

Able to improve?

The skills and knowledge NHS front-line staff use to deliver quality improvement:
findings from six case studies

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Executive summary

The 2014 Health Foundation report [*Skilled for improvement?*](#) found that successful quality improvement (QI) initiatives rely on a pyramid of three skill sets – technical, soft and learning – built on a sound organisational foundation. Although the report explained why the introduction of technical QI skills often fails to have the desired organisational outcome, it was not designed to uncover in detail the necessary soft and learning skills. This report, also funded by the Health Foundation, sets out to do just that. By studying groups of NHS front-line staff in England working to make improvements, three key questions are explored.

1. Which improvement skills matter most, and when and why are they important?
2. What factors help or impede practitioners' use of their improvement skills?
3. How and why do groups overcome (or not) the barriers and capitalise on the facilitators, and what can be learned from such successes and failures?

Method

Two QI initiatives in each of three trusts were studied, one chosen from among the highest Care Quality Commission (CQC)-rated acute trusts in England, one from among the lowest and one rated intermediate. This provided us with a small, but varied, sample of organisations for the research.

Over a period of 14 months, in-depth interviews and observations at each trust generated a range of case studies on improvement projects at various stages of design and delivery. This entailed 73 interviews with mainly senior staff to understand the context and choose six case studies. Once the case studies were identified, 122 mainly front-line staff were interviewed and a crucial staff meeting was observed in each of two sites. The resulting data was reviewed from all 195 interviews, along with associated informal observations and documents, to develop an evolving thematic analysis that was tested and iteratively developed through frequent discussions. The final analysis was sense checked with key participants from all six case studies.

Findings

QI skills in the front line

The six case studies, which ranged from attempts to alter nursing working patterns and practices to tackling unprofessional behaviour among clinicians, all turned out to be compelling stories yielding a large amount of data. The findings confirmed that improvement relies on technical, learning and soft skills, but also showed that the pyramid is more complicated than was suggested in the earlier report. Usually reflecting their organisations' preferences for certain improvement techniques or availability of learning opportunities, front-line staff were found to use a limited range of technical and learning skills. However, the same staff used countless generic soft skills, highlighting the importance of the often-underplayed relational work of QI.

A sound organisational base

Further insight was gained into the sound organisational base that was part of the original improvement pyramid model. Where improvements were successful, several fundamental features were found that pervaded organisational cultures to create a favourable situation in which front-line staff could undertake QI. These included:

- establishing respectful critical dialogue
- constructively confronting failure
- adducing local data

- allowing collective autonomy
- resourcing and rewarding good suggestions
- rewarding the extra mile
- ensuring efficient structures and processes.

To succeed, this culture had to be actively promulgated at all levels of the organisations, especially those close to the front line. Even when absent, these features were often aspired to – but whether or not they prevailed on the front line was not necessarily linked to the values and edicts of senior managers.

SOFFT skills in the frontline

Improvements on the front line, which depended on the immediate organisational environment, occurred largely through the successful achievement of six inter-linked sets of socio-organisational functional and facilitative tasks (SOFFTs), which are listed in Box 1. These were particularly evident where staff succeeded against the odds (positive deviance).

See Box 1 (next page).

Box 1: The six sets of socio-organisational functional and facilitative tasks (SOFFTs)

Adopting and promulgating the appropriate style and tone

Ensuring a blame-free, nurturing and open environment

Enabling staff to have difficult conversations:

- respectful critical dialogue
- challenging suboptimal practice
- managing tensions and factions

Ensuring the QI team use technical QI skills, such as:

- data collection,
- utilisation and audit skills
- stakeholder mapping

Fostering a strong sense of ownership by the staff

Encouraging and rewarding good suggestions

Inculcating a sense of dedication to high-quality care:

- instilling high professional values
- role modelling

Securing the resources to do the job

Leading staff towards the achievement of improvement

Managing the QI roller-coaster

Avoiding and shielding staff from 'initiativitis'

Timing, coordination and momentum

Getting the problem (and the intended solution) right

Understanding what is wrong and why it is wrong

Co-designing the QI work

Communicating the right message to the right people

Getting through to the right people

Framing the message correctly

Communicating effectively

Enabling learning to occur

Creating the necessary culture of learning

Growing the necessary QI skills

Contextualising experience

Adapting prior experiential learning

Transforming the original improvement to match the context

Using experience to modify the intervention

Implications

To enable staff to accomplish SOFFTs that are critical to successful QI on the front line:

- Front-line staff and those involved in implementing QI projects undertake a rapid audit to determine the readiness for improvement of a unit/team/ward before starting any QI project.
- Organisational managers and improvement/development leads should recognise that:
 - opportunities to think, talk and debate are necessary if improvement skills and associated knowledge are to be used effectively
 - improvements and their related tasks need to be genuinely understood and owned by their target audiences. This requires the tasks to be framed appropriately for (preferably *with*) the staff who are expected to implement them
 - the adverse effect of ‘initiativitis’ should be minimised. It is suggested that all QI initiatives be logged and continually reviewed by a senior manager who can coordinate and re-prioritise projects and, where necessary, halt those that become burdensome or fruitless.
- Senior policymakers and managers have a key role in creating optimal structural and cultural environments for successful QI, specifically the sound organisational base that is described in this report.

1 Introduction

QI initiatives sometimes do not achieve the intended impact. Magic bullet approaches to QI flounder because they fail to understand complex contextual, person- and process-related factors.^{1,2} These factors include the external and internal policy and regulatory environment, the commitment and involvement of the senior team and change champions, the level of understanding of the problem and the appropriateness of the proposed solution.³⁻⁸ Additionally, improvements frequently underachieve because technical QI skills are lacking.⁹

In the Health Foundation's earlier report *Skilled for improvement?*,^{10,11} the aim was to identify the additional skills that health care organisations need to boost QI capacity. The initial assumption had been that the deficit would be around technical skills, such as plan, do, study, act (PDSA) cycles, data collection or other more specialised QI techniques. Instead, the report found that successful QI initiatives relied crucially on both soft skills and the individual and organisational capacity for learning. This led to the analogy of an improvement skills pyramid (Figure 1), the argument being that a pyramid cannot stand up for long unless all three walls – technical, soft and learning skills – are equally high and built on a sound organisational base. The model explained why the introduction of technical QI skills so often failed to have the desired organisational outcome. Staff also needed the necessary soft skills such as leadership, effective communication, team working and negotiation; and learning skills such as fostering multidisciplinary, team-based learning, motivating experimentation and psychological safety.

Figure 1: Improvement skills pyramid

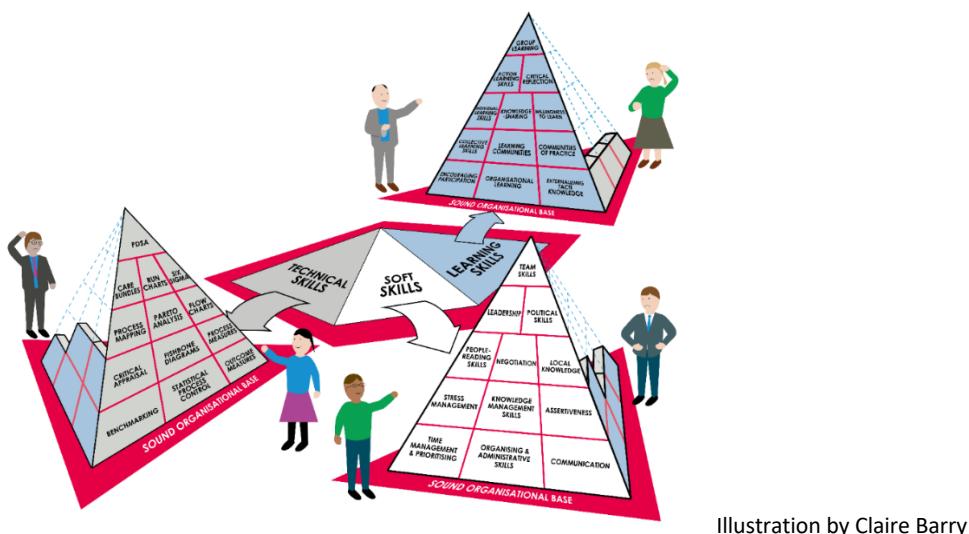


Illustration by Claire Barry

The earlier report was not designed to describe the soft and learning skills needed to enable staff to carry out improvement initiatives. The purpose of this report, however, was to do just that among groups of staff who were trying to make improvements on the front line of the NHS. Three key areas were explored.

1. Which improvement skills matter most, and when and why are they important?
2. What factors help or impede practitioners' use of their improvement skills?
3. How and why do groups overcome (or not) the barriers and capitalise on the facilitators, and what can be learned from such successes and failures?

2 Method

Ethics

All case-study participants formally consented and the project was conducted in line with ethical approval¹. All field books and findings were pseudonymised (including names of the trusts and the participants) and all identifying details were removed. To avoid identification, all details of the trusts are omitted and all managers, regardless of gender, are referred to as female.

Literature review

A literature review was conducted to inform both the research and the question schedule. The focus was on two areas: barriers and facilitators to QI (serving as a broad context for the project) and QI skills (and their barriers and facilitators). Over 140 papers were selected on broad criteria of relevance to health care setting, timeframe and general QI skills.

Theoretical approach

The way staff use their skills was assumed to involve knowledge-in-practice-in-context.¹² This differs from the theoretical knowledge provided by research, textbooks and manuals. It is deeply context specific and brings into play other types of knowledge and experience that help to deal with the many competing tensions of any professional activity. Social learning processes were expected to play a key role in how these skills are acquired and deployed.¹³ The study of such phenomena requires a method capable of surfacing the associated, often intangible, processes by which learned skills are put into practice collectively and individually. Therefore, a methodological approach that was naturalistic, ethnographic, interactive and flexible was chosen. The research attempted to harness the analytical power of what has been referred to as positive deviance (which examines how some groups achieve better results than others with the same resources and obstacles) as a tool for understanding how some groups develop the skills to succeed, yet others fail.¹⁴ To achieve this, ethnographic interviews and observations from a diverse set of case studies of QI projects at various stages of design and delivery in organisations and with a range of quality CQC ratings were used.

Case studies

Two QI initiatives from each of three acute trusts were studied over a period of 14 months. One trust was chosen from those with the highest CQC rating, one was from the lowest, and one was rated intermediate. This provided a varied sample of organisations for the research.

Premton: A trust with two main district hospitals and a sizeable catchment area. CQC rating: outstanding.

Middleswick: A trust with two district hospitals embedded in its community, one of which has university hospital status. CQC rating: requires improvement.

Upsworth: A single hospital trust, mainly serving an urban population. CQC rating at the start of the research: special measures.

Orientation and scoping

The two principal investigators (JG and AIM) spent a total of 2 weeks on each site, conducting an initial scoping assessment that:

- mapped the organisations' QI capability-building (training and education) structures, activities and culture

¹ HRA IRAS reference 216254 and University of Southampton ERGO reference 23844

- explored potential improvement initiatives for the research
- obtained sufficient insight into the wider internal and external context to inform the subsequent fieldwork.

This was achieved through informal, confidential discussions with key senior staff, including the chief executives and other board members, senior managers and clinicians, team leads and further key players identified by snowball sampling². The orientation phase entailed 73 interviews (Table 1) to investigate the contexts, aims and status of each trust's current and planned improvement initiatives.

Table 1: Orientation and scoping interviewees

Key: ('x2' = 2 interviews with one person)		
Premton	Middleswick	Upsworth
CEO	CEO (x3)	CEO
Director of nursing	6 Executive board members (group)	QI director
Medical director	Director of quality	Clinical QI director (x3)
Human resources director	Chair	Director of finance
3 Deputy directors nursing	1 QI nurse manager (x2)	Director of nursing (x3)
2 QI matrons	2 QI nurse managers	Medical director
Director patient experience	Operations manager (clinical finance)	Deputy medical director
Safeguarding lead	Operations manager (clinical information)	Chair
6 Clinical directors	3 Senior training managers	Human resources director
Patient safety lead	2 Consultants	Head of audit
Quality lead	Director of nursing	Director of corporate and governance
2 Education leads	Deputy director of nursing	Deputy director medical education
Chair	Medical director	Senior training manager
6 Senior nurses/matrons		Director of communications
		2 Consultants
		2 QI nurse managers (x2)
		Divisional director of operations
28	19 + 1 group	25

This allowed the selection of two QI initiatives at each site. The key players were identified to assist in planning the case-study and negotiating acceptance, clearance and ground rules for undertaking the six case studies, and background documents were collected. (Box 2). The case studies are described in more detail in Table 3.

² Snowball sampling is a technique for gathering research subjects through the identification of an initial subject who is used to provide the names of other actors. These actors themselves then open possibilities for an expanding web of contacts.

Box 2: The six case studies

Premton

Handover at night: improving the method for handing over clinical responsibility to night staff

Nurse-led discharge: enabling nurses to discharge in-patients without a doctor's sign-off

Middleswick

Enhanced care: developing new staffing arrangements for managing high-demand patients on the wards

Postural blood pressure: improving the measurement and recording of blood pressure

Upsworth

Tissue viability: introducing a better way to assess and manage pressure sores on the wards

Managing unprofessional behaviour: introducing a structured method for averting poor staff conduct

Data gathering

The case study research entailed 120 interviews in total with mainly front-line staff (Table 2), who were each interviewed between one and four times. Snowball sampling was used to identify a range of staff involved with the projects. Most interviews were face-to-face, with a small number of telephone follow-up interviews and email conversations for clarification. Cross-referencing during the interviews ensured that as many key staff as possible were involved, and this process was continued until data saturation was reached. Responses were good, apart from Handover at night, where most staff declined to participate or failed to respond.

The interviews followed a topic guide (Box 3), which was informed by factors highlighted in the literature review as likely to be important and was piloted with four QI leads. The topic guide was tailored to the circumstances of each case study and this evolved as the projects developed.

Interviews were recorded (but not transcribed) in the two Premton case studies to ensure accurate recall. Recording was not considered necessary or feasible in the other four case studies, where two interviewers worked together, with one of the interviewers writing extensive fieldnotes. Two key meetings were also observed.

Table 2: Case study interviewees at the three trust sites

Key: ('x3' = 3 interviews with one person)					
Premton		Middleswick		Upsworth	
<i>Handover at night</i>	<i>Nurse-led discharge</i>	<i>Enhanced care</i>	<i>Postural blood pressure</i>	<i>Tissue viability</i>	<i>Managing unprofessional behaviour</i>
QI lead matron x3	QI lead matron x2	QI lead nurse x3	QI lead nurse x3	QI manager x 3	Senior clinical manager x2
QI lead junior doctor x2	Senior management team manager	QI lead nurse x3	QI physiotherapist	QI lead x 4	Medical administrator x2
2 Senior management team managers	Matron x2	QI manager x3	Consultant lead	2 Specialist nurses	Human resources manager x 2
2 Consultants	2 Matrons	Matron x2	2 Matrons	Patient safety manager	Consultant x4

Organisation development manager	Senior sister x2	6 Ward managers	Senior nurse	Director of nursing x 2	Consultant x2
1 Meeting observation	Sister/charge nurse x2	5 Staff nurses	2 Ward managers	Training manager	Senior nurse manager
	Sister/charge nurse	4 Health care assistants	2 Staff nurses	Link nurse	Senior nurse manager x2
	2 Ward managers x2	Director of nursing	3 Healthcare assistants	3 Ward managers	Administrator x2
	4 Staff nurses			4 Staff nurses	Trainer/manager
	2 Advanced practitioners			Matron	Training manager x3
	Consultant surgeon			2 Physiotherapists	1 Meeting observation
				Student nurse	
				Healthcare assistant	
10 + 1 meeting	21	27	15	26	21 + 1 meeting

Analysis

The research team reviewed the resulting data from all 197 interviews (including three group interviews) along with associated informal observations and documents to produce an evolving thematic analysis that was tested and iteratively developed through frequent discussions. At the end of data collection, a two-day analytical workshop was held and a framework of the agreed themes, including definitions, inclusions and exclusions, and interrelationships was developed. The final analysis was sense-checked with key participants from all six case studies and their comments incorporated where appropriate.

Box 3: Front-line topic guide**Interview topics covered before a project was launched.**

- Participants' understanding of the upcoming improvement project, including its suitability, relevance and achievability, and the likely facilitators and barriers.
- Participants' aspirations and fears about the improvement task, including their own role.
- The skills participants believed they brought to the project.
- Where/how participants might have acquired those (new and old) skills during their careers.
- Participants' perceptions of the skills that they hoped their colleagues would contribute.
- Any further skills participants considered necessary and desirable for the improvement group to achieve the desired goals.

Interview topics for participants taking part in QI projects already underway or completed (the majority of participants).

- Participants' experience of the implementation of the QI project.
- Participants' views on how well their project was going and why, including its strengths and weaknesses.
- What skills participants saw being deployed (both their own and their colleagues') in the implementation of the QI project, including whether unexpected relevant skills or skill deficits had come to light.
- Whether participants believed the expected or desirable skills were being used (or not).
- How participants had learned their own QI skills, for example, during their careers, from their colleagues, or from the way the project was developing, including how any problems and setbacks were being handled.
- What participants had learned about QI skills from their project.

3 Findings

The organisational environment

Premton: an exemplary environment for QI skills to thrive

The data confirmed what the literature suggests should be done by senior managers to help QI initiatives succeed. This included monitoring performance, setting strategic direction and goals for improvement, establishing suitable QI structures and providing appropriate resources such as training. Other important factors were also highlighted. These included setting, promulgating and living out the management styles (or tone) that affect the QI initiatives and maintaining an appropriate environment that fosters a learning culture receptive to change.

These principles were consummately achieved at Premton, which serves as an exemplar. Premton's CEO had made the creation of an appropriate environment the centrepiece of her efforts over her long tenure. Box 4 details some of the characteristics of her management style that were described repeatedly during the orientation interviews with Premton's senior and middle management staff and, importantly, that they themselves aspired to emulate.

Box 4: Features of Premton's CEO style (as reported by clinical and non-clinical senior and middle-managers)

- Clear, unwavering, consistent expectations and values (no hiding from the ethos).
- Role modelling: acting as she advocates, inspiring and expecting others to follow suit.
- Consistently reiterating and inculcating those values in everything staff are asked to do.
- Being visible and accessible and knowing everyone personally.
- ‘Somehow knowing everything that’s going on’ without micromanaging.
- Trusting staff to do the job well; giving them the space (and challenge) to prove they can.
- Once convinced they can do the job, giving staff the tools to do it properly, regardless of cost.
- Genuinely and overtly valuing and encouraging staff, such as passing on letters of praise, as well as complaints.
- Consciously balancing money, performance and quality.
- Always genuinely focussing on quality, as reduced costs are then expected to follow.
- Showing genuine passion and emotion. Readily apologising personally to patients when things go wrong.
- Not over-reacting to problems and rarely showing anger.
- Ensuring that all staff briefings are honest, frank, personal and clear.
- Clarifying and simplifying service problems by using personal examples, such as ‘what if it were your own mother who exceeded the four-hour emergency department wait that you so deride?’
- Expecting every decision to be grounded in meeting patients’ needs.
- Insisting management is there to support clinicians, who must always be kept on board.
- Making sure the consultants are engaged and open to change by way of robust discussion.
- Not shirking from tackling, even sacking consultants if they become obstructive.
- Fostering open and constructive dialogue at all levels across disciplines
- Recognising that if staff are unhappy, patients will be unhappy.
- Ensuring that staff who have not met the required standards are supported, as long as they clearly tried.
- No respite. Always finding and tackling the next problem and no ‘improvement weariness’.
- No complacency: ‘Things can always be improved; we’re always one step away from a fall’.

The Premton principles, in many respects the epitome of a learning organisation, also had the self-reinforcing effect of attracting and retaining (often for decades) good staff who were not only keen to maintain this environment, but willing and able to help it evolve and improve. ‘It may be cheesy,

but it works!' said one director on the trust's board. Staff were fiercely proud of their ethos, which the analysis suggests had the following main features (the quotes are from senior staff).

[Establishing respectful critical dialogue](#)

'It's about listening and knowing you'll be listened to'

A key feature of the Premton environment was "lots of conversations" based on the skill of 'respectful critical conversations'³. This was linked to the staff's willingness to make sure they knew each other well and developed mutual trust, respect and rapport, regardless of rank. None of this precluded conflict: many vigorous arguments took place among senior managers and clinicians, but as far as possible these were mutually respectful, emotionally mature, open and robust discussions.

[Confronting failure constructively](#)

'If someone fails, we've let them down'

Being open and honest with each other was particularly important when things went wrong; constructively confronting adverse incidents was key. Blame was considered inappropriate if someone failed while trying to do what they thought was the right thing. The response instead, participants said, should be mutual support and development wherever possible. Neglect or sloppiness, however, was unacceptable.

[Adducing local data](#)

'These aren't just numbers, they're our own friends and neighbours who happen to be patients'

'Respectful critical dialogue' required the skilful use of data and information so that colleagues understood why things needed to change (or not). Staff were encouraged to come forward with innovative ideas (see Resourcing and rewarding good suggestions, below) but ideas had to be backed up with local data. Where possible this data should be gathered and owned by the relevant clinician as data imposed from above was thought unlikely to persuade staff to change. The CEO would set the tone by always 'humanising performance data with real anecdotal examples'.

[Allowing collective autonomy](#)

'You're working with intelligent, motivated people'

Once headline goals were set, the principle was to rely on colleagues to get on and do the job well. Staff should be allowed autonomy and not be micromanaged or pushed. Premton had thereby achieved a sense of genuine agency and collective, mutually reliant autonomy. That this did not descend into anarchic empire building was attributed to a widespread feeling that individualism, careerism, one-upmanship and publicity seeking were frowned upon. Again, this principle stemmed from the top of the organisation.

[Resourcing and rewarding good suggestions](#)

'We don't talk crap about 'enabling people'. We give them what they need to do the job'

An important skill was that of encouraging a sense of genuine influence. If clinicians thought they had a good idea and backed it up with good evidence, they knew there was a good chance it would be taken up and made systemic, with every effort to find the funding. And if a new suggestion worked out well, the staff concerned were made to feel rewarded. The downside of this approach

³ Double quotation marks are quotes from the data. Single quotations marks are the authors' terms.

was that sometimes the nature of the problem and/or the proposed solution was not rigorously examined before proceeding.

Rewarding the extra mile

'We roll our sleeves up and do whatever is needed; pull together, rather than pull rank'

Encouraged by the oft-repeated mantra that 'we're all in this together for the patients', there was a genuine willingness to pitch in and help out when needed regardless of rank and role (as embodied in the oft-repeated stories of the CEO pushing patient trolleys, or the director of nursing helping prepare beds for patients). Making oneself available on the front line also helped senior staff 'take the organisational temperature' while chatting informally to a wide range of staff, which also help generate suggestions for improvements. However, the pressure to avoid a "nine-to-five approach", which was deeply internalised rather than demanded by one's boss, could impact adversely on the work-life balance of both clinicians and managers.

Ensuring efficient structures and processes

'Action plans here are actually closed!'

This quote came from one flabbergasted senior nurse who had long experience of other trusts where action plans had not been fully acted on. The more prosaic contributory features of the organisation included the efficient administrative systems, the maintenance of the necessary QI structures and training programmes – which were not wedded to one particular improvement method, but were always evolving – and the knack of identifying and securing suitable funding to underpin new initiatives.

Premton's relatively flat organisational structure created a relatively high ratio of consultant clinicians to junior doctors. This stemmed from the CEO's belief that experienced senior staff are more likely to get things right first time and save on patient inconvenience (and costs). This approach was made possible by the expectation that senior staff would help out as needed regardless of rank (see Rewarding the extra mile, above). Finally, Premton had a particularly well-designed needs-led training programme that encouraged and enabled staff to develop their skills.

Upsworth: trying to overcome an environment inimical to QI success

While Premton was rated outstanding in over half of the CQC categories, and good in the remaining categories, Upsworth had been in special measures for a significant period. The contrast between the two trusts across the above seven categories had until recently been stark.

- As a failing trust, respectful dialogue at Upsworth had been a rarity. 'Bullying' and 'keeping your head down' were the terms most often used when interviewees described exchanges between staff during those times.
- Problems had not been confronted constructively, but with blame and/or panicky, short-term fixes imposed from above.
- Accurate data had rarely been collected or used to inform decisions.
- Lack of resources had always been given as a major reason for not making changes, despite poor management of resources often being the reason that change was necessary.
- Senior staff had often acted with self-interest, independently of the organisational needs. Junior staff had been expected to do as they were told and felt utterly disempowered.
- Far from wanting to go the extra mile, staff had been demoralised and unwilling to stick their necks out for anyone.

- Excessive bureaucracy, untethered committees and a chronic inability to complete organisational tasks had been the dominant characteristics of the trust's management.

When the new Upsworth CEO had arrived, a crucial long-term task she had faced was to create a more conducive environment for improvements to occur. However, during the early phase of the research, her main aims were to ensure that the environment was safe for patients and to bring Upsworth out of special measures.

Her immediate focus was to replace the dysfunctional senior manager team, recover some measure of financial control, solve the dire staffing shortage and – with the aid of a highly effective new medical director – convince the senior doctors to act corporately. This urgent set of tasks took priority over what she knew would be the more enduring and effective strategy of achieving a change in the culture. It was only towards the end of the research, and once the urgent turnaround had been completed, that the CEO felt she had got to the point where she could begin 'to tackle the culture thing', which she would have much preferred to do earlier.

The urgent remedial work at Upsworth spawned many separate groups and varied QI structures and programmes, which were eclectic in their methods but often underpinned by the principles of Lean. This plethora of QI work was understandable in the circumstances but threatened at times to overwhelm a workforce who were already overloaded. During the research there was little genuine sense of receiving meaningful and helpful support, as opposed to pressure, from the higher tiers of the trust.

[Middleswick: a modest makeover in the making](#)

At Middleswick, following a recent merger of hospitals, the senior management team had made it a priority to promulgate an explicit set of values to underpin all aspects of the trust's work, including recruitment and appraisal schemes. The trust's board based the initial proposition of those values on the NHS values statement, and then held a programme of high-profile consultation and intensive roll-out events to try to ensure ownership of those values. However, finding staff to lead this transformation process proved problematic. The impression from the interviews was that while staff were aware that there was a set of values, and accepted that they were generally in line with what might be expected across the NHS, they did not always know the content in any detail. There appeared to be a mismatch between the much-vaunted top-down values statements and the (often sceptical) perception of those statements, but not necessarily of the values they embodied, in many parts of organisation. Consequently, the transformation was not being felt on the ground.

Middleswick's staff often saw the management culture as rather formal and hierarchical, with some middle managers feeling slightly inhibited, deskilled and disempowered. There was even – although senior managers might disagree – occasional evidence of a blame culture. Work tended to operate in silos, which made effective change more difficult and also, some claimed, encouraged buck-passing up the hierarchy. Serious staff shortages were often alluded to, and dented morale also featured in some of the interviews.

QI was, of course, at the heart of the organisational objectives, and – as in almost all NHS organisations – there were senior staff whose role was to identify areas of suboptimal practice, devise and execute strategies for improvements, roll these strategies out and then evaluate their success. QI projects could be identified both top-down and from the front line. The Trust espoused no particular QI model or method; they were pragmatic in their choice of improvement methods, depending on the needs of the work and staff involved.

In summary, the environment at Middleswick was not as favourable for QI as Premton, but was much closer to Premton's ideal than Upsworth.

In all three sites, the senior managers' role in creating a conducive environment was a necessary (but not sufficient) prerequisite for successful QI. A culture favourable to QI had to be actively promulgated at all levels of the organisations, especially those close to the front line, for its success. Even when absent, a conducive culture was often aspired to, especially by senior managers – but whether it prevailed on the front line was not necessarily linked to what senior managers said and did. The main focus of this report, however, is on front-line staff, which included middle managers charged with developing and implementing the improvements, as well as the (mostly nursing and medical) clinicians who were carrying out the changes.

The case studies

Table 3: Summary of findings from the six case studies

<p>Premton: Nurse-led discharge</p> <p><i>Aim.</i> This QI project was a suite of activities designed to speed up discharge, initially on two specialised surgical units, but which was later spread to other surgical wards. Led by senior surgical nurses, but with the support of most surgeons, the aim was to produce documents and checklists suitable for each different surgical environment. This meant that patients could routinely be discharged (either home or to less high-dependency wards) without having to wait for a doctor's decision.</p> <p><i>Result.</i> Under no time pressure, and developed and audited in an inclusive way that varied according to each unit's differing needs, it was successfully implemented across all units and appeared to be firmly embedded.</p>	<p>Premton: Handover at night</p> <p><i>Aim.</i> This was an attempt to build on the success of the trust's high-profile upgrade of the shift changeovers in wards. Handover at night aimed to hold, besides the separate specialty-based handovers, an additional cross-disciplinary meeting of key night staff to discuss all potentially problematic patients in the hospital.</p> <p><i>Result.</i> Staff professed it to be a good idea in principle but could not agree on what problem Handover at night meetings were attempting to solve. Additionally, they could neither clarify the project's QI leadership, nor was the practical backing of key senior clinicians ever forthcoming. Attendance was poor and the project eventually fizzled out, despite an audit that suggested it was reducing the number of emergency calls from the wards at night.</p>
<p>Middleswick: Enhanced care</p> <p><i>Aim.</i> Enhanced care was a method of grouping patients with special nursing needs into one or more bays of a ward to avoid 'specialising' with one-to-one care, which had been placing great strain on already stretched wards. A team of enthusiastic nurses, led by one senior nurse from each of the trust's two hospitals, developed the scheme over many months before it was rolled out to a rigorous timetable across all wards.</p> <p><i>Result.</i> The principle and the new paperwork were generally accepted but – apart from the wards of the enthusiasts – the practice of Enhanced care was patchy, muddled and challenging. This was exacerbated by chronic staff shortages and by mixed messages about the motives for the change. When the fieldwork ended, the scheme was being</p>	<p>Middleswick: Postural blood pressure</p> <p><i>Aim.</i> Postural blood pressure measurement is one of a suite of techniques to reduce the numbers of patients falling in hospital. It requires nurses to select at-risk patients and measure their blood pressure when they are both standing and lying down. Audits had shown that this was not being performed satisfactorily. A multidisciplinary team, led by an experienced specialist nurse, developed a programme to raise awareness and train ward staff in a bid to change current practice.</p> <p><i>Result.</i> Postural blood pressure measurement struggled to become fully embedded, with large differences between the hospitals. The greatest success was achieved on wards with enthusiastic ward managers. Audits of the incidence of falls were disappointing. As the fieldwork ended, a reconfigured team was reconsidering the problem at</p>

redesigned and relaunched alongside wider work on reducing patient falls.	a wider level, encompassing postural blood pressure among other factors.
<p>Upsworth: Managing unprofessional behaviour</p> <p><i>Aim.</i> This scheme, based on a proven US programme, was designed to allow trained colleagues ('peer messengers') to avert poor behaviour by having a carefully designed 'cup of coffee' conversation in which the transgressor is made aware of their unacceptable behaviour. This allows them to avoid having to enter the human resources department's disciplinary procedures unless they re-offend more than once.</p> <p><i>Result.</i> The senior multidisciplinary team that led the innovation had some serious teething problems in designing and implementing the scheme locally but began to resolve their differences and difficulties within a few months. As the fieldwork ended the team were beginning to train a cadre of peer messengers and were about to launch the scheme.</p>	<p>Upsworth: Tissue viability</p> <p><i>Aim.</i> Tissue viability (especially the excessive incidence of pressure sores) was a serious problem being tackled on multiple fronts by a small and chronically understaffed team of specialist nurses. One strand of the QI work was to introduce a new Tissue viability rating assessment tool (the Waterlow score) across all wards of the hospital. The scheme was launched after a series of audits, many months of preparation and multiple attempts at training staff on all wards.</p> <p><i>Result.</i> The message did not percolate to all staff, and there was patchy and unsatisfactory change to practice with considerable haziness and confusion about the new scheme. Following a tactical rethink, but above all the final establishment of a fully staffed Tissue viability QI team, matters improved greatly.</p>

Skills to deliver QI in the frontline

The socio-organisational functional and facilitative tasks (SOFTTs)

This section is an analysis of the tasks that front-line staff faced, and the skills they used to accomplish them when introducing improvements in care. These tasks and skills were extensive, overlapping and pervasive and it was impossible to itemise them all. However, although front-line staff used a limited range of technical and learning skills, usually reflected their organisations' preferences for certain improvement techniques or availability of learning opportunities, they used countless generic soft skills. This highlighted the importance of the often-underplayed relational work of QI.

A number of different, but related, tasks that were needed to accomplish improvements were identified, which it was possible to group into SOFTTs. It was through achieving those tasks that front-line staff were able to succeed in their QI initiatives, and it was towards those tasks that most of their soft skills were directed.

Every SOFTT (Table 4) is not only a task but also a skill, just as stitching a laceration is both a task and a skill. And in the same way as that task / skill is dependent on other prior skills, such as aseptic technique, knowing which suture to use and when, being dextrous with forceps, or keeping the patient calm, SOFTTs also depend on wider skills and abilities.

Table 4: SOFTTs skills that helped QI projects succeed

SOFTTs	Examples of what the SOFTTs achieved
Adopting and promulgating the appropriate style and tone	
Ensuring a blame-free, nurturing and open environment	There was clear communication in an honest, supportive and collaborative environment that enabled a clear and shared understanding of, and commitment to, the agreed improvement.
Enabling staff to have difficult conversations through respectful critical dialogue, challenging suboptimal practice, managing tensions and factions, data collection utilisation and audit, stakeholder mapping	Staff were enabled and encouraged to have 'grown-up conversations' that could challenge practice without triggering punitive action.
Ensuring the QI team use technical QI skills.	Staff made good use of data, and also used audit findings strategically, or used PDSA or stakeholder analysis effectively.
Fostering a strong sense of staff ownership	Staff had the time, resources, and socio-organisational intelligence about when, for example, to involve which staff and listen to their views.
Encouraging and rewarding good suggestions	There was a sense of being involved and taken seriously, and having contributions recognised and respected.
Inculcating a sense of dedication to high-quality care: instilling high professional values and role modelling	Respected front-line leaders demanded and demonstrated genuine values. They emphasised the highest standards of care, inspiring but also admonishing where standards slipped.
Securing the resources to do the job	There was adequate staffing and the demands on the QI team were matched with the necessary resources, support and training.
Leading staff towards the achievement of improvement	Leaders showed enthusiasm communicated well, appointed the right team, set clear direction and goals, conferred autonomy, provided resources, and motivated staff be creative and productive.
Managing the QI roller-coaster	
Avoiding and shielding staff from 'initiativitis'	Staff did not feel inundated by quality initiatives from above, and were protected from multiple, rushed QI imperatives that gave little time to achieve and sustain change.
Timing, coordination and momentum	QI teams had a chance to develop practice, reflect on progress, and embed, evaluate, and sustain change. This required understanding the context, maintaining a clear direction and "getting the timing right".
Getting the problem (and intended solution) are right	
Understanding what is wrong and why	The true nature of the perceived problem, the improvement required, and the approach used had all been carefully investigated with a clinical and managerial eye.

Co-designing the QI work	All the relevant parties had been carefully and appropriately involved in discussions that genuinely took on board staff needs and concerns at all project stages.
Communicating the right message to the right staff	
Getting through to the right people	It had been made possible for everyone concerned (including night shift and agency staff) to hear the message first hand.
Framing the message correctly	The QI team had considered carefully who the right staff were to engage with and when, understood the potential resistance and support for change, and had tailored their communication styles appropriately.
Communicating effectively	Everyone was able to engage, explain, listen and understand others' intentions and concerns. When staff were asked about the necessary QI skills, communication was mentioned the most often. In practice, however, good communication depended on many other SOFTTs being achieved.
Enabling learning to occur	
Creating the necessary culture of learning	The organisation took learning seriously and enabled staff – however busy – to partake in an array of relevant coaching, mentoring, preceptorship, on-site training, roadshows, and 'skills blitzes' and didactic teaching.
Growing the necessary QI skills	Staff were encouraged to share their knowledge and experience of QI. It was recognised that skills obtained on training courses are only a small part of the skills and knowledge used in QI.
Contextualising experience	
Adapting prior experiential learning	Staff at all levels were encouraged to adapt their prior experience appropriately in a new context, and to recognise that what works in one environment may not translate to a different one.
Transforming the original improvement to match the context	The QI team displayed contextual empathy, matching an intervention to its context to ensure alignment between the initial vision, the desired outcome, the approach used and the immediate local front-line circumstances.
Using experience to modify the intervention	The QI team continually monitored projects: asking participants how it was going, observing, learning from feedback, identifying problems and solutions, and auditing compliance. (PDSA – even 'PDSA-lite' – was helpful here)

The SOFTTs were multiply inter-related and many underlying soft skills were needed to accomplish them. QI was achieved through sensitive and contextualised combinations and applications of these soft skills, combined with technical skills and learning skills. QI initiatives struggled to succeed without them.

Adopting and promulgating the appropriate style and tone

This SOFTT had several features that, if not adequately deployed, left the QI projects struggling. These features have been illustrated with both examples and participant quotations from the interviews.

Ensuring a blame-free, nurturing and open environment

Having clear communications in an honest, supportive and collaborative environment enabled a clear and shared understanding of, and commitment to, the agreed improvement.

One of the leads in the Postural blood pressure team attributed her manifest initial success in persuading staff to change practice to 'knowing the staff personally ... always being there ... never pulling rank or talking down to the staff or making them feel silly ... being supportive and encouraging ... giving feedback on performance without making staff feel guilty, capitalising on staff's desire to do a good job for their patients'. These characteristics were also shown by her two main colleagues in the team, and amply confirmed by the staff whose practice they were targeting.

Enabling staff to have difficult conversations through respectful critical dialogue

Staff were more effective in changing practice when they were enabled and encouraged to have ‘grown-up conversations’ that could challenge practice without triggering punitive action. Some of the staff who appeared most effective in maintaining and improving quality combined a deep-rooted intolerance of errors with the skill of correcting poor behaviour without being censorious.

I don’t want them to feel they have to explain why they haven’t done it’, said one ward manager. This echoed a matron running the successful Nurse-led discharge project who told us, ‘Staff will do anything if they feel they have a voice and a say. I don’t ever hunt down or try and identify someone that’s done something wrong. We would just discuss it in generic terms because then people are more likely to tell you if they have concerns rather than try and cover it up.’

Another feature of respectful critical dialogue was the ability to manage interpersonal/interprofessional tensions, and to communicate across ‘tribal’ borders.

The Handover at night project was unsuccessful partly because it ran into serious interprofessional communication difficulties; the exhortations of a highly competent senior nursing QI lead failed to impress the doctors who were intent on rejecting the proposed new handover arrangements. And some junior doctors in the Postural blood pressure project were dismissive of the training given by an expert nurse, listening only to the consultant physician (who was delivering exactly the same message as the nurse).

When the Managing unprofessional behaviour project was in danger of self-destruction, the clinical leads stepped in and decided to quietly chat ‘offline’ with their opponents on the steering group. They showed that they understood their concerns, which enabled them to skilfully agree on a way forward.

Ensuring the QI team use technical QI skills

Successful projects collected and made good use of data and also used audit findings strategically. Often this was to influence others (for example by making use of stakeholder analysis techniques) and make the case that change was needed. A lack of benchmarking or initial audit diminished the incentive to improve. Data was used less often, and less successfully, to develop agreed targets or monitor progress in the manner recommended by improvement theorists.

The Nurse-led discharge project coincided with a trust-level benchmarking exercise that highlighted the barriers to the timely discharge of patients and informed the improvement plan. The QI work made effective use of audit, for example by demonstrating to initially resistant staff that when the Nurse-led discharge documentation was used, fewer patients were phoning for help after discharge.

In the Handover at night project, in contrast, there were no benchmarking or initial audit data and this contributed to the lack of incentive to make the suggested improvements.

Fostering a strong sense of ownership by the staff

Staff needed to have shared views on the improvements required. This required time and resources, and socio-organisational intelligence about, for example, which staff to involve, and when.

The Premton Nurse-led discharge teams took great care that surgical nurses did not feel that the concept of Nurse-led discharge was being imposed on them: 'If it's home-grown, they'll own it. They love it if it's their idea.' Not only were the teams able to feel they were developing the intervention in the surgical wards concerned, but they were free to manage Nurse-led discharge to their own timescales. They could adapt the model as they saw fit for their own area. By the time they were expected to implement the change they were already familiar with it. The other Premton project, Handover at night, developed no sense of ownership and failed.

[Encouraging and rewarding good suggestions](#)

Motivation to engage with a QI project was enhanced by a sense of being involved and taken seriously, and by having contributions recognised and respected.

'If someone comes to you and says, "would this help? I've been working on this", we tend to be much more open to 'actually, that sounds like a really good idea, why don't we try it?' And obviously if your staff feel they are being listened to and you are prepared to try something or at least have the conversation, then you get more respect from your staff./

This attitude ensured that the Nurse-led discharge team took account of the views of the staff who were using the new approach to patient discharge, and modified the scheme accordingly to suit the needs of the different wards. Clinical staff appreciated this approach and were consequently motivated to engage in the implementation of the Nurse-led discharge programme.

[Inculcating a sense of dedication to high-quality care: instilling high professional values and role modelling](#)

Projects fared better when respected front-line leaders instilled high professional values, emphasising highest standards of care, inspiring and admonishing when standards slipped. They inculcated a desire to improve, demonstrating that the task was not imposed remotely, but led by those understanding the clinical activity.

'When patients fall there are just no excuses', the matron overseeing the Postural blood pressure project told us. She added that she felt 'mortified and [took] it personally whenever a patient falls ... even if we get one failure in 500, it's not good'. It was this attitude that she inculcated into all her staff, especially her ward managers. Her experienced senior ward managers were also exceptionally zealous in maintaining high nursing standards and in the importance of falls prevention. Their wards were the successful ones in this initiative.

These ward managers were consciously modelling the way they wanted staff to act. They took it upon themselves to continually act as role models, leading by example and reminding staff how important it was to uphold the values they themselves were demonstrating. The skill, they told us, was to make others want to please you, and emulate you, because they respect you for your clinical credibility and can see your enthusiasm for – in this case – measuring postural blood pressure to avoid falls.

The QI manager for the Postural blood pressure project relied strongly on her 25 years' experience of elderly-care nursing. This had two advantages. She commanded the respect that comes from experience and a strong reputation, and she understood the practical and personal constraints on making changes to practice.

This allowed her to be more selective about when to push hard and when to hold off. 'I know you can't always be systematic, but first and foremost you have to be realistic.'

When establishing the Managing unprofessional behaviour scheme, the QI team won over fierce opponents by consciously modelling the non-threatening conversational methods that characterised the scheme.

Securing the resources to do the job

Inadequate staffing undermined some of the case-studies. An important skill was matching the demands on the QI team with the necessary resources, support and training, including basic administrative support and skills.

The Enhanced care project engendered scepticism during the roll-out and this was due mainly to the perceived lack of sufficient nurses to carry it out. Indeed, the feasibility of Enhanced care did depend on staffing levels – even on some wards where the project was accepted, it unravelled on days when the ward was understaffed.

The Postural blood pressure project had to be rolled out at a time of staffing shortage on the wards. This was compounded by the prolonged absence of a key member of the implementation team, which put a great strain on the rest of the team. The project eventually faltered and lost momentum because there were too few staff at the right level who had the skills and time to run the roll-out across so many wards.

The Tissue viability QI team was seriously understaffed and struggled to make any impact until staffing levels were rectified.

Leading staff towards the achievement of improvement

Effective leadership included enthusiasm, motivation, clear communication, setting clear direction and goals, conferring autonomy, providing resources, appointing the right team and helping them be creative and productive.

In the Managing unprofessional behaviour project, a lack of clarity as to who was in charge held things up in the early stages. Turf battles emerged, rooted mainly in the different conceptions of the methods and desired outcomes of the various disciplines in the QI team. However, once the influential medical director took hold of the reins and gave it clear direction and drive from the executive board, others in the team felt more able to exert their own influence. One team member explained that this new clarity gave her the space to help shape the project even though she was not in a leadership role. This was an important skill in itself: knowing how to have influence without necessarily having power.

Given the vast literature that discusses leadership skills, one key aspect is highlighted here – the nature of the relationship between senior and front-line managers. This relationship was important and ensured that the favourable environment espoused at the top was embodied by front-line staff. Local style and standards of practice varied between different parts of the organisation and this was often due to front-line managers' management style.

The local culture and, consequently, the standards of practice could vary greatly between different parts of the organisation in all three trusts. Even Upsworth,

during its worst period of being in special measures, had wards and departments widely regarded as delivering exceptionally good care – including one unit rated by the CQC as outstanding. Very often such disparities were due to the management style and tone adopted by front-line managers, notwithstanding the measures taken by senior managers. For example, the three outstanding ward managers and their exacting matrons at no point referred to the trust's value statements and slogans when describing the principles and methods by which they got their staff to strive for the highest quality care.

Managing the QI roller-coaster

Avoiding and shielding staff from 'initiativitis'

Ward staff sometimes felt inundated by quality initiatives, although less so at Premton where staff were encouraged to generate their own QI ideas and take time to implement projects. At the other two trusts, the imperative to improve patient safety resulted in many top-down improvements being quickly implemented, creating QI overload with little time to achieve and sustain change. QI staff often felt caught in the middle between senior management and front-line staff. Skills required to survive these pressures included influencing one's seniors, persistence, determination and the ability to grasp untoward events as opportunities. For example, the collapse of an imposed ill-designed and under-resourced initiative allowed the QI team to repossess it and redesign it in a way that worked.

For staff on the wards at Upsworth, 'Lots of different blue nurses [a reference to the uniforms of practice development nurses] coming along asking people to do things like pressure sores, falls, dementia... and you say 'hang on! I'm just one person and I'm already rushed off my feet'. The connection between the initiatives was not clear, partly due to the structural arrangements and partly due to the cultural differences between the approaches of the various groups charged with QI. A similar feeling at Middleswick led staff to revert to a culture that was less receptive to change, an antipathy that some senior managers thought had lingered even when the pressures had subsided.

Timing, coordination and momentum

Coordinated leadership involved delivering change in the context of other changes, prioritising and maintaining a clear direction. Time was needed to define the QI, develop practice, reflect on progress, and to embed, evaluate and sustain change.

Key contributors to the success of the Nurse-led discharge project, which was deliberately afforded all the time it needed to establish new attitudes and practices, was the time to think the QI through, time to undertake the necessary practice development, and time to embed the change little by little and to see new practices become established and follow them through. Time to reflect openly on how the improvement was going and carry out adjustments if it begins to falter and to revisit and sustain change after the project was completed was also important. More typically, however, adequate staff time – let alone the time that was needed to change culture – was simply not available. Several of the case studies suffered from a lack of adequate staff time to run the QI project – often alongside the demands of other simultaneous QI initiatives.

'Getting the timing right' was important, by 'reading' wards to know when to push and when hold back or even actively support busy teams, and using this to establish credibility. The trade-off for this was that staff who had been helped in this way should actively support the desired improvement.

Getting the problem (and intended solution) right

Understanding what is wrong and why

QI projects failed when the initial problem or solution was not well defined. Most projects used literature, targeted audits, experiences of other trusts and talking with staff to develop the intervention. It was crucial to carefully investigate the true nature of the perceived problem, the improvement required and the approach used. Direct clinical experience of QI leads enabled a good understanding of what staff might be asked to do.

The Handover at night project failed largely because of the failure to establish exactly what problem they were wanting to solve at the start of the initiative. It was very much process driven. It was, "we want to have a handover that looks like this" rather than, "the aim of changing our handover is ..." Is it to make our patients safer? Is it to make our staff feel safer? Is it to provide education? Is it to provide joined up working? Is it to be more efficient?' This also meant there was no clarity around the degree to which the current system for handover was problematic. Hence, there was no agreement about its priority and no enthusiasm among senior clinicians who, instead of agreeing to lead the project, stifled it.

Co-designing the QI work

Ensuring careful and appropriate consultation with involved parties was essential in delivering QI and changing practice. Successful projects had wide discussion that genuinely took on board staff needs and concerns in the early stages and beyond.

The Postural blood pressure project team was a largely self-selected group of enthusiasts, who designed the project without feeling the need to consult a wider audience. Over three meetings and significant debate on the details of the scheme and a series of PDSA cycles on their own (not necessarily representative) wards, they designed the intervention. As they began work on the wards, they realised that the level of ignorance of the correct procedure for measuring postural blood pressure was worse than they had imagined. Several unanticipated practical problems relating to the implementation of the change also came to light, which they tried to solve on the hoof. This slowed progress considerably.

The successful Nurse-led discharge team was the only one that could claim to have involved a sufficiently wide range of all grades and locations of staff to result in a fully rounded and representative set of views. One consequence that needed to be tolerated, though, was a lack of uniformity in how the Nurse-led discharge project was implemented.

Communicating the right message to the right people

Communication was the skill that staff most frequently cited as being necessary for QI. It included the art of listening, engaging staff, being clear on what was expected, explaining the need for change and the resultant benefits, anticipating and eliciting needs and concerns and the ability to motivate others. Related skills included reaching the right staff, building commitment, using appropriate methods to achieve change (e.g. chats, not cold emails) and handling local factions.

Getting through to the right people

It was crucial to get through to staff with an accurate and helpful message about the desired change, but four projects were unable to achieve this. The challenges included shift work, the pressure of clinical duties, under-resourcing and staffing shortages. Despite the best efforts of the change teams, the logistics of getting the message accurately to all relevant front-line staff often remained an unsolved problem.

Largely due to under-resourcing and staffing shortages, the Tissue viability team found it impossible, despite considerable ingenuity and enthusiasm, to make their communication strategies work. They used ward meetings, 'trolley dashes', ward visits, one-to-one coaching and on-site as well as sessional training. However, they were still only able to reach staff who happened to be on duty at the time and/or were able to leave their clinical duties to attend. Their optimism that they had done enough to get the word through to the rest of the staff by 'trickle down' from these events was misplaced. This was despite the considerable back-up material supplied to staff, such as information packs, laminated cards, notices, intranet posts and other media. The message that was handed down had inevitably become altered, misrepresented and diluted to such an extent that a considerable proportion of staff were only vaguely aware of it.

Framing the message correctly and communicating effectively

The art of selling and framing an improvement was also important, which meant knowing who the right staff were to engage with and when, understanding resistance and support for change and tailoring communication styles accordingly. The skill of framing had drawbacks: framing the change in different ways for different audiences could result in mixed messages or, in some cases, be interpreted as deviousness. The skills needed to frame messages required personal skills and socio-organisational intelligence.

Mapping stakeholders and developing the best pitch for each of them was regarded as one of the key skills that had resulted in the Nurse-led discharge project working so well. They learnt the importance of identifying the right staff ('there are always more people the intervention will affect than you think'), understanding motivational factors behind resistance/support of change and tailoring communication styles accordingly.

One of the reasons the Handover at night project failed was the co-lead's incorrect assumption that others would cascade the information, and her lack of confidence in talking to some key individuals.

The Enhanced care project successfully sold the idea differently to different staff. The range of messages included, "it's better for patients", 'it's more cost-efficient' and 'it empowers ward staff'. When, a year later, the project began to fail (mainly due to lack of staff) there was cynicism from ward staff who heard that Enhanced care had been a way to save resources, and conversely from managers who had heard that wards were using it to obtain more staff.

Enabling learning to occur

Creating the necessary culture of learning

Much of Preston's extensive training centred on deepening the trust's QI mentality. The trust adopted an effective model of coaching, mentoring, preceptorship, on-site training, roadshows and

'skills blitzes', rather than didactic teaching. It used home-grown online tools, educational videos and included QI in staff inductions. Attendees at the well-received in-house action-learning programme on change management/improvement skills worked on live projects and learned leadership and technical improvement skills, such as project mapping, PDSA and Lean. Everything possible was done to ensure that staff attended training, even if, for example, a matron had to stand in for a nurse on the ward so the nurse could attend the course.

In contrast, QI was not a focus of the general induction or mandatory training at Upsworth. Some staff were selected to attend set-piece Lean-based training programmes run by an external agency. Of the two key staff running the Tissue viability project, one had found the course irrelevant and unhelpful in practice, and the other was always too busy to be allowed to attend. But despite the inadequacy of the top-down learning environment, they were able to provide each other with their own front-line learning culture.

The work of developing the Tissue viability project was clearly enhanced by the Tissue viability team's proximity to the other specialist nursing teams working in the same office space on separate but similar projects (such as falls and dementia). They all shared their skills and techniques as needed. For example, when suddenly called on to produce a project plan, the team leader received invaluable on-the-job help from her immediate manager and a colleague at the next desk who had received training in the relevant skills and could provide a template. A great deal of 'mutual mentoring' went on in this office.

Regular formal and informal meetings with peers, not necessarily just in their own unit, provided a constructive way for senior nurses implementing the Nurse-led discharge project to share ideas and experiences to help overcome difficulties that lay in their path. Team learning was an important part of the project's success, with senior nurses ensuring that staff supported each other in acquiring and using the necessary skills and confidence to support Nurse-led discharge.

[Growing the necessary QI skills](#)

Participants found it difficult to say how they had attained specific QI skills. Occasionally an interviewee would recall a course from earlier in their career that had been valuable or – more often – recent training, such as Prenton's various leadership, change management and other QI-related training QI programmes. A notable benefit, though, from courses like these seemed to be the opportunity to learn from 'counterparts in all the other areas, so you get to find out what other people's struggles are' and how they deal with them.

The general feeling among a group from the Postural blood pressure project who attended a national training session on falls prevention was that the most valuable part of the course was the opportunity to meet others doing similar work from other parts of the country. This meant that participants could learn from others' experience of solving (often mundane, practical) problems – unlike the formal presentations and posters which, as one interviewee explained, 'never really told you what they'd actually done'.

This type of informal learning, skills acquisition and problem solving that occurs with any community of practice or learning community was evident in all the case studies. Respondents often said that the most useful QI skills had been accumulated during their professional experience, which was enhanced by working in a variety of different environments. That was how, for example, they said

they had absorbed the necessary communication and influencing skills from colleagues, role models and mentors.

[Contextualising experience](#)

[Adapting prior experiential learning](#)

Using prior experience appropriately in a new context was an important skill. It was important to recognise that what works in one environment may not translate to others, and vice versa.

Modifying previous experience entailed sometimes curbing front-line staff's enthusiasm for a previously successful formula, or overcoming their previous negative experience.

The Handover at night project discovered – to its cost – that highly successful improvements to handover between the daytime nursing shifts did not translate to the night-time multidisciplinary handover meetings. Another challenge was that 'it had been tried before in various different forms and at different times, so people already had opinions on it based on their previous experience, so trying to get buy in from the start was tricky.'

In two of our case studies, the projects suffered from being run by QI managers who failed to adapt their prior experience and management style to the current project.

[Transforming the original improvement to match the context](#)

Matching an initiative to its context was vital, modifying an intervention to ensure congruence with what was locally feasible. At every level and stage of a project, one of the main SOFTs was to maximise the alignment between the initial vision, the desired outcome, the approach used and the immediate front-line circumstances. This required what can be referred to as 'contextual empathy'.

The roll-out of the Postural blood pressure project proved problematic because it tried to make one size fit all. Similarly, the Tissue viability project was unable to make the modifications needed between, for example, elderly care wards and surgical wards or wards that were well managed and those that lacked leadership.

In contrast, the matrons who were implementing the successful Nurse-led discharge project enabled it to work differently in separate units across the hospital, while always adhering to the essence of the required improvement. They recognised that the diverse traditions of practice in the various wards required crucial adaptations without which the staff would have rejected it.

The Managing unprofessional behaviour project was constantly grappling with the question of how far to modify this US-derived scheme to match the local circumstances. The continuing conflict over the question of fidelity versus adaptation almost derailed the project.

[Using experience to modify the intervention](#)

Four of the six projects used a (usually watered-down) version of PDSA, which was almost the only formal QI technique used in any of the projects. It enabled them to learn from their experience, making small tests of change, learning from what happened, tweaking the intervention and trying again. Monitoring projects was important in this regard, including asking participants how it was going, observing, learning from feedback, identifying problems and solutions, and, auditing compliance. Where these skills could not be deployed (usually due to lack of time), implementation teams faltered. Their projects were not enabled to detect and understand the emerging problems,

but they felt compelled to continue them regardless. Knowing when to stop and when to persist was a particularly important skill.

The Enhanced care project used PDSA successfully during the pilot phase to encourage resistant staff to try it out, and arrived at a well-received scheme. However, thinking they had found the right formula, they stopped using PDSA when Enhanced care was rolled out across the rest of the wards. This contributed to its failure and meant that enhanced-care methods could not evolve to suit the much more varied contexts of wards that had not been part of the pilot.

The Handover at night project went through at least four informal PDSA iterations to try to optimise the way handover meetings were run and quality assessed. However, this did not help improve the new arrangements, which remained poorly thought through and ineffectually executed. In retrospect, the clinical leads realised they had pushed it for too long. ‘If we are flogging a dead horse and it’s not a priority for the organisation, do we keep on pushing it because somewhere in an action plan we said we had to do it, or do we ... have it as a dynamic decision to say this is not the right time to do this?’

4 Discussion

More than one of the case studies displayed positive deviance with their QI teams able to function remarkably well in highly adverse environments. This was largely due to individuals who succeeded against the odds because of their exceptional SOFFT skills. One site, on the other hand, displayed the opposite characteristic of running into difficulties despite being carried out in a trust nationally recognised as one of the best.

Having such a spectrum of results presented us with an exceptionally useful set of comparators to iteratively review the findings. Those findings confirmed that achieving QI relied on sensitive and contextualised applications of all three sides of the improvement-skills pyramid comprising soft skills, technical skills and learning skills. The case studies enabled us to describe a set of socio-organisational functional and facilitative tasks (SOFTTs) that represented, and relied on, a related set of skills (SOFFT skills). Without those SOFFT skills (Box 4), QI initiatives struggled.

The case studies suggested several refinements to the original model (Figure 1).

- From the point of view of the staff involved, the improvement skills pyramid often seemed to be constructed in highly disruptive circumstances that could include conflicting priorities, change fatigue, scant resources and saboteurs (Figure 2).

Figure 2: Building the improvement skills pyramid? No easy job!



Illustration by Alex Brenchley

- Unlike the original model, one wall of the pyramid comprises a wide range of soft-skill ‘bricks’, whereas the other two walls rely on relatively few skills. These are perhaps best described as composite slabs that are usually chosen according to the prevailing preferences in the organisation. (Figure 3).
- On closer examination the soft skills wall appears to be built from a myriad of soft skills aggregated into the SOFFT skills that are the main structure of that wall. The QI initiative only succeeds by applying these aggregated skills along with the skills that make up the other two walls (as demonstrated by the tick in Figure 3).

Figure 3: Front-line improvement skills pyramid: all three skill-sets contribute to success, despite needing fewer technical and learning skills than soft skills

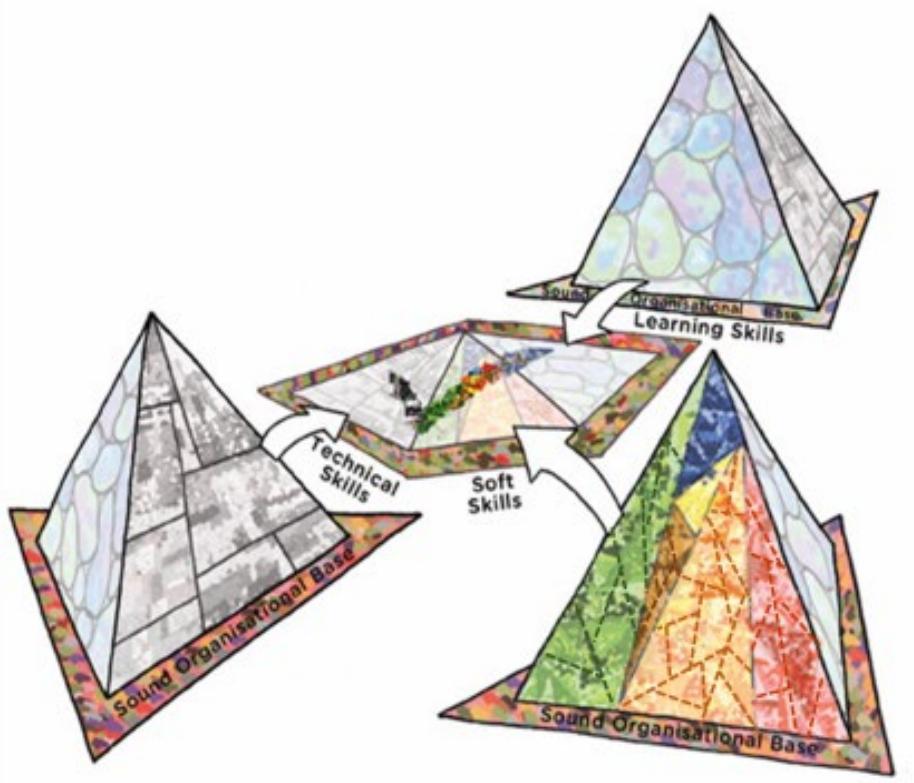


Illustration by Alex Brenchley

- The distinction between the different types of skills is not as clear as it first appeared. Some SOFFT skills also have a technical component, for example, data interpretation, communication media and educational techniques. Technical skills, however, are themselves imbued with contextual, political and personality-driven challenges, which the SOFFT skills often seek to modulate. These can include budgeting, staff allocation or the construction of run charts, which are far from being purely technical acts.
- The need for a sound organisational base is not confined to the pyramid's foundations. It pervades the entire building. However sound or unsound the corporate culture may be, the situation in different sections of the organisation can vary considerably. It is the skills on the front-line micro-environments that shape the success or otherwise of QI initiatives. This is why the front-line focus of this research, which has been lacking in QI literature up to now, has been so illuminating (Box 5).

Box 5: Summary of how the findings relate to the research literature

Organisational ethos

Although the literature has largely focused on the higher tiers of health care organisations, its broad conclusions support the contention that for those on the front line, a vital component of the necessary socio-organisational tasks, and the SOFFT skills they embody, is closely bound up with maintaining a blame-free, nurturing and open, non-hierarchical (or, at least, a softly hierarchical) environment. Crucially, senior managers need to foster an environment that allows colleagues, without fear of shame or recrimination or put-down, to engage in the respectful critical dialogue that this research has highlighted as an essential skill.

Crossing boundaries

The literature suggests that successful QI teams tend to be interdisciplinary in nature and involve employees who, whatever their professional background, understand the topic of interest, are qualified and experienced, have decision-making authority, shared goals, articulated responsibilities and who meet frequently. The case studies exemplified this and showed how inter-professional blocks could be overcome by the deft use of SOFFT skills.

Technical skills

As has been described in the literature, PDSA cycles and Lean methodology were the most frequently-used improvement approaches in the case studies. Although there were weaknesses in using the technical aspects of such tools, what mattered was the judgement of when and how to use the tools, tailoring them to suit the circumstances and using context-specific workarounds that helped overcome the barriers to the effective use of technical skills.

Engagement

It is widely accepted that, as was also observed in this research, QI interventions in health care are more likely to succeed when they are developed in collaboration with clinical professionals, rather than being imposed on them. Consulting and engaging with staff effectively can help overcome initial resistance to QI, whereas top-down, managerially-led initiatives can result in resentment and a sense of exploitation among health care staff.

Resourcing

Adequate resourcing of QI activities is generally agreed to be an important determinant for success. The literature suggests that the available time to undertake QI is almost always inadequate, as can be the accessibility of a physical space to meet and learn from each other. Securing these resources was a crucial SOFFT skill, as was the ability to harness staff enthusiasm and maintain momentum and morale despite the lack of time and/or space.

Leadership

The literature has much to say about the role of transformational and distributed (or shared) leadership in QI. The findings on the front line confirm that a wide range of appropriate generic leadership skills was paramount, and these may or may not reflect the style promulgated by senior management. In five of the case studies, key front-line individuals were, when the need arose, repeatedly and consistently able to deploy leadership skills without which the project would probably have failed. The sixth arguably failed largely because the ground-level opposition was particularly well led! The role of one or more change champions was crucial in most of the projects, and this also features widely in the literature.

Surviving turbulence

Other research has described how shifting policy agendas and regulatory requirements can serve as a major barrier to improvement activities, generating organisational ‘turbulence’, and distracting or

destabilising QI teams. This played a big role in both the internal and external contexts of the case studies.

Solving the actual problem

The literature supports the conclusion from this research that defining the problem and its solution require the front-line QI team to not only bring to bear a complex technical and SOFFT skill set, but also to devote significant time and resource to this stage of a QI project.

Communications, targeting and framing

Communication skills, ranked above all others by the interviewees, figure prominently in QI literature. Research has repeatedly shown that effective and early communication is important in ensuring staff are clear on the purpose of the initiative. The inability to make the time and space to discuss the initiative fully with staff was a major obstacle in three of the case studies. The ability to adapt (or frame) communication approaches to different individuals or situations also appears in current literature as an aid to motivation.

Learning

The findings about the acquisition and deployment of SOFFT skills were consistent with widespread evidence on the fundamental role of learning communities or communities of practice. These are social learning environments, often informal, where knowledge and ideas are shared and debated, skills developed, innovations shaped and identities formed and reinforced. A consistent message appears to be the need to adopt multidisciplinary approaches and to support collective learning in teams. This can benefit problem solving, responsiveness to challenges, adaptability to changes in protocol and local culture and systems. Therefore, success is not, as some research has suggested, simply a matter of identifying skills gaps and plugging them. The case studies have shown not only the range of skills that front-line staff use, but how context specific and flexible they need to be if they are to succeed.

Adapting to the context: the role of transformation

The literature suggests that QI activities are most successful if they incorporate a degree of adaptability, enabling improvements to ‘fit’ – not just with institutional objectives, but also with the realities of clinical activity. Tailoring an intervention is necessary; imposing a magic bullet or off-the-shelf solution in a way that does not resonate well with clinical practice in context, or that represents too abrupt a shift, undermines the intervention’s chances of success. The adaptative transformation of interventions was a vital SOFFT skill in the case studies.

5 implications

To enable staff to accomplish the SOFFTs that are critical to successful QI on the front line:

- Those involved in implementing QI projects, including front-line staff, might undertake a rapid audit to determine the readiness for improvement of a unit/team/ward before starting any QI project. The SOFFTs have been incorporated into a ‘fitness for improvement tool’ (Appendix 1) to help establish fitness for improvement and show if, and where, resources and skills need to be strengthened before work commences.
- Organisational managers and improvement/development leads should recognise the following:
 - QI is an activity with relational, technical and learning aspects, all of which require resource and attention. This means that opportunities to think, talk and debate are necessary if improvement skills and associated knowledge are to be used effectively in context in practice. However, the opportunity for this type of conversation is often one of the first things to be cut when staff at any level of an organisation are under pressure. It is suggested that those responsible for QI lobby for ring-fenced resources that provide the space to nurture critical respectful dialogue as part of everyday practice.
 - Improvements and their related tasks need to be genuinely owned by their target audiences. This requires the tasks to be framed appropriately for the staff who are expected to implement them or – better still – developed through a process of co-construction. All too often improvements start without the full understanding of those involved, which then leads to incoherence and division. Ensuring a sound level of understanding is the responsibility of improvement leaders at all levels of the organisation.
 - To reduce the feeling and effect of ‘initiativitis’, it is suggested that local logs of all QI work be kept, reviewed and updated, and projects re-prioritised regularly to guarantee that an overarching understanding of the extent and progress of improvement work is held by a senior manager in every organisation. That person should be empowered to halt projects that become burdensome or do not progress. In addition, this report will help to identify areas where improvement is still necessary and where QI skills need to be developed, which will identify improvement-training needs.
- Senior policymakers and managers have a key role in creating optimal structural and cultural environments for successful QI, which is likely to prove more productive than making multiple QI-related demands that can often be disjointed, unplanned and inadequately resourced when viewed as a whole. They should also consider broadening QI training to explicitly encompass SOFFT skills development.

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Appendix 1: The Fitness for Improvement Tool (FFIT) – a potential SOFFT audit tool

The thinking underpinning the FFIT is to be found in the Health Foundation report ‘Able to Improve?’. A summary of the findings that informed the tool is attached below.

Each section of the FFIT reflects the tasks and skills needed for successful improvement on the front line and will help to assess the readiness of the QI team and the staff to undertake an improvement initiative. The higher the score, the readier the setting is for improvement. Lower scores highlight areas that may need strengthening before fully-owned, sustainable improvement can occur successfully.

Please note that FFIT has not been validated and tested. It will only be an approximate barometer for use as a guide for further action, working in conjunction with the units undertaking the QI initiative.

It is recommended that QI initiators and key managers of the relevant units consider the following questions below and score each one as follows:

- 0 = Not at all
- 1 = To a small extent
- 2 = To some extent
- 3 = To a moderate extent
- 4 = To a great extent
- 5 = To a very great extent

Thinking of the unit(s) where you wish to make the improvement, to what extent do the front-line staff:

- | | |
|---|-------------|
| • feel they are in a blame-free, nurturing and open environment? | 0 1 2 3 4 5 |
| • feel able to challenge suboptimal practice? | 0 1 2 3 4 5 |
| • show an ability to manage tensions and factions? | 0 1 2 3 4 5 |
| • have the capacity to collect the necessary data? | 0 1 2 3 4 5 |
| • undertake successful audits and respond to them constructively? | 0 1 2 3 4 5 |
| • feel a strong sense of ownership about the quality of care? | 0 1 2 3 4 5 |
| • feel encouraged to make suggestions about improving care? | 0 1 2 3 4 5 |
| • show a sense of dedication to high-quality care? | 0 1 2 3 4 5 |
| • aspire to high professional standards? | 0 1 2 3 4 5 |
| • have good clinical role models? | 0 1 2 3 4 5 |
| • feel they have the resources to do the job? | 0 1 2 3 4 5 |

Is there adequate resourcing to carry out the improvement in terms of:

- | | |
|--|-------------|
| • staffing levels in the clinical units concerned? | 0 1 2 3 4 5 |
| • necessary equipment? | 0 1 2 3 4 5 |
| • appropriate documentation/admin procedures? | 0 1 2 3 4 5 |
| • administrative support? | 0 1 2 3 4 5 |
| • training support? | 0 1 2 3 4 5 |
| • active backing and support from senior managers? | 0 1 2 3 4 5 |
| • staffing levels and skill-mix among the QI team? | 0 1 2 3 4 5 |

Thinking of the managers who will be involved, will they be able to:

- lead staff capably towards achieving the improvement? 0 1 2 3 4 5
- inspire and nurture skilful, influential champions to help achieve the change? 0 1 2 3 4 5
- skilfully handle resistance to change? 0 1 2 3 4 5
- shield staff from dealing with too many improvement initiatives at once? 0 1 2 3 4 5
- make good judgements about the timing of the QI initiative? 0 1 2 3 4 5
- coordinate the QI initiative with all the other required tasks? 0 1 2 3 4 5
- follow through and maintain momentum? 0 1 2 3 4 5

How confident do you feel that:

- you have fully understood what is wrong and why? 0 1 2 3 4 5
- the intended improvement will actually solve the problem? 0 1 2 3 4 5
- the managers, staff and service users would agree with that assessment? 0 1 2 3 4 5
- you have fully assessed and involved all the main stakeholders? 0 1 2 3 4 5
- all the relevant staff will be fully on board? 0 1 2 3 4 5
- there are not too many other initiatives already underway? 0 1 2 3 4 5
- this initiative has been appropriately coordinated with other improvements? 0 1 2 3 4 5

To what extent have you thought about how you will:

- make sure the right messages get through to all the right people? 0 1 2 3 4 5
- reframe the message to suit all the various people involved? 0 1 2 3 4 5
- know that the message is being communicated effectively? 0 1 2 3 4 5
- take account of people's reactions? 0 1 2 3 4 5

In terms of the new learning that will be required among the staff:

- is there a good learning culture? 0 1 2 3 4 5
- is there the capacity to undergo the necessary learning? 0 1 2 3 4 5
- will they be able to acquire and develop the necessary QI skills? 0 1 2 3 4 5
- will they be able to acquire and develop the necessary clinical skills? 0 1 2 3 4 5

Most improvements need to be modified to suit the context. To what extent have you considered:

- lessons learnt from previous attempted improvements in this context? 0 1 2 3 4 5
- the degree to which the proposed changes will fit in the units concerned? 0 1 2 3 4 5
- ensuring how the improvement could be sensibly adapted as it proceeds? 0 1 2 3 4 5
- how you will take account of problems encountered as the work proceeds? 0 1 2 3 4 5
- how much modification to the original intended change will be acceptable? 0 1 2 3 4 5

The findings that underpinned the FFIT: How the skills for achieving the necessary socio-organisation functional and facilitative tasks (SOFFT skills) helped QI to succeed

SOFTTs	Examples of what the SOFTTs achieved
Adopting and promulgating the appropriate style and tone	
Ensuring a blame-free, nurturing and open environment	There was clear communication in an honest, supportive and collaborative environment that enabled a clear and shared understanding of, and commitment to, the agreed improvement.
Enabling staff to have difficult conversations through respectful critical dialogue, challenging suboptimal practice, managing tensions and factions, data collection utilisation and audit, stakeholder mapping	Staff were enabled and encouraged to have "grown-up conversations" that could challenge practice without triggering punitive action.
Ensuring the QI team use technical QI skills.	Staff made good use of data, and also used audit findings strategically, or used PDSA or stakeholder analysis effectively.
Fostering a strong sense of staff ownership	Staff had the time, resources, and socio-organisational intelligence about when, for example, to involve which staff and listen to their views.
Encouraging and rewarding good suggestions	There was a sense of being involved and taken seriously, and having contributions recognised and respected.
Inculcating a sense of dedication to high-quality care: instilling high professional values and role modelling	Respected front-line leaders demanded and demonstrated genuine values. They emphasised the highest standards of care, inspiring but also admonishing where standards slipped.
Securing the resources to do the job	There was adequate staffing and the demands on the QI team were matched with the necessary resources, support and training.
Leading staff towards the achievement of improvement	Leaders showed enthusiasm communicated well, appointed the right team, set clear direction and goals, conferred autonomy, provided resources, and motivated staff be creative and productive.
Managing the QI roller-coaster	
Avoiding and shielding staff from "initiativitis"	Staff did not feel inundated by quality initiatives from above, and were protected from multiple, rushed QI imperatives that gave little time to achieve and sustain change.
Timing, coordination and momentum	QI teams had a chance to develop practice, reflect on progress, and embed, evaluate, and sustain change. This required understanding the context, maintaining a clear direction and "getting the timing right".
Getting the problem (and intended solution) are right	
Understanding what is wrong and why	The true nature of the perceived problem, the improvement required, and the approach used had all been carefully investigated with a clinical and managerial eye.
Co-designing the QI work	All the relevant parties had been carefully and appropriately involved in discussions that genuinely took on board staff needs and concerns at all project stages.
Communicating the right message to the right staff	
Getting through to the right people	It had been made possible for everyone concerned (including night shift and agency staff) to hear the message first hand
Framing the message correctly	The QI team had considered carefully who the right staff were to engage with and when, understood the potential resistance and support for change, and had tailored their communication styles appropriately.
Communicating effectively	Everyone was able to engage, explain, listen and understand others' intentions and concerns. When staff were asked about the necessary QI skills, communication was mentioned the most often. In practice, however, good communication depended on many other SOFTTs being achieved.
Enabling learning to occur	
Creating the necessary culture of learning	The organisation took learning seriously and enabled staff – however busy – to partake in an array of relevant coaching, mentoring, preceptorship, on-site training, roadshows, and 'skills blitzes' and didactic teaching.
Growing the necessary QI skills	Staff were encouraged to share their knowledge and experience of QI. It was recognised that skills obtained on training courses are only a small part of the skills and knowledge used in QI.
Contextualising experience	
Adapting prior experiential learning	Staff at all levels were encouraged to adapt their prior experience appropriately in a new context, and to recognise that what works in one environment may not translate to a different one.

Transforming the original improvement to match the context	The QI team displayed contextual empathy, matching an intervention to its context to ensure alignment between the initial vision, the desired outcome, the approach used and the immediate local front-line circumstances.
Using experience to modify the intervention	The QI team continually monitored projects: asking participants how it was going, observing, learning from feedback, identifying problems and solutions, and auditing compliance. (PDSA – even ‘PDSA-lite’ – was helpful here)