Evidence:

Overcoming challenges to improving quality

Lessons from the Health Foundation’s improvement programme evaluations and relevant literature

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Foreword

For nearly ten years, the Health Foundation has been working with the NHS to deliver improvement through service and staff development programmes. Our programmes test out new ideas for improving the quality of healthcare. Our aim is to take the best ideas – those that we can prove really make a difference to improving the quality and safety of patient care – and encourage uptake throughout the NHS.

Almost uniquely, we believe, we have consistently evaluated these improvement programmes and the difference they make. We evaluate our programmes to provide sound evidence of their impact, and to better understand how the impact has been achieved – or not. These evaluations have provided important insights into the interventions being tested, and have demonstrated many successes achieved by the programmes. For example:

- Co-Creating Health’s self management programme for patients improved their activation (knowledge, skills and confidence for self-management), as well as their use of self-management skills. There were also improvements in condition-specific outcomes and quality of life.

- Participation in our leadership programmes has catalysed improvements. For example, the Shared Leadership for Change programme meant that a team from Carmarthenshire Diabetes Network successfully moved routine diabetes care from secondary to primary care, resulting in dramatic reduction in waiting times from 12 months to no wait for new secondary care appointments.

- The Safer Patients Initiative heightened managerial awareness of, and commitment to, patient safety and created organisational understanding about how to implement safety improvement efforts.

- The two Engaging with Quality programmes showed that peer-led improvement processes secured effective clinician engagement. The Engaging with Quality Initiative secured the attention of the royal colleges and professional bodies, which reported immediate consequences in organisation and practice, and also that the programme had either ‘catalysed’ or supported longer-term trends towards involving them in quality improvement.

As those actively involved in improvement work will know, bringing about the change in behaviour and practice necessary to improve quality can be hard and slow. Despite the many successes of the programmes we have supported, teams frequently encounter obstacles to achieving their original goals. The question this posed for us was whether, by identifying and better understanding some of the common challenges, it would be possible to develop a set of evidence-based approaches for successfully overcoming these challenges to improving quality. Our interest was not in the pros and cons of different technical methods of improvement, but on the factors that affect the likelihood of methods being applied and new interventions adopted.
To answer this question, we commissioned Professor Dixon-Woods to conduct a review of our evaluations to date and identify the barriers commonly encountered by project teams when doing improvement. The resulting report provides an engaging and cogent analysis of the key challenges facing people doing improvement – and what has been shown to work, both in practice and in the wider literature, to overcome them.

Debate about the contribution improvement approaches can make to the quality and value of healthcare is ongoing. Improvements in safety, effectiveness and patient experience are seen as necessary to meeting the resource challenge facing healthcare. Yet, too often, the benefits improvement interventions demonstrate in ‘study’ conditions have fallen short of expectations when applied at scale. This report highlights the factors that need to be addressed in order to increase the success of improvement efforts. As such, it should be required reading for anyone leading improvement work.

So, what might be done differently as a result of the insights presented here?

The findings emphasise the importance of those leading improvement work taking time to reflect before starting an improvement programme. They need to plan carefully and recognise the multiple inter-dependent factors that need to be taken into account for improvement programmes to be effective. It is also necessary to ensure that project language and structures do not inadvertently alienate those that will be depended upon for success. Of particular importance is the time needed to establish the evidence base for change, allowing space for participants to debate and to build genuine ownership. Getting measurement right is also vital, but always takes more time than people anticipate.

The report concludes that structured improvement is complex and takes time and, unless the conditions for success are in place, is unlikely to fully achieve set objectives. This reinforces the importance of the role that organisation and system leaders play in supporting successful improvement efforts. They need to ensure that sufficient time and resource is provided to enable those at all levels in the organisation to devote time to improvement projects. They need to nurture a culture that motivates a multi-professional approach to improvement and strikes the right balance between appealing to people’s internal motivators and using externally defined requirements to drive improvement.

For many, these findings won’t be new. However, they may well resonate with tacit knowledge about improvement work. The value of this report is that it provides an evidence base for the factors contributing to successful improvement.

As a major funder of improvement programmes, The Health Foundation itself has found much here to inform our future work. The findings are shaping both how we support individual improvement programmes, as well as the wider strategic focus of our work. In our improvement programmes we are placing a much greater emphasis on the need for projects to have a clear theory of change, a strong evidence base and for active senior leader engagement and commitment. We are building in much more time for planning and set-up, and for an objective and critical analysis of the nature of the challenge being addressed by each project.

Part of our strategic focus is to contribute to developing the emerging academic disciplines of improvement science in order to build a stronger evidence base for what works in improving quality. We also have a number of improvement programmes that explicitly set out to change the wider organisational context for improvements in quality.

With the major challenges currently facing healthcare, improving quality is more important than ever. However, there can be extra pressure to make change happen immediately, as well as the health system’s cultural bias to jump to implementation. This report shows that if you take the time to get an intervention’s theory of change, measurement and stakeholder engagement right, this will deliver the enthusiasm, momentum and profound results that characterise improvement at its best.

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Executive summary

Improving quality in healthcare is intrinsically a good thing to do and efforts to make improvements should be commended. However, improvement is not easy. Though there are some examples of demonstrable, real and lasting improvements in the care provided to patients, the effectiveness of improvement initiatives is more often inconsistent and patchy. Over time, the Health Foundation has assembled an impressive portfolio of improvement programmes and, in a perhaps unique contribution to advancing the field of improvement, has ensured that each is evaluated - mostly independently. We report here a synthesis of learning from the Health Foundation’s evaluations of its improvement programmes. We set this in the context of the broader academic literature, seeking to draw out lessons for those engaged in improvement activities in the NHS and other health systems.

The evaluation reports are necessarily defined by the nature of the improvement programmes themselves, which can be broadly categorised as ones which aim to improve:

- leadership
- clinical engagement
- patient safety
- integrated approaches to self-management of long-term conditions.

Although our findings are limited by the scope of these evaluations, a number of important lessons emerge that are likely to be useful for most improvement efforts. Within three main themes, we have identified 10 challenges to improvement that consistently emerge, and have suggested ways to overcome them, summarised below.

Theme 1: Design and planning

Rigorous design and planning of improvement interventions is crucial to their prospects of success.

Challenge 1: Convincing people that there is a problem

Use hard data to demonstrate the extent of the problem and patient stories and voices to secure emotional engagement. Use peer-led debate and discussion.

Challenge 2: Convincing people that the solution chosen is the right one

Come prepared with clear facts and figures, have convincing measures of impact, and be able to demonstrate the advantages of your solution. Involve respected senior figures.

Challenge 3: Getting data collection and monitoring systems right

This always takes much more time and energy than anyone anticipates. It’s worth investing heavily in data from the outset. External support may be required. Assess local systems, train people, and have quality assurance.

Challenge 4: Excess ambitions and ‘projectness’

Over-ambitious goals and too much talk of ‘transformation’ can alienate staff if they feel the change is impossible. Instead, match goals and ambitions to what is realistically achievable and focus on bringing everyone along with you. Avoid giving the impression that the improvement activity is unlikely to survive the time span of the project.
Theme 2: Organisational and institutional contexts, professions and leadership

Organisational and institutional contexts, including leadership and professional behaviour and culture, can have a profound impact on the prospects of improvement efforts. It is important to ensure that these enhance, rather than inhibit, improvement.

Challenge 5: The organisational context, culture and capacities

Staff may not understand the full demands of improvement when they sign up, and team instability can be very disruptive. Explain requirements to people and then provide ongoing support. Make sure improvement goals are aligned with the wider goals of the organisation, so people don't feel pulled in too many directions. It is important that the organisational culture supports learning and development.

Challenge 6: Tribalism and lack of staff engagement

Overcoming a perceived lack of ownership and professional or disciplinary boundaries can be very difficult. Clarify who owns the problem and solution, agree roles and responsibilities at the outset, work to common goals and use shared language. Intermediaries, such as training staff, are likely to have a role here. Protected staff time may help to secure engagement.

Challenge 7: Leadership

Getting leadership for quality improvement right requires a delicate combination of setting out a vision and sensitivity to the views of others. ‘Quieter’ leadership, oriented towards inclusion, explanation and gentle persuasion, may be more effective. This may require additional training.

Challenge 8: Balancing carrots and sticks – harnessing commitment through incentives and potential sanctions

Relying on the intrinsic motivations of staff for quality improvement can take you a long way, especially if ‘carrots’ in the form of incentives are provided – but they may not always be enough. It is important to have ‘harder edges’ (sticks) to encourage change, but these must be used judiciously and are likely to require the support of senior executives, professional bodies and those designing reward structures.

Theme 3: Sustainability, spread and unintended consequences

Sustainability and spread of improvement initiatives are key challenges. Improvement is vulnerable to an ‘evaporation effect’, particularly once projects have been completed.

Challenge 9: Securing sustainability

Sustainability can be vulnerable when efforts are seen as ‘projects’ or when they rely on particular individuals. From an early stage, projects need to identify future funding sources, or identify ways to use resources more efficiently in order to sustain improvements. Successful outcomes should be written into standards, guidelines and procedures to ensure they are embedded in routine activities.

Challenge 10: Considering the side effects of change

It’s not uncommon to successfully target one issue but also cause new problems elsewhere. This can cause people to lose faith. Be vigilant about detecting unwanted consequences and be willing to learn and adapt.
In overcoming the challenges to improvement, it is important to avoid nihilism. Improvement is hard, but not impossible. Many challenges can be overcome if they are recognised and managed effectively. The following can be done to optimise improvement efforts.

- Recognise that there is no magic bullet. Making progress requires negotiating many cramped channels.

- Secure the engagement of multiple stakeholders using numerous approaches, many of them apparently contradictory: strong leadership alongside a participatory culture; direction and control but also flexibility according to local need in implementation; critical feedback on performance without attaching blame.

- Tame the urge to action by ensuring that time is dedicated to planning and design, and recognise that knowing that there is a need to improve care does not mean knowing how to improve care.

- Make careful assessment of organisational readiness, resource requirements and the commitments needed from staff. All of these are vital at the outset of projects, as this is a period of development, piloting and testing. However, they continue to be important throughout implementation to avert disenchantment and disengagement as the scale of the tasks becomes apparent.

- Resist organisational impatience for quick wins and early results, since it can have many negative effects on the authenticity of improvement, and encourage poorly planned, poorly evidenced and unsustainable approaches to improvement.

- Manage the ‘project status’ of improvement interventions carefully.

- Account for the ways in which organisational and institutional contexts can pose ongoing threats to improvement activity, particularly when they involve personnel changes or organisational stresses that erode the time and enthusiasm for activities.

- Balance the temptation to focus on settings most likely to be receptive to improvement with the risk that such an approach may reproduce inequities by increasing delay to improvement in less fertile settings.

- Gain consensus and build coalitions. Obtaining the support of one group of stakeholders may risk alienating another; finding agreement on the problem to be addressed and creating coalitions of multiple professional groups are important tasks of improvement. Interventions that ‘go with the grain’ and offer a clearly demonstrable advantage over current practices are especially likely to succeed.

- Coordinate actions at multiple levels, seeking to influence multiple stakeholders, to ensure improvement that engages, incentivises and endures.

- Remain vigilant about the potential unwanted effects of improvement, and respond to them flexibly and appropriately.
Chapter 1

Introduction

Improvement in healthcare poses important challenges. Even the definition of what ‘improvement’ means escapes consensus. Perhaps the most useful definition is that offered by Batalden and Davidoff:

Many in healthcare today are interested in defining ‘quality improvement’. We propose defining it as the combined and unceasing efforts of everyone – healthcare professionals, patients and their families, researchers, payers, planners and educators – to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development.2

These authors use the term ‘quality improvement’. This is a term that tends to be used in different ways by different people in different contexts, and is often associated with particular methodologies. Because we are interested in improvement in healthcare broadly, and in keeping with the spirit of Batalden and Davidoff’s definition, we will use the term ‘improvement’ to encompass the whole range of purposeful, directed attempts to secure positive change in health systems.

Though there are some examples of demonstrable, real and lasting improvements in the care provided to patients,1 the effectiveness of improvement initiatives is more often inconsistent and patchy. The improvement field is replete with examples of interventions, initiatives and programmes that worked well in some settings but floundered when introduced elsewhere. Organisational context is often the deal-breaker in making positive change happen in healthcare. As scientific understanding of improvement has developed, attention has turned increasingly to trying to explain what causes this variability in organisational response.3-6

Over time, the Health Foundation has assembled an impressive portfolio of improvement programmes and, in a perhaps unique contribution to advancing the field of improvement, has ensured that each is evaluated – mostly independently. The programmes have diverged in their scope and remit, but all are united by their focus on technical skills, leadership, capacity, knowledge and the will for change. They therefore meet the definition of ‘improvement’ that we offer above. The evaluation reports represent a valuable resource, providing insights into the challenges and opportunities of improvement and how they are influenced by different healthcare organisational contexts.

In this report, we provide a synthesis and review of the findings of these evaluations as they relate to factors that constrain and facilitate improvement. We set the learning from the evaluation reports in the context of the wider literature, and seek to draw out the lessons for those responsible for designing and implementing improvement in the NHS.
Chapter 2
Approach and methods

Review of the Health Foundation’s evaluation reports
We reviewed 14 Health Foundation evaluation reports, as follows (further details are provided in the appendix). The abbreviation in brackets after each report is the one we use to refer to the evaluation in our review.

Safer Patients Initiative (SPI)
- Safer Patients Initiative phase 1 (SPI I), February 2011
- Safer Patients Initiative phase 2 (SPI II), February 2011
- Learning report: Safer Patients Initiative (SPI Lng), February 2011
- The journey to safety: a report of 24 NHS organisations undertaking the Safer Patients Initiative (Journey to safety), unpublished

Leadership programmes (2003–08)
- A review of the Health Foundation’s leadership programmes 2003–07 (Leadership review), October 2008
- Leadership Fellows pilot scheme (LF pilot), September 2006
- Leaders for Change evaluation report (Leaders for Change), August 2006

Engaging with Quality Initiative
- How do you get clinicians involved in quality improvement? (EWQI), August 2010
- An evaluation of the Health Foundation’s Engaging with Quality Initiative (EWQI 2009), March 2009

Engaging with Quality in Primary Care (EWQPC)
- Engaging with Quality in Primary Care: evaluation of the Leading Improvement Teams Programme (EWQPC), March 2011

Co-creating Health
- Co-creating Health evaluation (Co-creating Health), in press
We began by reading each report carefully. The reports varied in quality, length and level of detail, but we did not make any decisions about inclusion or exclusion of data based on these characteristics. We thus make no comments about the strength of evidence that we present, though generally we have sought to ensure that all claims are well supported by both the findings from the analysis of reports and by a corresponding research base.

To undertake the analysis and synthesis, we initially generated a thematic framework for coding based on Damschroder et al’s consolidated framework for implementation science.\(^7\)

This framework was selected to enable a rapid preliminary classification of the material, and our approach thus has a number of similarities to ‘best fit’ evidence synthesis, which is based on the framework analysis technique.\(^8,9\) The preliminary framework was modified substantially as we began to refine our analysis, discuss the emergent findings within the project team and integrate relevant literature. The final framework is represented by the thematic headings and subheadings of the report presented here.

**Review of literature**

We conducted a rapid narrative review of organisational factors likely to hinder improvement, with the primary aim of illuminating and deepening understanding of the findings in the evaluation reports through linking to the relevant academic literature. We built on a previous literature review in a related area,\(^10\) which included systematic searches of the Scopus database using keyword terms. This search was updated using a combination of professional expertise,\(^11\) reference chaining, and expert recommendation.

For the literature review, we:

- treated the review question as a compass, not an anchor, so that the question was open to being refined as the review proceeded
- used iterative, intuitive searching of literatures combined with more formal systematic searching techniques
- engaged in selective, judicious sampling of relevant literatures
- sought to integrate the various literatures through a narrative argument.

The areas of literature in which we searched included: organisational studies; medical, economic and institutional sociology; social and community psychology; critical development studies; social movements; and innovation and diffusion studies. We examined original empirical research, theoretical and conceptual work, and reviews (both systematic and narrative). On every topic that we discuss, there is an extensive associated literature, and we make no claim to comprehensiveness. Given the potential for a vast and overwhelming presentation, and a concern with making this review accessible for non-academic audiences, our review is necessarily selective and only sufficient literature to support the points made is cited.
Chapter 3

Findings: factors affecting improvement

The evaluation reports are necessarily defined by the nature of the improvement programmes being evaluated. The programmes varied in the interventions they used and the outcomes sought. The interventions used in the programmes might broadly be categorised as:

- leadership development
- clinical engagement
- organisational and systems-based approaches to patient safety
- promoting integrated approaches to self-management of long-term conditions.

The programmes, taken in the round, intervene at many different levels, from the individual to the team, and from organisation to system. Synthesising the evidence across the programmes helps to provide an integrated perspective that recognises both the importance of individuals (their skills, competencies and qualities) but also the contexts in which they work.

Our findings reflect and are constrained, of course, by the nature of the programmes and their interventions, and by the nature and reporting of the evaluations. However, a number of important themes emerge across the reports that are likely to be useful for most improvement efforts. We organise our analysis into three broad themes:

- design and planning
- organisational and institutional contexts, professions and leadership
- sustainability, spread and unintended consequences.

There are other ways in which the same material could be organised and our choice of presentation here does not represent any attempt to impose a hierarchy on the importance of particular themes, but rather an effort at clarity.

In general, we have focused on commonalities across the reports. Where appropriate, we have also commented on silences or absences in the reports. The nature of the reports and the programmes studied do not easily allow for an assessment of the extent to which factors might interact, or of which factors are likely to exert the most powerful influences on improvement efforts. However, we would expect many of the factors to be contextually specific and to link together in ways that may be difficult to predict.
**Theme 1: Design and planning**

Our analysis suggests that in the design and planning of improvement interventions, it is important to:

- establish with the key audiences that there is a real problem to be addressed and that it matters locally
- ensure that the evidence-base is of sufficient quality to convince people that the proposed intervention will work
- understand the mechanisms through which the interventions are intended to achieve their effects
- design data collection and feedback systems that help to track progress and stimulate engagement and learning
- address the ‘double-edged sword’ of project status
- ensure that ambitions are consistent with available resources and likelihood of change.

**Challenge 1: Convincing people that there is a problem**

One of the most fundamental, but often least well met, challenges in improvement is to first convince healthcare workers that there is a real problem to be addressed.

In the SPI programmes, many aspects were already good at baseline, leaving little room for improvement (SPI I/II). This was also true in EWQI, where some units were already performing so well that they were unlikely to improve significantly further. Clinicians and others may argue that the problem being targeted by an improvement intervention is not really a problem, that it is not a problem ‘around here’ or that there are many more important problems to be addressed before this one (EWQI; SPI).

The literature is replete with examples of interventions where clinicians insist that the service being provided is already good. Trying to convince clinical teams that are already doing well to change what they are doing is likely to be futile. Those designing and planning an intervention therefore must be careful to target problems that are likely to be accepted as real and that the improvement activity will offer relative advantage over the status quo.\(^{12,13}\)

The evaluation reports and the wider literature suggest various possible strategies for establishing the problem as a problem. First, hard data to demonstrate its existence, including variability between the worst performing and best performing units, are critical.\(^{14}\) The power of using data both ‘passively’ to ‘make transparent’ discrepancies in performance\(^ {15}\) and more ‘actively’ in enforcing clinical change\(^ {16}\) is now clear. Some examples of using data in this way are evident in the evaluation reports: for example, the EWQI programme used a double audit cycle to demonstrate that comparative performance data can be used to promote improvement. Second, patient stories can be used to secure emotional engagement with the impact of poor quality. There were few reports in the evaluations of the use of patient stories, but those that were used ‘seemed to have powerful effects and helped to engage healthcare economy leaders in the worth of the programme for patients’ (Co-creating Health).

A further important strategy involves engaging clinicians themselves in defining what it is that they would like to improve in their service; clinicians are usually able to identify defects that they would like to fix, although there are risks that such defects will be attributed to causes outside the control of individual teams.\(^ {17}\) Interesting work using methods such as video ethnography is now showing considerable promise in helping practitioners to engage actively in recognising both problems and their own role or contributions in the resolving of those problems.\(^ {18}\)
Challenge 2: Convincing people that the solution chosen is the right one

A second fundamental challenge is to convince people that the right approach to tackling the problem has been selected. Improvement interventions are often ‘essentially contested’: everyone may agree on the need for good quality, but not on what defines good quality or how it should be achieved. Both the wider literature and evidence from the evaluation reports suggest that having a sound scientific evidence base for improvement interventions is likely to be important to the chances of success.

Two aspects of evidence need to be distinguished. On the one hand, evidence is required to support particular interventions – for example, the five elements of practice known to reduce infection rates in central venous catheter insertion – and on the other, evidence is also needed for how best to implement those practices. Weaknesses in the evidence base for either can negatively impact on projects. The evaluation reports show that the leadership projects, for example, faced challenges in demonstrating the relationship between particular leadership behaviours and anticipated improvement outcomes (Leadership review). Similarly, in EWQI, involvement of patients in improvement and service development, and the best ways to engage clinicians, suffered from a weaker evidence base. The SPI programme included interventions for which the evidence base was contested; one of these (beta blockade) was dropped from the second phase.

Challenging the evidence base can be an effective strategy of resistance for clinicians who want to avoid cooperating with an intervention, as several of the evaluation reports (including SPI) have found. If professional consensus is lacking on the evidence base for a given intervention, time and energy can be dissipated on debates about the legitimacy or otherwise of seeking to achieve a particular standard for care. Reducing the number of areas to be tackled and avoiding areas which are disputed or scientifically contested may help make interventions more achievable (SPI II).

Changes in practice are more likely where there is correspondence between the probabilistic, statistical proof offered by the research evidence base and clinicians’ own reasoning about what is likely to work in practice. This can mean that even those quality standards that appear relatively well established in scientific terms may be open to contest if they do not align well with people’s own reasoning, if they threaten people’s interests, or if they cause too many conflicts of priorities. Further, different forms of evidence may have varying degrees of credibility with different professional and managerial groups. Several Health Foundation awards found that what was accepted as best practice in one profession or discipline was disputed in others.

Thus a sound evidence base is important, but does not of itself ensure engagement and implementation. Active work to secure credibility is needed. This is likely to imply working with a variety of professional groups on their own terms, and aligning the project with each group’s values and notions of best practice. Interventions that ‘go with the grain’ and are consistent with the values and internal motivations of healthcare professionals (SPI Lng), and do not clash with wider changes in healthcare systems (EWQI), may be more likely to succeed. In the absence of such alignment, staff may push back and fail to engage. Connecting with established ways of working in a particular organisation may also play a role; for instance early warning scores in the SPI programme (SPI I) were evidently connected to long-standing traditions of monitoring vital signs, and thus were seen as more acceptable than more disruptive innovations such as Situation, Background, Assessment, Recommendation (SBAR).

There is, however, a danger that being too deferential to existing norms, values and behaviours may result in failure to challenge poor quality practices. Norm-disrupting tactics may be needed to confront institutionalised complacencies. Further, designing interventions that are too similar to those already in use may risk, as the EWQI programme found, non-adoption and wasted effort. One approach for ensuring the acceptability of interventions is to make strategic use of forums involving the relevant
stakeholders to discuss and debate the evidence and expose it to challenge, rather than hoping that the evidence will ‘speak for itself’ in convincing clinicians of the need for change.25,26

Recent years have seen growing emphasis on the need to know not only whether improvement interventions succeed, but also why.14,27 The wider literature supports the idea that having an explicit theory of change – that is, an account of the activities undertaken, and of the causal links between these activities and the outcomes sought – is key to ensuring clarity of focus and strategic direction and to convincing people that the chosen solution is likely to work.

The evaluation reports demonstrate the challenges that can arise when aspects of intervention design lack sufficient detail at the outset, and when the theory of change is difficult to articulate because the intervention continues to develop during implementation. Sometimes, there was a lack of clarity about fundamental aspects of the intervention and award terms, such as agreed definitions of ‘shared leadership’ and ‘quality’ (EWQI 2009) and confusion about the nature of the award (whether it was in the form of cash or professional support ‘in kind’) (Shared Leadership). In SPI, a more explicit theory of change might have helped to focus attention on clinical engagement and the role of middle managers (SPI II). The Co-creating Health evaluation found that the programme was hindered by programme theory that had not been explicitly articulated as clearly as it might have been at the outset, and a disconnection between programme aims and measures of impact at site level. In the Leadership schemes, participants tended to focus on personal development unless the focus on improving quality was very clearly articulated (Leadership review). The absence of a requirement to apply learning in the workplace limited the support that participants could expect from employers (Leadership review).

Plenty of early consultation and trialling can help not only to refine the theory underlying the intervention, but also to engage key stakeholders and help them to feel included and valued. For example, one project in the EWQI programme found that some clinicians were reluctant to take part because they had not been consulted in the development of a care bundle. Taking more account of prior skills and experience would also have helped in implementing the intervention in the Shared Leadership programme. Similarly, the SPI programme might have benefited from more pre-intervention work to identify how it would work and in what circumstances.

Though considerable effort needs to be invested in the theory of change at the outset, it should not be regarded as fixed and immutable. It needs to be able to develop over time in response to learning: retaining flexibility and a commitment to learning are important aspects of enabling improvement initiatives to work.14 Having a good understanding of how the intervention really functions, and being able to articulate this in a meaningful way, is critical to avoiding ‘thin simplifications’ that reproduce superficial outer appearances of an intervention. However, this can be particularly challenging. In the Co-creating Health programme, for example, there was a perception that over-‘manualisation’ and scripting of tutors’ interactions with patients was damaging to the establishment of more authentic relationships.

When real-time adaptations were made in Health Foundation projects, they appear to have been very helpful if they were carefully and thoughtfully undertaken. For example, revisions to the EWQPC programme, which was felt to have been initially too inflexible, allowed it to adapt better to meet team needs.

Challenge 3: Getting data collection and monitoring systems right

Designing and supporting data collection and feedback systems needs to be one of the earliest tasks undertaken in any improvement effort. Data collection and feedback are essential elements of the process of improvement. Good quality data are the key both to demonstrating the problem and showing that it is being addressed and, as we noted earlier, is therefore critical in engaging investments of emotion, effort and resource. Transparent monitoring systems facilitate learning, and enable clinicians to challenge and support each other in
pursuit of improved quality. Monitoring has an important role both in securing compliance in real time and in providing evidence of success, and contributes to establishing shared norms of quality. Regular feedback on performance can motivate sustained efforts by providing a sense of progress or keeping participants ‘on task’ – particularly when it is gauged against the performance of comparable settings. Indeed, one of the features that distinguishes improvement from research is the real-time feedback of improvement data to clinical teams, rather than being used solely to generate research reports. But in driving improvement, data (and their source) need to be seen as credible by potential participants, while at the same time not too irksome or burdensome to collect. If data collection can help rather than interfere with workflow, and replace rather than duplicate previous systems, it may be more likely to succeed.

Data collection, monitoring and feedback systems therefore need to be explicitly designed into an improvement activity from the start, and need to be adequately resourced. But they are remarkably hard to get right: the evaluation reports consistently demonstrate that many improvement projects stumble over this aspect of the process. There are no standard established methods for assessing some of the types of interventions and activities, yet often little investment is made in developing them before the start of activities. Requirements for evaluation, and its benefits and limitations, are often poorly understood (EWQI; Co-creating Health). The SPI programme highlighted the need to recognise differences in context when importing interventions from other healthcare systems, for example, allowing for differences in data collection systems in the US compared to the UK (SPI Lng; Journey to safety). In the leadership programmes, there was a reliance on retrospective self-reporting (Leadership), which is prone to multiple biases. Baseline measures are not always collected, or were not done well (Shared Leadership; SPI; Co-creating Health). Local teams and project managers may lack expertise and experience in collecting and interpreting data, and thus introduce biases or draw incorrect conclusions (Co-creating Health).

Measures that are excessively burdensome or do not enjoy credibility with the target community risk alienating, rather than engaging, clinicians and producing confusion about the extent to which any changes are real. Choosing measures that can reliably capture relevant quality issues is critical to avoid gaming, where participants are incentivised to produce the desired numbers without the intended changes in practice. Common targets and measures across all participating teams are generally preferable. However, gaining consensus on these and setting up systems for centralised data collection is far from straightforward, and is resource-intensive and demanding of organisational support.

It is clear from some of the evaluation reports that collecting improvement data was a stretch too far for some organisations. In some cases, setting up the systems and collecting the data not only produced resentment but also undermined the improvement effort as a whole. Existing systems in most organisations have been designed for clinical needs or to capture data to report to national targets: they are not well-suited to gathering the type of data required by improvement initiatives (SPI Lng). Quality measurement systems, where they do exist, are often unstable and underfunded (EWQI 2007). Substantial investment in training is required to ensure that people are able to collect, record and interpret data correctly. Even well-informed and committed teams may require additional support to measure, validate and learn from activities (EWQI 2009).

**Challenge 4: Excess ambitions and ‘projectness’**

One challenge for certain types of improvement activities, no matter how well designed, is that they can acquire a ‘project’ status that can bring opportunities but also threats. In the private sector, projects are seen as key tools for introducing novel work practices. Project status can mean key benefits, including a distinctive focus, identity and drive that helps to set an improvement activity apart from the routine of day-to-day activities. Projects also have the potential to introduce working practices unconstrained
by existing organisational divisions, and for generating excitement and interest. However, their transferability to public sector contexts such as the NHS is not straightforward.41

A changing policy context can make it difficult to align time-limited projects with wider organisational goals. If projects lack ongoing senior managerial support, it can be difficult to make the transition from project to institutionalisation as part of wider organisational policies, procedures and norms. Perhaps most corrosively, activities seen as time-limited risk simply being tolerated or ignored until they go away by coming to an end. The evaluation of the EWQI found that improvement ‘is often not regarded as a part of the core business of the NHS and has to be undertaken at the margins of mainstream activities’. Given this, improvement projects can be disregarded by those who did not have the time or will to engage, safe in the knowledge that, in time, the projects would ‘go away’. At the other extreme, projects risk becoming the ‘chief executive’s favourite’, and resented for how they draw away attention and resources from other activities. Further, there is some evidence in the SPI of hostility towards those who reap praise and reward from being associated with project teams, while others are left with the drudgery of implementation. This points to a need to find a compromise between harnessing the distinctiveness of improvement projects as a tool for change, and ensuring that such projects are also aligned with the wider ‘direction of travel’ of organisations and government policies.

Enthusiasm for improvement is very natural, but it can easily overwhelm the available resources. Being over-ambitious may be risky in a number of ways, not least because ambitious ‘stretch goals’ and talk of ‘transformation’ may risk alienating people early on, and later lead to disillusionment if the aims are not realised. The balance between ambitious aims and availability of resources to support change is a frequent concern in the evaluation reports (SPI; Leadership review; Shared Leadership; EWQI), and both the literature and the evaluation reports suggest that the scale of resource required to support improvements is often underestimated (SPI I; Shared Leadership).

Without adequate financial support, infrastructure, improvement and managerial skills and capacity, training, and managerial and clinical time, improvement efforts can quickly run into difficulties.27

These difficulties can be compounded by an impatient organisational culture that does not give new initiatives sufficient time for a diagnosis phase (Co-creating Health) or to allow interventions enough time to ‘bed in’.12 The time required for interventions to penetrate to the ‘sharp end’ and result in measureable improvements may be much greater than anticipated at the outset. Some activities, such as team- and relationship-building, can take significant time to achieve, especially when they start from a low base. It may also be hard to sustain enthusiasm and effort over long periods and to maintain focus when interests and priorities move elsewhere (EWQI). Ultimately, the literature suggests that mismatches of ambitions and resources can give rise to ‘change fatigue’, making people and organisations more resistant to subsequent improvement initiatives,12 and cause frustration, disillusionment and ultimately exhaustion as efforts to improve flounder.27,42

The scale and demands of improvement interventions therefore need careful assessment at the outset and the implications of involvement need to be explained to participating teams. In the Leading Improvement Teams Programme, teams started with no real appreciation of the scale of the work involved or the amount of time engagement would require (EWQPC). It may be difficult to protect participants’ dedicated time (EWQI; Leadership review), especially if they are involved in a number of projects or have multiple other demands. Therefore this needs to be clearly and explicitly negotiated before the intervention gets underway. Clarity about the contributions expected of each team member, including service users (EWQI), is essential.

Staffing and skill mix required to deliver on the goals of the intervention requires especially careful assessment. Research on improvement has highlighted lack of capacity as a consistent problem.12,41 Leadership, finance, management,
communication, clinical skills, administration, relationship building, data analysis, database design and the ability to train others are among the array of skills required by the programmes covered in the evaluation reports (EWQI; Leadership), reflecting many of the findings in the literature on this point. All may be in short supply in NHS organisations.

Bringing together a team with the range of skills required is challenging, especially when people lack basic meeting skills and team working skills (Shared Leadership). In some Health Foundation awards, lack of resourcing was evident at a very basic level, such as the inability to provide all clinical staff with a workbook (EWQI). The importance of dedicated administrative support for improvement activities also needs to be strongly emphasised (Shared Leadership). If structures and systems are not already in place to support activities such as data collection, the problem of excess ambition may be compounded (SPI).

**Theme 2: Organisational and institutional contexts, professions and leadership**

A second theme evident from evaluation reports and the literature relates to the profound impact on improvement efforts of organisational and institutional contexts, including: organisational cultures; organisational capacity; user involvement; and outer contexts, such as the surrounding policy environment.

The evaluation reports and the wider literature offer clear evidence of the role of professions and leadership in enabling improvement to function most effectively. Harnessing professionalism, supporting and nourishing leadership, ensuring ownership, engaging senior staff and other stakeholders, engaging middle managers and ward staff, overcoming silos, securing effective user involvement, and incentivising participation all emerge as important.

**Challenge 5: Organisational cultures, capacities and contexts**

**Organisational cultures**

Not surprisingly, organisational cultures supportive of personal and professional development, and committed to improvement as an organisational priority, are more likely to provide an environment where improvement can flourish (Leadership review; LF pilot). The evaluations demonstrate how morale, leadership and management in organisational settings may lead to variation in outcomes (EWQI), reflecting wider findings on how organisational culture impacts on performance, quality and outcomes.

One key challenge is to ensure that organisational objectives are aligned with an improvement activity (LF pilot). Some healthcare organisations do not appear to value improvement (EWQI), sometimes because the improvement activity has to compete with many competing demands on organisational attention, resource and support.

The motives of organisations for participating in improvement activities are often important determinants of the likely success of an initiative. Organisations may sometimes participate in programmes for reputational reasons – because not to do so would be unacceptable and damaging – but their engagement with the programme may not be authentic. If reasons for participation vary, then variations in response may also occur.

The internal politics of organisations are often deeply implicated in cultural support for improvement, and may not be easily detectable from a simple inspection of organisational structures. Within organisations, relationships between clinical teams and managers are crucial to success, but the evaluation reports suggest that some managers appeared to be too busy to take an interest in the project or felt personally threatened (Leadership review). Attempts by teams to secure resources such as budgets and release of time to support improvement may be seen by managers (or other colleagues) as political acts, and handled accordingly. Sometimes key individuals – described vividly in one research report as ‘constipators’ – are all it takes to stop a change process or data collection system in its tracks.
A lack of organisational engagement in initiatives can mean that highly committed staff are left to take on responsibilities for delivering improvement on top of their existing commitments (EWQI). It can be difficult to find and protect time to focus on improvements that are not viewed as priorities by the wider organisation (Leadership review; EWQPC). Lack of emotional and logistical support for clinical engagement tends to result in unsustainable activity that fades out through time.\(^{27}\)

A history of involvement in improvement can provide an advantage in terms of organisational readiness\(^{43}\) – but can also be a source of potential strain if activities are not well-integrated and aligned with organisational goals (Journey to safety). Even though flexible, risk-taking hospitals are more likely to succeed in improvement,\(^{45,51}\) organisational cultures may be oriented towards stability rather than innovation, and be reluctant to allow for failures and consequent learning. This can influence the extent to which clinicians are risk-averse when adopting new practices (EWQI). When attempting to implement innovative projects, there is a need to be open to new ways of learning (Shared Leadership), and to accept that not all interventions will succeed; some may take considerable time to yield positive results. Implementing new methods requires a good pre-existing level of staff morale and motivation.

A further cultural challenge is ingrained individualism in some areas of the health service (Shared Leadership). Safety may be seen as the responsibility of individual clinicians rather than as an organisational issue (SPI Lng), yet a barrier for clinicians is that NHS clinical career structures do not typically lend themselves to progression through involvement in improvement (Leadership review). In general, improvement work may be held in lower esteem than medical research, especially among clinicians. Clinicians often have to look beyond their daily work for opportunities to apply their learning, for example by taking on committee roles (LF pilot). Such disincentives to clinician involvement are an important barrier to improvement, especially given research findings that emphasise the importance of clinical (and particularly medical) leadership in improvement processes.\(^{12,19,25,42}\)

Some organisations failed to learn as much as they might have done from involvement in projects because the capacity to apply the learning was lacking. The greatest potential to learn came when participants were able to work with senior managers to build local capacity (Leadership review). Effectiveness of dialogue and quality of relationships were the foundations for making tangible improvement (Leadership). Others have noted elsewhere the need for joint work between the ‘blunt and sharp ends’ of organisations to ensure that learning is bedded in and to avoid ‘organisational amnesia’\(^{16,27}\) but also point out that organisational structures can sometimes militate against the capacity of practitioners to solve problems by taking a top-down approach to the implementation of evidence that leaves no space for creativity and learning.\(^{51,52}\)

### Organisational capacity

The importance of organisational capacity to support improvement has been repeatedly recognised in the literature.\(^{27,44,45}\) A shared sense of ‘readiness’ is difficult to achieve across organisations.\(^{53}\) Considerable variations in local capability have been found (Journey to safety) in areas that are critical to improvement, including around implementing process measures and reliably collecting and reporting data. An academic paper arising from the Journey to safety work commented that:

> The implementation of data collection and reporting structures for microsystems level clinical data on this scale provides certain resource and practical challenges for organisations, where such processes have not existed before. Review of process metrics from SPI revealed that speed and ease of uptake, along with final capability for process measurement was highly variable between sites. This was evident from a number of data quality limitations arising in the first phase of the programme, including: insufficient data points and lack of sufficient baseline periods, changing samples or sampling strategies mid-time series, inadequate
Lack of adequate structures to support improvement activities often means creating new systems and processes from scratch (SPI I; Journey to safety). Without such an infrastructure, organisations lack the capacity to benefit fully from the awards (Leadership review), but developing new systems can be extremely costly in services that lack the experience and infrastructure to support improvement (EWQI).

The complexity of many interventions can also pose significant challenges for organisations. ‘Whole organisation’ approaches require alignment and coordination across departments, professions and levels, and is far from straightforward (EWQI; SPI). More complex improvement work necessitates the blending of task- and people-related leadership skills (Leadership), which may be especially challenging. There may be substantial problems of staff feeling helpless in the face of problems outside their direct control, for example arising in other departments or wards, or in relation to tasks undertaken by other teams.

Trying to implement improvement in situations where organisational capacity is inadequate and culture is hostile can result in emotional exhaustion and evaporation of support for improvement activities. Securing organisational support is particularly testing when organisations are undergoing periods of instability including changes in senior personnel, financial difficulties and reorganisation. These distractions can mean lack of senior leadership buy-in. Unstable staffing is a further risk to improvement projects, resulting in stalled progress, especially when a team leader leaves and there has been no succession planning (Shared Leadership). Instability of teams, including rotating staff, shift patterns and the use of agency staff, makes it difficult to sustain collective knowledge of an implementation (SPI I; Safer Systems).

External support may be important in overcoming limitations of local expertise and capability. In the evaluation reports, teams trying to undertake improvement valued: support, knowledge and expertise from organisations such as the Institute for Healthcare Improvement or other technical providers; support from professional bodies (though some are better equipped/more experienced than others (EWQI)); technical input and coaching from specialists, such as clinical improvement experts and leadership development consultants; and trained patients acting as critical friends – though they need to be involved at an early stage and receive effective support/training (EWQI 2009). Such outside consultants and membership of structures such as quality improvement collaboratives have been noted elsewhere as an important resource in improvement initiatives. The involvement of patients as consultants in driving improvement is a promising, though as yet under-researched, approach. However, the extent to which external support can compensate for major structural and resource deficits (such as inadequate nursing levels) or adverse organisational cultures is still unclear.

User involvement

The wider literature supports the notion that the involvement of service users in organisational change can increase its legitimacy and its chances of success, though evidence that user involvement improves quality and outcomes remains limited. There was evidence of the value of user involvement in at least some of the evaluation reports. However, key challenges face those leading improvement initiatives as they seek to incorporate the voices of service users into their projects, including unresolved debates about the appropriate role for involved service users and the question of their ‘representativeness’ of the wider patient population. The challenges that are faced when working across disciplinary silos, considered above, are also faced in working effectively with service users, who can easily be marginalised despite commitments to ‘work in partnership’. Clarity about aims and purpose and flexibility in implementation is vital to ensure that involved users are able to participate actively in the development and refinement of the intervention through time.
Outer contexts

The wider policy context has an important impact on the likely success of improvement initiatives. External, mandated requirements for meeting targets, policy objectives, payments, inspection or accreditation, revalidation and data collection all weigh heavily on improvement initiatives by consuming energy, attention and resources. Sanctions for non-compliance with certain activities may depress support for other, non-mandated activities, such as improvement.

Many national policy documents, reports and guidelines are aligned with the aims of improvement initiatives supported by the Health Foundation. Government policy has placed a notable emphasis on quality, safety and leadership in the NHS over the last decade. Researchers in the wider improvement literature have noted how the nature of this ‘outer context’ can be crucial in supporting or undermining improvement initiatives. Some interventions in the evaluation reports were more well supported by the outer context of policy developments than others. For example, improved hand hygiene was both a goal of the SPI and of national policy over the same period, and thus the two were well aligned. By contrast, leadership development, though emphasised in national policy, is often ad hoc and incoherent in the NHS generally (Leadership review), and much less consistently supported within organisations.

Turbulence in policy direction and organisational structure in the English NHS has often constituted a significant obstacle for improvement projects funded by the Health Foundation. Constantly shifting policy agendas during the award periods of many of the improvement projects have proved to be a major barrier to improvement. While teams in Wales and Scotland had the advantage of a reasonably stable environment, in England ongoing policy instability, and consequent major organisational upheavals, affected the ability to complete projects or sustain commitments (Shared Leadership; Leadership review). Significant changes which impacted on projects included the reorganisation and merger of primary care trusts and the transfer of services from secondary to primary care.

This volatility is likely to remain a feature of the English NHS context for the medium-term future at least. One notable additional challenge of rapidly evolving outer contexts is that it has made it difficult to isolate the impact of the Health Foundation’s work, as skills and knowledge generally tended to increase as a result of national developments concurrent with the project activities – the so-called rising tide phenomenon.

Besides the distraction and disruption associated with policy turbulence, changes in the organisation and structure of the NHS may give rise to more fundamental shifts in the context that improvement projects have to face. This is already notable from, for example, comparing the EWQI and EWQPC programmes, where strategies that were effective in acute care were not always effective in primary care. In acute care, physicians saw improvement in quality as sufficient motivation in itself; in primary care, financial incentives were often required to motivate change among general practitioners. This reflects a wider cultural change in primary care detected by social scientists, where policy changes such as new general practice contracts and the introduction of the Quality and Outcomes Framework have meant that general practitioners’ time and even clinical decision making is increasingly driven by financial considerations.

It is difficult to anticipate with certainty how current changes – the abolition of primary care trusts and the introduction of general practitioner-led commissioning, for example – will affect improvement, but it is likely that approaches will need to be adaptable. While professional motivations may be resistant to such changes, much will depend on the question of how the issue of quality is integrated into expectations around commissioning, choice and regulation – and the detail of how it is measured and valued.

Challenge 6: Tribalism and lack of staff engagement

Harnessing professionalism

The professional status of so many of the stakeholders involved in healthcare is simultaneously one of the greatest challenges and richest opportunities for improvement.
Resistance to improvement based on ideals of professional autonomy, impermeable boundaries between professional groups, and resistance of professional cultures to change led from outside have all impeded efforts to improve quality by the Health Foundation and others. Yet professional norms, values and networks also offer an important resource that can be drawn on in seeking to change individuals' behaviour; the trick is to mobilise them in the right direction.

Sociologists have increasingly moved away from a view of professions as self-interested cabals, towards a more nuanced view which recognises the way in which the professional ethos can be instrumental in promoting values of quality and patient centredness. Central to this renewed interest in the progressive potential of professionalism is a recognition of the social function of professions as providing strong norming effects on members' conduct and behaviour. Professions can secure conformity to certain standards and expectations of behaviour – and are generally much more effective in this than organisational and managerial efforts to change behaviour. The EWQI evaluation, for example, reported that peer-led audit can achieve high participation and trusted results; the fact that a project was initiated by clinicians helped increase its appeal to colleagues as the goals were perceived as being common to the profession as a whole, reflecting findings elsewhere.

Issues of professional legitimacy repeatedly surface in the evaluation reports and the wider literature. In promoting the legitimacy of improvement interventions, some evaluations found that clinical staff may be more influenced by personal and professional networks than by hospital management (SPI II). Professional bodies and royal colleges can not only confer legitimacy, but also influence attitudes through training, leadership and organisational support (EWQI; SPI II). Clinician-led approaches to identifying standards, auditing and developing improvement plans may be important in successfully engaging other clinicians (EWQI). As others have noted, healthcare organisations comprise 'multiple professions socialized elsewhere', and different groups do not always share knowledge effectively. Consequently, tapping into profession-specific networks, norms and values can be crucial.

Peer support was highlighted as an important feature in several projects, especially those concerned with the development of leadership skills (Leadership review; EWQI; Leaders for Change). This took the form of collaborative learning experiences, buddying, sharing tools and data, and benchmarking. Although it was resource intensive, the ongoing interaction was seen as highly valuable and helped to sustain momentum (EWQI; Shared Leadership). It was especially important for frontline staff who have few such opportunities (Journey to safety). Peer support could build confidence and provide a source of encouragement and motivation through sharing common problems. The opportunity for staff to work with peers from outside their organisation was important, as it provided a safe space for honest and frank discussions (Leaders for Change). This was an important aspect of the EWQPC programme, which included specialist meetings for particular groups such as project managers. Findings from other improvement initiatives suggest that this approach can be very valuable, noting a particular role for 'outside experts' and communities of practice in supporting those leading improvement, and emphasising the need for such forms to be cross-professional (bridging the silos between professions and disciplines) and interactive.

Indeed, in evaluations of some of the initiatives focusing on leadership, the multidisciplinary approach of the projects was felt to be successful and a particularly useful feature (Leadership review; LF pilot). Bringing together individuals from a range of organisational and professional backgrounds exposed participants to a variety of skills, perspectives and knowledge to broaden their thinking and horizons (LF pilot). These groups did, however, require expert help in teamwork and relationship management to realise their full potential (Shared Leadership). One issue was that the language used by clinicians and managers differed, hindering relationship building (LF pilot). Another challenge was a lack of understanding and appreciation of each other’s roles (LF pilot).
Ingrained hierarchical attitudes and behaviours were evident too, especially in difficult situations (LF pilot). Ensuring that joint working between professions and managerial groups takes place effectively – and that improvement does not become a ‘battleground on which professions compete for ownership and definition of quality’\textsuperscript{74} – would seem critical.

Ownership

Engaging staff and overcoming a perceived lack of ownership is acknowledged as one of the biggest challenges in making organisational changes such as improvement.\textsuperscript{75} It requires, as already noted above, top-level and local-level leadership, alignment with staff priorities, and active work among staff to foster collaboration and engagement with improvement aims.\textsuperscript{12,15,67,76} In the SPI programme, medical engagement was one of the biggest challenges (SPI Lng). Perceptions of interventions vary between stakeholder groups involved in the improvement projects. The emphasis on measurement and reporting up the organisational hierarchy in SPI gave the impression of a top-down approach despite local staff involvement in Plan-Do-Study-Act (PDSA) cycles (Journey to safety), affirming the need noted above for measures that make local ownership seem real rather than tokenistic.\textsuperscript{15} Some frontline staff felt the focus needed to be on structure and resources rather than processes (SPI). Disciplinary groups also vary in their attitudes: doctors and nurses have different approaches to change and leadership, making engagement across groups difficult (EWQI). Inter-group differences in educational cultures and preferred learning styles have been noted as an impediment to improvement elsewhere.\textsuperscript{16}

Others have suggested that clashes between professional and managerial models of change – command and control versus influence and persuasion, for example – can be an impediment to improvement. Avoiding a situation where improvement is seen as an illegitimate managerial intrusion into professional concerns is important.\textsuperscript{12,77} Nevertheless, some evaluations indicated that the methods introduced enabled staff in particular locales to understand and measure the progress and impact of clinical interventions. Helping staff to understand cause and effect in this way had the potential to engender local ownership (SPI Lng).

Engaging senior staff and other stakeholders

Obtaining engagement at all levels, from the ‘sharp end’ of the practice of frontline staff to the ‘blunt end’ of senior managers in organisations is critical to improvement efforts. Getting buy-in from frontline clinicians and senior managers simultaneously can be particularly challenging: the first phase of SPI, for example, secured a great deal of managerial enthusiasm, but was sometimes perceived by staff on the frontline as being ‘top-down’ and ‘imposed’. For example, there was enthusiasm for the SPI at a strategic level and here features such as the leadership walk-rounds were viewed positively. They were not, however, viewed as so effective by some ward staff.

The evaluation reports chime with much of the wider literature in suggesting that engagement of senior stakeholders is a necessary, but not sufficient, condition for getting improvement interventions to work.\textsuperscript{52,61,62} In contrast to the SPI, the support of senior staff in some Health Foundation programmes appeared sometimes to be little more than nominal. Although interest from trust executives was most likely when a project accorded with a national or local priority, such support was fragile (EWQI). The need for mutual understanding between fellows and employers was highlighted in the Leadership review.

Tellingly, projects that worked best were those where a steering group member had a significant leadership role in the organisation (EWQI). Respected individuals could play a vital role in encouraging colleagues across different professions and affording credibility to activities (EWQI). Conversely, in one EWQI project where the team operated as a satellite, it was especially difficult to influence senior stakeholders (Shared Leadership). Some projects needed to do more in terms of developing strategic thinking and establishing links not just with medical directors, but with a range of senior executives and board members (Shared Leadership; Safer Systems). For senior-level support to count, then, it needs to be realised through strategic integration of the goals of improvement with wider organisational objectives and priorities.\textsuperscript{78}
Engaging and supporting middle managers and ward staff

Non-engagement of middle managers was identified as an issue in the evaluations of several of the programmes, including various leadership projects and the first phase of SPI. Preoccupied with the maintenance of stability and the need to ensure reliable service delivery, and responsible for implementing strategic changes led from the top of organisations, middle managers often had little opportunity to engage proactively with the improvement initiatives sponsored by the Health Foundation. Where middle managers were themselves the recipients of awards, they sometimes struggled to obtain time away from operational responsibilities. The wider literature suggests that support from middle managers can be important in multiple ways: for example in helping to ensure that particular projects and initiatives are aligned with wider organisational aims, and in integrating improvement efforts into broader performance monitoring and management systems. Middle managers who are sympathetic to changes may become important internal advocates, and may be crucial in providing not only the resources but also the justifications for activities.

Middle managers and ward staff can be difficult to engage in new interventions because they already face numerous, complex and often competing clinical and organisational demands, often with inadequate staffing, limited resources and equipment shortages. Since they are already balancing multiple competing priorities, initiatives that generate further paperwork are likely to be especially unwelcome (SPI I). Complex interventions might be viewed as daunting (SPI I), so making the implementation appear manageable is important in securing the support of frontline staff (SPI I). Others have noted the importance of ensuring that the information infrastructure supports, rather than deters, staff engagement.

Factors found to affect medical engagement in the SPI include: improvement track record; resource allocation; perceptions of purpose of intervention; evidence of efficacy; external expertise; local programme champions; and management involvement (Journey to safety). In the same programme, managers were more likely to report positive outcomes compared to frontline staff. Communicating candidly and frequently is important to secure the engagement of clinicians (EWQI).

Silos

The gaps between professional and disciplinary groups, and between professions and management more broadly, have also been an important impediment to change in the Health Foundation’s programmes. Award holders often find it difficult to develop strong working relationships with stakeholders across professional and managerial boundaries, reflecting wider social scientific characterisations of hospitals and other healthcare environments as ‘tribal’ organisations, in which relationships between different professional groups are often strained. Consensus and trust within one profession do not necessarily extend to processes led by other clinical groups. Professional silos can be an important impediment to improvement uptake. The EWQI evaluation also found that disciplinary boundaries within professions can also be important: the involvement of clinicians from different specialisms, with different values, norms, and conceptions of the evidence base, can obstruct engagement.

Successful strategies in some of the programmes included opportunities for coaching and reflecting on the nature of these professional silos, which offered a rare chance to escape the day-to-day pressures of roles into which award holders had been socialised over many years. Multidisciplinary learning – both among award holders and in the settings in which improvement projects were being undertaken – also showed some promise in mediating the boundaries between professional and disciplinary groups. This finding is in line with suggestions from both the literature on improvement and broader social scientific theory and evidence. However, this evidence also indicates that a multidisciplinary community, covering multiple professions and specialties and including managers, is not something that can be imposed. Rather, if it is to be sustainable and effective, it needs to be driven by the volition of those groups themselves, and thus needs to be viewed as legitimate and worthwhile by different stakeholders and according to the standards of different professions.
Challenge 7: Leadership

The wider literature on improvement finds an important role for leadership, especially clinical (often medical) leadership, which can be crucial in ensuring that initiatives gain traction at a local level. The Health Foundation evaluations found that leadership of complex improvement interventions requires a combination of technical skills, facilitation skills and personal qualities (Leadership review). In line with findings in the wider literature, leaders are required at all levels, from the frontline to executives. Time and space to develop leadership capacity is noted as a crucial success factor in several of the evaluations of the Health Foundation's programmes, especially given the diverse backgrounds and limited leadership experience of many of those awarded funding. Also prominent is the breadth and diversity of leadership qualities needed, and the particular importance of facilitative, enabling forms of leadership in achieving the aims of improvement, given the position of most award holders in the ‘middles’ of organisations. Leadership of improvement needs to be confident, but not overly dominant (Shared Leadership). Of particular importance are the interpersonal, relationship and engagement skills needed to involve and encourage others (Leadership review). Bradley et al., for example, found that ‘uncompromising clinical leaders’, who were willing to make things happen but also sensitive to the needs of team members, were a crucial component in the improvement project they studied.

Given the focus, aims and recipients of its improvement awards, the Health Foundation's conceptualisation of leadership is well supported by the wider social scientific evidence base. However, this evidence base also highlights the need for a plurality of leadership roles, distributed throughout the different levels of the organisational hierarchy and across the multiple groups that need to be engaged. This reflects the findings of a growing body of research on leadership in public sector organisations, which emphasises the importance of more distributed forms of leadership across organisations where organisational aims are ambiguous, and power is located across multiple professional groups.

There are risks that individuals aspiring to be seen as ‘inspirational’ or ‘transformational’ in fact alienate others and perhaps are seen as claiming credit for efforts made by people in the middle layer and the sharp end. This implies not just collective responsibility for leadership across clinical and managerial groups, but also a broad set of strategies that are credible at different levels in the organisation and with different professional groups, and which are thus most likely to yield influence and change policy and practice.

The improvement leader might perhaps best be characterised as an enabler, rather than a figurehead, and this role involves enabling others to contribute views, expertise and ideas, creating networks, facilitating cooperation and collaboration, building confidence and trust in others (Leadership), and sparking enthusiasm and maintaining momentum (EWQI). ‘Quieter’ leadership, which is less about bombastic declarations and more about working to facilitate collaboration among key stakeholders, may be key.

Challenge 8: Balancing carrots and sticks – harnessing commitment through incentives and potential sanctions

Busy clinicians may need incentives in order to prioritise improvement. The literature suggests that the more indirect and dispersed the benefits of an intervention are perceived to be, the less likely clinicians are to become involved, and the evaluations support this view (EWQI 2009). Visible improvements and unequivocal evidence that patients will benefit from improvement activities can act as an incentive for greater clinician involvement in what is generally seen as a relatively low status activity with poor rewards (EWQI 2007, 2009). One suggestion is developing audit as an activity that can be used as evidence for engagement in continuing professional development and revalidation (EWQI). Linked to this, monitoring systems could act as an incentive by imbuing staff with a sense of accountability (SPI I). Similar efforts have been reported in the wider literature to have generated some success.
Peer pressure and peer esteem generated through activities such as comparative audits, regional meetings and peer-review visits (EWQI) may be important drivers of change, while incentives for managers might include cost-benefit evidence and delivery of key targets (EWQI 2007).

Although the SPI was seen as enhancing the career prospects of a select few, attaching reputational incentives to improvement programmes was recommended as a ‘strategy for the future’ (SPI I). Similarly, the Shared Leadership scheme evaluation argued that career management and the reward system should be organised to keep the team together and increase sustainability. Certainly, the wider literature suggests that alignment with clinicians’ values and motivations can facilitate engagement with improvement.13,16

To a large extent, many of the improvement projects funded by the Health Foundation seek to draw on the intrinsic motivation of healthcare professionals to maximise the quality and effectiveness of the care they provide for patients. However, professional commitment and the public service ethos only go so far in securing change. Where projects come up against hostility or indifference, ‘softer’ modes of persuasion may be inadequate to make changes to practice. If intrinsic motivation is lacking, then harder tactics may be needed in addition to softer forms of encouragement. Some of the more successful projects in the EWQI learned this lesson early on, and applied a combination of soft persuasive tools and ‘harder edges’ to achieve change across systems – for example, some projects deployed a system of peer review and audit early on as a means of both supporting change, and reminding participating sites that they were being ‘checked up on’.

The key here appears to be to find a combination of strategies, in which the harder approaches that rely on extrinsic motivation do not undermine the intrinsic will to improve quality that most healthcare professionals will possess.85 The medical profession offers a sophisticated example of this, in which the assumed professional commitment of individuals is backed up by a system of regulation, support and potentially admonishment from peers if an individual professional should deviate.86

Support from professional associations can thus offer powerful backing to an improvement project, but projects also need to develop for themselves a clear theory of change that sets out how they plan to shift behaviour in pursuit of improvement, which draws in both softer and harder tactics in a complementary manner.28

**Theme 3: Sustainability, spread and unintended consequences**

A final theme relates to sustainability, spread and the potential for the intervention to produce unintended – and unwanted – consequences. The evidence from the evaluation reports on these topics is relatively limited, as most of the evaluations coincide with the periods of the programmes themselves, and do not include follow-up studies. Extending evaluations to look at the longer-term effects of programmes may be something for the Health Foundation to consider in the future, especially given that sustaining and spreading improvements within and beyond organisations is a well-known challenge: the ‘improvement evaporation effect’ can mean that initial gains in quality and safety diminish over time.87

**Challenge 9: Securing sustainability**

The available evidence suggests a need for an explicit model for spreading learning and sustaining change from the outset (SPI; Leadership review). Involvement in improvement programmes may act as a stabiliser in times of uncertainty (Shared Leadership), but may also enable improvements to be better sustained in the future, especially when the policy focus has moved elsewhere (SPI I). Yet unless measures are embedded in wider mechanisms, clinicians’ and managers’ interest is likely to waver when they are faced with new, competing priorities (EWQI).

‘Locking in’ changes by changing performance management policies and organisational infrastructure to accommodate them can be crucial in sustaining change.27
The EWQI evaluation noted that improvement activities appeared to have more traction when they are pulled into routine activities. A key problem was the over-reliance on certain individuals, rather than institutionalised processes such as the adaptation of standards and guidelines and the building of local capacity to lead change. Relying on individuals is a threat to stability as impact, support and commitment can quickly be lost if they move on (EWQI). Equally, organisational change can quickly destabilise progress and reverse achievements unless improvements are fully embedded (SPI Lng). Senior executive support may be required to sustain progress in the face of such challenges.

An obvious challenge to embedding is the lack of ongoing resources, especially when organisations face challenging financial situations. In many Health Foundation programmes, individuals have continued to commit time beyond the end of the initiative to ensure improvements are maintained. Some projects have secured additional funding through subscriptions or other awards programmes. In the case of individuals on leadership schemes, some had been successful in attracting additional resources from their employing organisation. However, in most cases, projects have to be resource neutral, or use existing resources more efficiently, if they are to continue (EWQI). Not all projects will become sustainable services; they need to be able to demonstrate clinical effectiveness and efficiency in order to become part of mainstream services (SPI Lng).

In the leadership schemes, examples could be found of individuals applying learning in a practical context. These included introducing an accountability framework and altering the trust’s plans to implement cuts. Others had gained buy-in from senior leaders for a countywide leadership development strategy (Leadership review). Despite these successes, a major limiting factor was that leading improvement did not always fit with standard professional roles (Leadership). In addition, exemplar and advocate roles are only sustainable in an organisation where the culture supports leadership development (LF pilot). This reflects points made above about the limited degree to which advancement along clinical career pathways is enhanced by leadership of improvement.

The appropriateness of transferring successful interventions to different contexts is another issue raised in the evaluation reports. There are significant dangers of assuming that because an improvement intervention has been found to work in one context, it is possible to transplant it elsewhere. The evaluations do contain some reports of successful transfers within specific clinical areas. In the EWQI programme, for example, methods from Scottish National Audit Project-Community Acquired Pneumonia (SNAP-CAP) were transferred to other infection areas and the care bundle was adopted at sites in other regions (EWQI). There were also examples of projects and individuals contributing to the development of national standards and strategies and informing the design of future programmes and campaigns (SPI Lng, EWQI). However, broadly speaking, transfer of complex, multifaceted improvement approaches is not a straightforward matter, but important learning can migrate from one setting to another.

Organisational contexts may mean that effects vary considerably (EWQI). The successes of complex, multifaceted approaches to improving quality can be especially hard to replicate beyond the original sites, requiring patience and adaptability. In particular, it may be difficult to transfer interventions from defined and distinctive clinical areas such as intensive care, where there is greater scope to address people and context issues, a stronger team culture and day-to-day leadership (SPI Lng). The ‘tribal’ nature of many hospitals, with ‘subcultures [living] out their lives in glorious isolation one from the other’, can also make transfer between directorates, wards and even teams difficult. This is consistent with the social science finding that internal cohesion works to reinforce behavioural changes, making it difficult for individuals to deviate from initiatives embraced by their colleagues.

The reach of some interventions is only ever likely to be localised, given the size of the team and the size of the domain (Shared Leadership), and the time and resources available, which may mean that only a limited number of people are ever exposed to the intervention (SPI I; Leadership review). Even with a well-founded and conducted programme, impact is likely to be patchy and limited (EWQI).
Challenge 10: Side effects of change

Any intervention risks unintended consequences and supporting positive side effects while mitigating for negative ones can be a challenge. Although none of the evaluations attempt to explicitly capture the side effects of change caused by improvement efforts, some of the evaluation reports discuss the risk of unintended consequences, including the prospect of clinicians becoming disenchanted with improvement. The Co-creating Health report, for example, identifies the risk of existing good practice being disrupted. In a few projects, there were unexpected opportunity costs, which were felt by some to outweigh any benefits (for example, non-provision of backfill costs in the Shared Leadership programme). The need to be alert to the side effects of improvement is now increasingly recognised, but the methods for their detection remain poorly developed.
Chapter 4
Key issues in overcoming the challenges to improvement

Poor understanding of how organisational contexts and other challenges affect improvement remains a stubborn obstruction to getting both the design and implementation of improvement efforts right. In this report, we have sought to synthesise learning across the evaluation reports of improvement projects and programmes undertaken by the Health Foundation, which seek to improve quality by building leadership for quality and through wider supporting mechanisms.

In addition to identifying some of the key challenges faced in improvement, our analysis has highlighted some of the ways in which the evaluations and the wider literature suggest overcoming them. Table 1 summarises the main lessons of this analysis, placed under the three broad themes. We then offer a short discussion of some of the important issues arising from this analysis.

Table 1: Practical lessons in overcoming challenges to improvement

<table>
<thead>
<tr>
<th>Challenges that affect improvement</th>
<th>Ways to overcome challenges</th>
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</thead>
<tbody>
<tr>
<td><strong>Theme 1: Design and planning</strong></td>
<td></td>
</tr>
<tr>
<td>Problem being addressed not as ‘real’ by staff</td>
<td>Peer-led debate and discussion; use of hard data to demonstrate extent of problem</td>
</tr>
<tr>
<td>Weak evidence base means intervention lacks credibility</td>
<td>Avoid areas where the evidence base is weak or professional consensus cannot be reached</td>
</tr>
<tr>
<td>Involvement of respected senior figures (expert opinion leaders)</td>
<td>Involvement of respected senior figures (expert opinion leaders)</td>
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<tr>
<td>Approaches inappropriate for local context</td>
<td>Piloting of approaches and revision (or rejection) as appropriate</td>
</tr>
<tr>
<td>Over-ambitious aims given timescale and/or resources</td>
<td>Better recognition of the scale of resource, effort and support required</td>
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<td></td>
<td>Focus on more defined area</td>
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<td></td>
<td>Trialling to help identify support needed</td>
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<tr>
<td>Challenges that affect improvement</td>
<td>Ways to overcome challenges</td>
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<tr>
<td>Lack of clarity about definitions/nature of award</td>
<td>Ensure basic details agreed at outset</td>
</tr>
<tr>
<td>Methods of evaluation not built in/baseline measures not collected</td>
<td>Consider evaluation at planning stage</td>
</tr>
<tr>
<td>Difficulty isolating impacts of interventions and attributing change appropriately</td>
<td>Build in evaluation methods from outset eg collect baseline measures Control group Counterfactual approach</td>
</tr>
<tr>
<td>Importance of evaluation not well-understood eg difference from improvement/performance management</td>
<td>External support may be required; needs to be built in from the beginning Local teams need strong support</td>
</tr>
<tr>
<td>Data collection oriented towards research rather than improvement</td>
<td>Focus on ways in which data can be used to benefit patients</td>
</tr>
<tr>
<td>Not a significant improvement because already good at baseline</td>
<td>Target those sites/individuals with greatest potential to benefit</td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>Factor in costs of administrative support to project budget</td>
</tr>
<tr>
<td>Unexpected opportunity costs or other unwanted consequences</td>
<td>Make limits of funding as clear as possible at start eg whether backfill costs met</td>
</tr>
</tbody>
</table>

### Theme 2: Organisational and institutional contexts, professions and leadership

<p>| Lack of organisational structures to support implementation | Need to identify support required and allow time/resources within project to establish systems if these are not in place eg to collect data |
| Improvement valued less highly than medical research | Support of senior executives, professional bodies, reward structures |
| Limited capacity for organisational learning | Involvement of senior managers required Culture needs to support learning and development |
| Need to align departments, professionals, levels | Reduce number of areas to be tackled |
| Shifting agendas/priorities in the 'outer context' | Map interventions to core themes as well as specific policies |</p>
<table>
<thead>
<tr>
<th>Challenges that affect improvement</th>
<th>Ways to overcome challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS career structures not suited to progression via improvement eg clinicians need to look beyond daily work to apply or change careers</td>
<td>Support of senior executives and professional bodies</td>
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<tr>
<td></td>
<td>Reputational incentives (raise status of improvement)</td>
</tr>
<tr>
<td></td>
<td>Peer pressure/peer esteem (eg peer-review visits, comparative audit)</td>
</tr>
<tr>
<td>Personnel changes</td>
<td>Embed in institutional structures rather than relying on individuals</td>
</tr>
<tr>
<td>Lack of incentives to encourage participation</td>
<td>Highlight visible improvements</td>
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<td></td>
<td>Use as evidence for continuing professional development/revaluation</td>
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<tr>
<td></td>
<td>Reputational incentives (raise status of improvement)</td>
</tr>
<tr>
<td></td>
<td>Peer pressure/peer esteem (eg peer-review visits, comparative audit)</td>
</tr>
<tr>
<td>Improvements seen as management-led/imposed</td>
<td>Clinician-/staff-led approaches</td>
</tr>
<tr>
<td></td>
<td>Involvement of professional bodies</td>
</tr>
<tr>
<td>Differing views between various professions, clinical areas and stakeholder groups</td>
<td>Involve representatives from all areas/professions involved in design of intervention</td>
</tr>
<tr>
<td></td>
<td>Focus on defined clinical areas</td>
</tr>
<tr>
<td>Language barriers between clinicians and managers and lack of understanding of roles</td>
<td>More opportunities for cross-professional working</td>
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<tr>
<td></td>
<td>Use of intermediaries eg training staff</td>
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<tr>
<td>Mix of skills required to deliver improvements</td>
<td>Multidisciplinary teams and draw on external support</td>
</tr>
<tr>
<td>Lack of staff skills (eg teamworking, networking)</td>
<td>Include training as part of the project</td>
</tr>
<tr>
<td>Inappropriate leadership style</td>
<td>Training for leaders at all levels in enabling/subtle leadership</td>
</tr>
<tr>
<td>Roles not clearly defined eg service users, boards</td>
<td>Establish stakeholder involvement and roles at an early stage</td>
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<tr>
<td>Lack of engagement of ward staff and middle managers</td>
<td>Ensure paperwork associated with project is not excessive</td>
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<td></td>
<td>Make sure intervention appears manageable</td>
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<td></td>
<td>Ensure early and full support of clinical leaders</td>
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<td></td>
<td>Peer-led interventions/peer opinion leaders</td>
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<tr>
<td></td>
<td>Build in rewards for middle managers and ward staff</td>
</tr>
<tr>
<td>Lack of staff time</td>
<td>Protect dedicated staff time to work on improvements, including reflection</td>
</tr>
<tr>
<td></td>
<td>Ensure activities recognised as a priority</td>
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<tr>
<td>Challenges that affect improvement</td>
<td>Ways to overcome challenges</td>
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<tr>
<td><strong>Theme 3: Sustainability, spread and unintended consequences</strong></td>
<td></td>
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<tr>
<td>Reach of interventions highly localised</td>
<td>Need to be realistic about likely reach at start</td>
</tr>
<tr>
<td></td>
<td>Longitudinal monitoring to allow time for effects to reach 'sharp end'</td>
</tr>
<tr>
<td>Lack of continued funding</td>
<td>Identify future funding sources eg subscriptions, other funders</td>
</tr>
<tr>
<td></td>
<td>Identify ways to use resources more efficiently</td>
</tr>
<tr>
<td>Projects not embedded in wider mechanisms/routine activities</td>
<td>Need to write into standards, guidelines, procedures etc</td>
</tr>
<tr>
<td></td>
<td>Need involvement of senior managers</td>
</tr>
<tr>
<td>No specific requirement to apply/spread learning</td>
<td>Specify in award documentation</td>
</tr>
<tr>
<td>Improvements not transferred successfully</td>
<td>Identify areas to which improvement can be transferred successfully (likely to be closely allied)</td>
</tr>
<tr>
<td></td>
<td>Need to take account of organisational context when transferring (may need to adapt)</td>
</tr>
<tr>
<td></td>
<td>Needs involvement of professional bodies and those developing national strategies</td>
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</tbody>
</table>

Perhaps the overriding message is that there is no magic bullet in improvement. This does not mean that nihilism has a place, but it does mean a need to accept the challenges and adopt a solution-focused approach. Much of what we have found concerns tensions and balances, so solutions need to be nuanced, sensitive, and sensible, while maintaining a firm focus on the benefits of improvement for patients. Securing the engagement of multiple stakeholders in improving quality requires multiple approaches, many of them apparently contradictory: strong leadership alongside a participatory culture; direction and control but also flexibility according to local need in implementation; critical feedback on performance but without the attachment of blame. Making progress in addressing challenges to improvement will require negotiating many cramped channels.

One tension is between action and evaluation. There is an understandable urge to action improvement, particularly when evidence of a deficit of care is revealed. Yet needing to improve care and knowing how to do it are two very different things. A feature of improvement for perhaps the last decade has been pressing on to action without enough of an evidence-base for intervening, or enough planning, assessment and consultation, and then looking for impressive results in a short period of time. An important lesson for future initiatives may be the need for much more extensive project development periods. Significant investment is needed in specification of the theory of change, consultation with stakeholders, designing and selecting the appropriate measures and setting up data collection systems, and assessing organisational capacity. At the same time, improvement design needs to supply a framework for change rather than a rigid specification; adaptability is a crucial component of improvement.

Another, related tension is that of project status. On the one hand, it can provide excitement and a clear impetus for change, but it can also hamper
effectiveness in a number of different ways. The sheer complexity of healthcare organisations, with their multiple tribes of professionals and managers, changing policy imperatives, and divergent accountabilities to patients, regulators and accountants, means that most improvement initiatives are but a small contribution to activity. There is a need to consider, in the early stages of planning, how well improvement projects align with national policy pressures. Projects that run counter to national pushes, or that are introduced into environments already suffering organisational stress from mandated requirements, will face challenges in achieving success.

Tensions also arise in relation to the excitement surrounding projects, especially when, as is usually the case for the Health Foundation, awards for projects are awarded through a competitive process and are seen as highly prestigious. Improvement project leaders can easily be carried away by enthusiasm or a perceived need to impress the funder, fail to set goals that are reasonable, or drain resources and energy from other important activities. This can be compounded by organisational impatience for quick wins and early results and so needs to be managed carefully. Projects are particularly challenging when they are complex, involve multiple priorities, and stretch structures and goodwill too far. Ambitious projects with ‘stretch’ targets can easily underestimate the resources required, and indeed the amount of work needed to achieve change throughout a ward, department or hospital. Explicit assessments of the effort required by participants need to be undertaken, and participants need to make explicit commitments to deliver on this effort. Allied to this, it is likely that specific kinds of project management skills for improvement interventions need to be developed, to ensure that the dangers of goal displacement – where, for example, meeting pre-set targets or milestones becomes more important than achieving positive change – are averted.

The evaluations and the wider literature repeatedly find differential capacity across organisations to support improvement initiatives. The degree of readiness, in terms of physical infrastructure such as information systems, human resourcing such as administrative support, and high-level buy-in from senior management, is likely to have a significant effect on the likelihood of success of an improvement project. Senior level buy-in needs to be backed up by active support, two-way communication and strategic alignment. Leadership styles also need to take account of the need to facilitate collaboration across multiple professional groups to secure success in improvement. There are some suggestions that creating ‘celebrity’ leaders for improvement within organisations may ultimately prove alienating, while under-resourcing of apparently unglamorous roles such as clerical support may prove fatal to an improvement effort.

Even in organisations where there is capacity and senior-level support, personnel changes, particularly if they involve senior sponsors and ‘mentors’ of award, can seriously disrupt improvement progress. In some organisations, improvement activities are perceived as a peripheral activity outside the mainstream business of providing healthcare. Some of the aspects of awards most valued by award holders, such as learning sets, coaching and ‘time out’ for reflection, may be most vulnerable to erosion if organisations are not fully supportive. Consequently, significant attention is needed to help ensure that organisational support does not wane. This may include closer links between these aspects of interventions and funding arrangements and making clear the connection between these improvement processes and patient outcomes.

Given our analysis of organisational challenges to improvement, one tempting option is to focus intensely on the contexts that are most receptive to change, and thus where the return on investment in improvement is likely to be greatest. The experiences of projects under both SPI and EWQI show that improvement is achieved much more easily in some settings than others: for example, the highly contained and culturally cohesive setting of the intensive care unit seemed a more fertile environment in which to achieve behavioural change than other departments. Focusing efforts on units characterised by strong, reciprocal ties between staff, where there is greater
acceptance of group norms and more opportunity for self-monitoring and informal social sanction, may be more likely to reap the rewards of improved quality and safety. However, even this approach involves a tension – since it may well be that the ‘stony ground’ units, wards or practices are those most in need of improvement. The risk then is that focusing efforts on easy wins simply increases inequity.

A further tension is the need to appeal to multiple different audiences; gaining the support of one stakeholder group may mean alienating another. Getting relationships and engagement right is one of the most important building blocks of an improvement effort. Securing and retaining engagement of staff towards improvement ends requires, as Bradley et al. put it, the ‘ability to pursue simultaneously contrasting approaches and balance the tensions between them.’ Gaining agreement on the problem to be addressed is perhaps the most important first step in building consensus and coalition. A clear finding across the reports is that both the problem to be addressed by improvement, and the evidence for the effectiveness of the means to address it, need to be seen as legitimate by the staff affected by it. Care is needed in deciding where to focus improvement interventions and in ensuring that they offer clear advantage over what is already in place.

Efforts that go ‘against the grain’ of wider professional, organisational and policy aims are likely to face significant difficulties in realising their ambitions. At a senior management level, fit with wider organisational aims means that improvement projects are more likely to be met with active enthusiasm rather than indifference. At the frontline, fostering a sense of ownership is crucial, so that the stakeholders whose practice is likely to be affected directly have had a chance to participate in refining the improvement intervention. Middle managers are very often neglected, yet their role in improvement is crucial and they require better recognition and support. This means achieving a balance between fit with broad aims that will secure the crucial sponsorship of senior managers, and a degree of flexibility that enables those whose behaviour is to be changed to be participants in the process, rather than objects of change. Engaging so many constituencies takes time and energy, and is no guarantee of success; unexpected events or turbulence in the outer context can easily take the wind from the sails of an improvement initiative. However, if an improvement project can be aligned with the interests of multiple stakeholders, and tied into enduring policy foci, then it has a better chance of securing wider influence over time.

Coordinated actions at multiple levels, seeking influence through multiple professional networks covering all stakeholders, are needed to secure change in organisations. Clear leadership on what needs to change must be combined with sensitivity to local particularities and adaptability in implementation to secure a sense of ownership and reduce the level of perceived threat. However, efforts to engender ownership can be viewed as tokenistic if they take place within a management culture that is perceived as top-down and authoritarian, and if staff feel that important issues are being marginalised.

Sustaining progress over time presents a further challenge. With appropriate engagement with professional associations and royal colleges, improvement activities can potentially become mainstreamed through training and revalidation processes. Improvement interventions are much more likely to succeed when they are developed with rather than imposed on healthcare professions. Projects seeking to change behaviour without some form of professional endorsement at a local or national level are often on a hiding to nothing: professional groups continue to remain crucial actors in the acceptance or refusal of efforts to change practice. Improvements in quality are vulnerable to changes in organisational context and to declining interest and enthusiasm, especially if they are not incorporated into wider performance management systems and organisational policies. Again, however, the risk of resentment and ritualised displays of compliance increases once an improvement activity becomes part of a performance management system.
Chapter 5
Conclusions

The Health Foundation is committed to supporting improvement that will enhance the quality, safety and experience of patients in the NHS. Many leaders of those who have received Health Foundation support have been innovative in negotiating the challenges in the complex organisational and professional context of healthcare. But change is hard and slow. Many challenges are deep-set and structural in nature, and resistant to even the most determined leader of change. Some aspects of organisational context may not be amenable to change through individual or team efforts, no matter how ‘heroic’, ‘transformational’ or determined the leadership, and no matter how generous the support. At least some failures are to be expected, and may not be attributable to any deficiencies on the part of award holders and their teams; they should, instead, be treated as learning opportunities and contributions to improvement science.

Many of the factors identified in this review are inter-related and are part of wider, complex systems. Successfully intervening to overcome one challenge may give rise to others; as noted above, the unintended consequences of efforts to improve quality are insufficiently studied. More explicit acknowledgement of the complexity of the challenge facing those improving quality may help to trim ambitions, avert disappointment, and maximise learning.

This is not to suggest pessimism about the efforts of the Health Foundation and others committed to achieving change through the agency of clinicians and others working at the coalface of healthcare. While some challenges may seem impossible to overcome, others become more amenable to intervention as we learn more about them. Many achievements in the evaluation reports are testament to how much can be improved with financial backing and the right training and support. The evaluations as a whole also highlight the potential for refining and honing the science of quality improvement through rigorous evaluation and careful synthesis of the lessons produced by this. We hope that our analysis may help to define further strategies.
Safer Patients Initiative
The Safer Patients Initiative ran from 2004–08. It was set up to test practical ways of improving hospital safety and to demonstrate what can be achieved through an organisation-wide approach to patient safety.

Safer Patients Initiative phase 1 (SPI I), February 2011
The first phase of the Safer Patients Initiative began in 2004, when four UK hospitals were selected through a competitive process. Each of the trusts undertook improvement in leadership in the four clinical areas using a predefined measurement framework. They were given an ambitious stretch goal of halving the number of adverse events across their organisation over two years.

An organisation-wide focus on patient safety underpinned the improvement work in each clinical area. This involved developing better communication, training staff in improvement methods, creating new systems for measuring process and outcomes, and reporting and learning from adverse incidents. Chief executives and senior teams were fully involved in the programme, ensuring that patient safety remained a top strategic priority.

Safer Patients Initiative phase 2 (SPI II), February 2011
A second phase of the initiative began in 2006. Phase 2 saw 20 further hospitals join the scheme, working in pairs so as to learn from each other's successes and challenges.

These trusts had two stretch aims: a 30% reduction in adverse events and a 15% reduction in mortality over a 20-month timescale.

Learning report: Safer Patients Initiative (SPI Lng), February 2011
This learning report provides an overview of the Safer Patients Initiative (phases 1 and 2) and its evaluation, and highlights the impact of the programme, key lessons and further issues for exploration.

The journey to safety: a report of 24 NHS organisations undertaking the Safer Patients Initiative (Journey to safety), unpublished
This programme examined five core issues essential for any safety programme:

- the role of the patient in patient safety
- raising awareness of safety issues across organisations
- the improvement of clinical processes
- high reliability units and the transformation of whole organisations
- how safety is addressed at each level of an organisation in a series of nested steps (focusing on the Safer Patients Initiative).
Leadership programmes (2008–11)

What's leadership got to do with it? (Leadership), January 2011

This is an in-depth evaluation of the Health Foundation’s leadership programmes, including an exploration of the links between leadership and improvement. The three core enquiry questions for the study were:

– What are the links between improvement and leadership behaviour?
– Do different types of improvement require different leadership behaviours?
– What are the lessons for leadership development generally and for the Health Foundation specifically?

This report presents a detailed account of the two-year study and the conclusions that emerged. It contains insights into how leadership development can support improvement in the NHS.

Evaluation of the Shared Leadership for Change programme (Shared Leadership), June 2009

This scheme was designed to test a hypothesis that provision of structured support to teams to improve functioning, using a model called ‘shared leadership’, would lead to improvements in team processes and patient outcomes. The scheme focused on diabetes managed clinical networks. Six multidisciplinary diabetes teams took part in the scheme between October 2005 and July 2007.

Leadership programmes (2003–08)

A review of the Health Foundation’s leadership programmes 2003–07 (Leadership review), October 2008

In 2003, when the Health Foundation started investing in leadership development for clinicians and managers in UK healthcare organisations, there was insufficient funding for developing leaders and limited learning from what was being undertaken. The aims were to produce more and better leaders, to learn what works and to share it widely. This review describes the history, evolution and impact of this investment.

Leadership Fellows pilot scheme (LF pilot), September 2006

This report identifies lessons from a formal evaluation of the pilot of the Health Foundation Leadership Fellows Scheme 2003–05. The aim of the pilot was to inform the development of a scheme to identify and develop a cadre of leaders with the potential – collectively and individually – to bring about improvements in the quality of healthcare. The 16 award holders involved in the pilot were provided with coaching, mentoring, action learning sets and master classes.

Leaders for Change evaluation report (Leaders for Change), August 2006

The aim of the scheme was to equip middle and senior professionals who have a leading role in service improvement with the necessary skills and knowledge in managing and implementing change. The award involved:

– undertaking a project (which forms the context for development during the period of the award)
– attending three action learning sets
– attending a modular Change Agent Skills programme
– undertaking a personal development programme
– using an e-learning resource.
Engaging with Quality Initiative

The three objectives of the Engaging with Quality Initiative were to:

- engage clinicians in leading improvement projects that would achieve measurable improvements in clinical quality
- identify effective strategies for clinical improvement that could be replicated and spread across the healthcare system
- increase capacity for clinical quality measurement and improvement in the UK by developing the infrastructure.


This is the second annual report evaluating this initiative.

An evaluation of the Health Foundation’s Engaging with Quality Initiative (EWQI 2009), March 2009

This is the third annual report evaluating the initiative.

How do you get clinicians involved in quality improvement? (EWQI), August 2010

This is the final evaluation report of the initiative.

Engaging with Quality in Primary Care

Engaging with Quality in Primary Care: evaluation of the Leading Improvement Teams Programme (EWQPC), March 2011

This is a major demonstration and examination of how to engage primary care clinicians from a variety of disciplines in improving the quality of the healthcare that they provide. The study was premised on the argument that actively engaging clinicians provides a sustainable and cost-effective means to improve outcomes for patients.

Co-creating Health

Co-creating Health evaluation (Co-creating Health), in press

This programme aims to achieve measurable improvements in the quality of life of patients with a long-term condition and to improve their experience of the healthcare system by embedding self-management support within mainstream health services. The evaluation report will look at how successfully this aim has been met.
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We believe that in order to achieve this, health services need to continually improve the way they work. We are here to inspire and create the space for people to make lasting improvements to health services.

Working at every level of the system, we aim to develop the technical skills, leadership, capacity and knowledge, and build the will for change, to secure lasting improvements to healthcare.

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