North Star or a guiding approach that helps you deal with those pressures. And you risk being very short-termist about just taking on the latest initiative or programme that comes along, and then that lasts for a few months and then falls away, and then something else starts. You need to develop a long-term sustainable approach that you're in it for years, not months.

Embedding quality improvement within an organisation requires changing the traditional approach to leadership, from a sense of leaders as managers with solutions, to leaders as enablers of the agents of change. A sense of a leadership that gives permission to those at the front line to flourish, and to take forward improvement approaches – which includes providing support, training and time, and an understanding that some initiatives may fail. As the participants in our study demonstrated, introducing and sustaining a quality improvement approach can unlock more efficient and high-quality services, but this requires both bravery and commitment from senior leaders.

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