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RESEARCH

Building capacity and capability for quality improvement: developing an organisational approach

Francisco Frasquilho[1]
Katherine Brittin[1]
Auzewell Chitewe[1]
Marco Aurelio[1]
Nicola Ballingall[1]
Robert Lloyd[2]
Amar Shah[1]

Author details can be found at the end of this article

Correspondence to:
Marco Aurelio;
m.aurelio@nhs.net

Abstract

There has been an increase in the adoption of quality improvement methods to tackle complex problems in healthcare. One of the key requisites for sustainable quality improvement is ensuring that organisations have the capacity and capability to make these changes effectively. This article uses a case study methodology to describe the learning from 9 years of developing, delivering and evaluating quality improvement learning programmes at East London NHS Foundation Trust. The key quality improvement learning progammes are evaluated using a Kirkpatrick framework across four levels: reaction, learning, behaviour and outcomes. Five key principles were identified: using a dosing approach; standardising development, delivery and evaluation; developing a community to support learners; making training relevant; and the importance of leadership. However, the authors believe that more research is needed to develop standardised approaches to evaluating quality improvement capability building and to understand why some quality improvement projects are less successful than others.

Key words: Capability; Healthcare; Quality improvement; Training

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Introduction

Despite advances in clinical and administrative practices, variation in outcomes and experiences persist across healthcare. Quality improvement—the systematic use of concepts, tools and techniques to improve outcomes (Øvretveit, 2009)—is being increasingly adopted by healthcare organisations to tackle unwarranted variation (Sun et al, 2014). Despite a growing body of evidence that points to the potential effectiveness of quality improvement (Wells et al, 2018), results remain mixed, and healthcare systems struggle to make it a sustainable problem-solving approach (Dixon-Wood and Martin, 2016).

Contextual factors are key to explaining the variation in success of quality improvement in healthcare (Coles et al, 2020). These include areas such as leadership, skills and resources (Kaplan et al, 2010; Øvretveit, 2011). Systematic approaches to building staff capacity and capability to lead change are frequently highlighted as important factors for successful quality improvement (Babich et al, 2016). However, conceptualising, measuring and building capacity and capability for improvement remains a challenge, and there is no widely accepted approach for this (Furnival et al, 2017). For the purposes of this article, organisational capacity is defined as 'having the right number and level of staff members who are actively engaged to take action', while capability is defined as 'staff members having the confidence, knowledge and skills to lead the change' (Bevan, 2010)

Having a systematic approach to building capability for quality improvement has been identified as a feature of high performing organisations (Bevan, 2010). The Berwick review into patient safety (Department of Health and Social Care, 2013) stated that leadership should strive to create learning organisations and that quality improvement should be an integral part of continuing professional development. Consequently, several professions now include quality improvement in their core training routes and several organisations offer subscription-based models to support providers. However, at the time of writing, there is no coherent centralised approach to building quality improvement capability across the NHS in England, despite calls for the coordination of resources to improve quality in the NHS (Ham et al, 2016). It is unsurprising then that there are also very few in-depth, long-term case studies on how to build improvement capacity and capability in practice.

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East London NHS Foundation Trust (ELFT) provides mental health, community health, primary care and specialist health services to a population of 1.8 million people across East London, Bedfordshire and Luton. ELFT has been using quality improvement since 2014 to empower its staff and service users to solve the complex issues that matter to them. ELFT has a long-term partnership with the Institute for Healthcare Improvement and has adopted the model for improvement (Langley et al, 2009) as its method. Quality improvement provides a systematic way for teams to identify improvement opportunities, understand them from different perspectives, develop clear aims and measurement plans, and test change ideas through iterative cycles of learning, using data over time to help understand if the changes are leading to demonstrable improvement. The application of quality improvement at ELFT has covered complex topics, including inpatient physical violence, access and flow across community teams, and joy in work (Shah and Course, 2018). An essential element of the delivery of results has been the focus on and approach to building improvement capacity and capability at scale and pace.

This article uses a case study methodology to explore 9 years of learning at ELFT to build an organisational approach to develop improvement capacity and capability at scale. The key questions are:

- How can organisations build understanding of who needs to be trained in what, and to what level?
- What are some of the key structures and processes for developing, delivering and evaluating an organisational approach to building capability?
- What are some of the key principles that organisations might consider when developing an organisational approach to building capability?

Case study

Dosing approach

Bevan's (2010) definition of capacity suggests that not everyone needs to have the same level of knowledge (Bevan, 2010). The concept of 'dosing' for improvement capability and capacity, first articulated by Lloyd (2018, 2019), states that the level of quality improvement knowledge and skills will vary according to an individual's role and the opportunities they have to use these skills to make system improvements.

Dosing at ELFT is based on an understanding of the level at which the individual is expecting to use quality improvement in their day-to-day work; someone employed as a full-time improvement advisor will require a heavier 'dose' of training and experience than someone who will be leading an improvement project in their area of work. For example, an improvement advisor would need an understanding of statistical process control chart selection, how to construct and interpret the chart and how to help others understand variation in the chart. Meanwhile an individual leading a project would only need to understand what a statistical process control chart is and what action to take based on the variation it displays.

Developing learning programmes

The quality improvement learning programmes range from building awareness all the way to having a deep understanding of quality improvement to help coach improvement teams (Figure 1). Many access the introductory programmes, with far fewer people needing to access the more advanced programmes.

Systematic dosing of tailored learning programmes began in 2014, when staff were given access to the Institute for Healthcare Improvement's Open School online course, which covers quality improvement, patient safety and leadership. Staff were also offered the Institute for Healthcare Improvement's 6-week improvement science in action course to equip them with the skills to apply the improvement method to complex problems at work. This course was delivered once a year and included five in-person days, with online sessions in between. In 2016, ELFT faculty took over the delivery of the course, which evolved into the improvement leaders programme. This programme remains the key delivery vehicle for improvement projects at ELFT and is linked to the trust's annual planning cycle; as each part of the organisation plans its priorities for the year, it develops quality

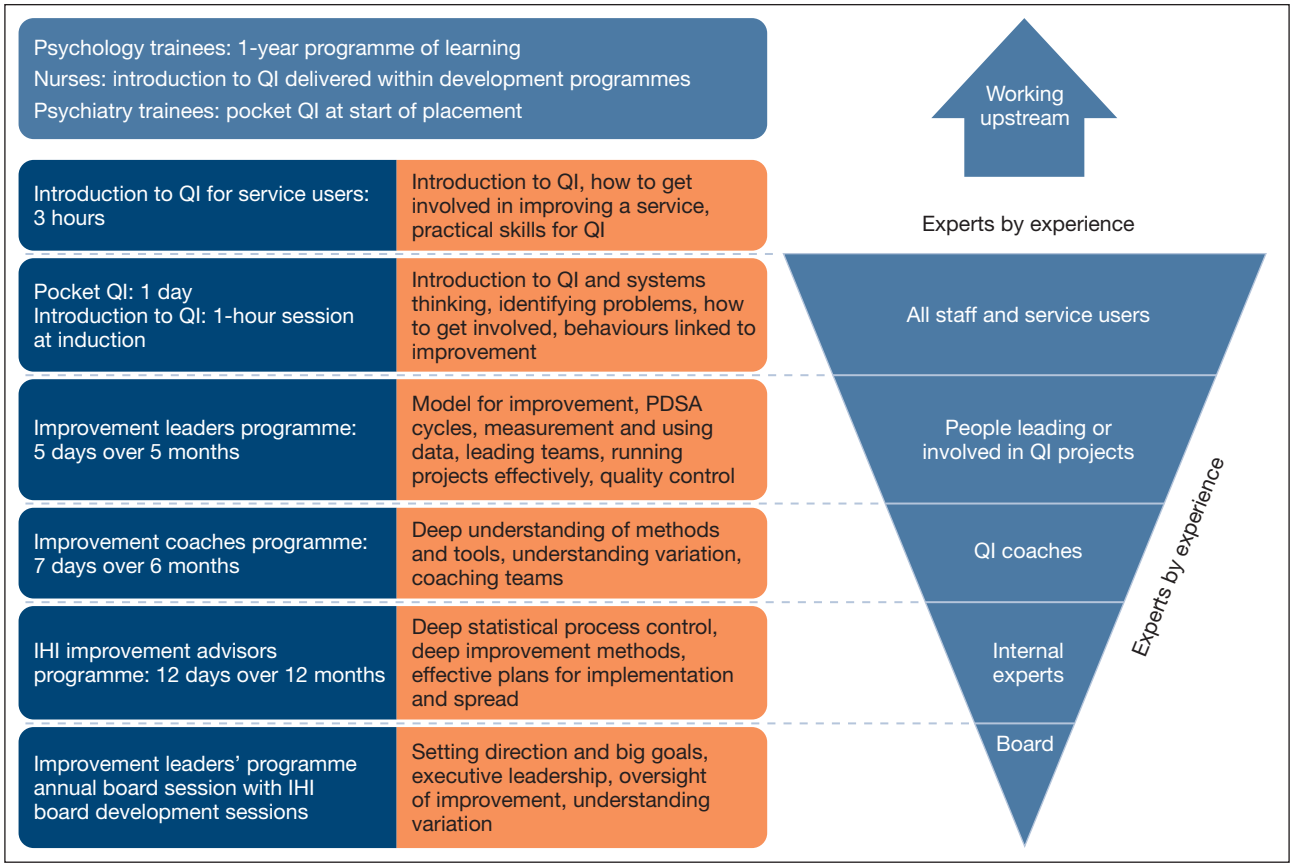

Figure 1. East London NHS Foundation Trust quality improvement learning programmes. IHI=Institute for Healthcare Improvement; PDSA=plan-do-study-act; QI=quality improvement.

improvement projects which are supported through the improvement leaders programme. Staff and service users enrol on to this programme and receive support over 6 months to learn and apply quality improvement to the issues they are tackling.

To give staff and service users an introductory way to learn the core approaches, skills, and tools of quality improvement, ELFT developed the pocket QI course in 2015. This is a 1-day, interactive course for 30–40 people, which all new staff joining ELFT are expected to have completed within the first 3 months of employment. Also in 2015, ELFT developed the improvement coaching programme with the Institute for Healthcare Improvement as a means of providing sustainable improvement support across the organisation. This was designed to develop a cohort of staff and service users as improvement coaches, who dedicate about half a day each week to coaching quality improvement work. The improvement coaching programme is a 6-month professional development programme, involving six or seven in-person workshop days complemented by several short virtual calls in between in person sessions. Staff and service users put themselves forward to become improvement coaches, with the support of their line manager and directorate leadership.

In 2016, service users at ELFT developed bespoke training to help service users and carers to understand quality improvement and learn about how they could become actively involved. Although many service users and carers had attended the pocket QI course alongside staff, something shorter and bespoke was required in addition to this.

ELFT have also worked upstream to ensure that staff coming into the organisation are equipped with quality improvement skills. Introductions to quality improvement are offered to undergraduate and graduate nurses through partnerships with City University London and Bedford University, and to trainee doctors on rotation at ELFT. Furthermore, trainee psychology students at ELFT apply their required service-related research project to existing quality improvement work. They receive bespoke learning sessions to help them apply quality improvement methods to work that is already underway within their placement (Tacconelli et al, 2019). The ELFT board also has one quality improvement

development session each year, delivered either by the Institute for Healthcare Improvement or the trust's chief quality officer. All executive directors are expected to complete the improvement leaders programme.

The improvement coaching programme is designed to support those who would like to coach quality improvement work alongside their substantive post. This is part of staff members' annual appraisals, with local leaders supported to identify those who demonstrate a passion for improvement and display the habits of an improver (Lucas and Nacer, 2015). Improvement advisors guide clinical and service directors to understand and predict the demand of quality improvement work, ensuring sufficient capacity in the improvement coaching pool to support this. Service users are encouraged to become quality improvement coaches with lived experience, with local management supporting remuneration and providing line management.

All ELFT staff and service users can sign up to quality improvement training via the ELFT quality improvement website, local leaders are supported to identify their improvement priorities for the year and assess gaps in existing capability, and service users are closely supported by the trust's people participation team. Criteria for acceptance on to the improvement leaders programme includes involvement in a piece of quality improvement work and support from their line manager or, for service users, from the local people participation lead.

Programme management and communications

A project management approach is used to provide structure to the planning and delivery of all training packages. Agile methodology has been adopted and includes the use of timeboxes, weekly huddles for faculty and operational teams, and clarification of roles and responsibilities of all team members early in the process.

A separate communication strategy is developed for each learning programme. Method, target audience and timings are all strategically considered. Organisation-wide communications via email, social media, newsletters and regular announcements at internal forums are used to advertise the learning programmes, recruit staff and service users, and inform registered participants before, during and after each session.

Curriculum development and evaluation

For all learning programmes, there is a structured approach to curriculum development using the analysis, design, development, implementation and evaluation (ADDIE) framework (Branch, 2009). The original development of the learning programmes was based on responses to gaps in improvement knowledge and skills. For each programme, an understanding of the audience's characteristics and the objectives of the learning programme guides its development. An analysis of the resources required is undertaken and a project development plan is proposed.

For the design, faculty are drawn from the quality improvement department based on their experience, relative to the needs of the course. The faculty agree objectives for each learning programme and establish content related to these goals. Content and learning activities are designed in a sequence that supports the learner's ability to apply quality improvement knowledge and skills. Learning resources are then generated by integrating content and strategy and developing guidance for the learners and the faculty. Materials are tested for acceptability, undergoing iterative plan-do-study-act cycles to finalise the content, which is then signed off by the accountable stakeholder.

It is important to prepare faculty members so that they feel confident to deliver the programme. Programme participants are prepared by receiving pre-course communications including information and resources for the programme.

In 2020, the Kirkpatrick model (Kirkpatrick and Kirkpatrick, 2010) was adopted to evaluate the impact of the learning programmes. This model has been used in several healthcare settings to evaluate capability-building programmes for quality improvement (Boonyasai et al, 2007; Wong et al, 2010). Before the Kirkpatrick model was adopted, learning programmes were evaluated during and after delivery, but without a systematic approach. The model considers the impact of capability building at four different levels:

- Level 1: reaction – how useful or satisfactory the participants found the training

- Level 2: learning – what new knowledge the learners took away
- Level 3: behaviour – how far the participants incorporate their new knowledge into daily practice
- Level 4: results – impact of the training on organisational results.

As part of the evaluation approach, feedback that focuses on levels one and two of the model is sought after each day or session, with a more in-depth questionnaire delivered at the end of the learning programme, encompassing all four levels. Table 1 describes the components that are assessed at the different levels of the Kirkpatrick framework for the three main quality improvement learning programmes at ELFT.

Methods

The collection strategy for this study was underpinned by Kirkpatrick's approach to learning evaluation. All questions used were aligned to one of the four levels of the approach. The numbers of individuals who completed the training programmes were also collected but were not the primary focus of this study.

For the pocket QI course, assessment is carried out after each cohort, while for the improvement leaders programme and improvement coaching programme, formative assessment on participant satisfaction is recorded each day, with a post-course evaluation. These assessments are all carried out using anonymous questionnaires administered to participants via Microsoft forms. It should be noted that the Kirkpatrick evaluation approach was only adopted in 2020, limiting the amount of feedback presented in this way up to this period.

Assessment of participants' reaction, learning and behavioural change following the pocket QI course was conducted via a post-course survey, performed after each cohort. Reaction to training was assessed by asking participants how likely they would recommend the pocket QI course to a colleague on a 5-point Likert scale (1=strongly disagree; 5=strongly agree). Learning was assessed by asking which topics the training should allocate more

Table 1. Components of the Kirkpatrick framework evaluated for the main three quality improvement learning programmes at East London NHS Foundation Trust

Component	Pocket QI course	Improvement leaders programme	Improvement coaching programme
Reaction	Percentage of attendees who would recommend the course to a colleague	Percentage of attendees who would recommend the course to a colleague Percentage of attendees who were satisfied with the learning programme	Percentage of attendees who would recommend the course to a colleague Percentage of attendees who were satisfied with the learning programme
Learning	Which topics should have more or less time spent on them	Pre- and post-session assessment of participants' knowledge and confidence in applying quality improvement across nine content domains each	Pre- and post-session assessment of participants' knowledge and confidence in applying quality improvement across 20 content domains each
Behaviour	Improvement tools that attendees will apply in practice Self-rated confidence to contribute to a quality improvement project in their area	Percentage of attendees who feel prepared to lead a quality improvement project in their area of work Percentage of attendees who say that they are likely to use quality improvement to solve complex problems	Self-rated confidence to be able to coach a team with their quality improvement work
Results	No measurement process in place yet	Percentage of projects that demonstrate achievement of their aim Percentage of attendees who feel that the programme has improved outcomes in their area of work	Percentage of projects coached that have moved to a score of at least 3 out of 5 on the Institute for Healthcare Improvement's project scoring scale

time for, with a list of topics covered in the course given for participants to choose as many as they felt necessary. Behavioural change was assessed by asking how confident participants felt to participate in a quality improvement project on a 5-point Likert scale (1=strongly disagree; 5=strongly agree).

For the improvement leaders programme, reaction was assessed by asking participants how satisfied they were with the programme on a 5-point Likert scale (1=very unsatisfied; 5=very satisfied) and how likely they were to recommend it to a colleague (1=very unlikely; 5=very likely). Learning was assessed using a pre- and post-course survey, measuring participants' knowledge and confidence. In both surveys, participants were asked to rate their knowledge across nine core learning domains relating to the key topics covered in the course, using a 4-point Likert scale (0=no knowledge; 3=very good knowledge). To measure confidence, participants were asked to rate their confidence in applying the nine domains on a 4-point Likert scale (0=very unconfident; 3=very confident). To assess behavioural change, participants were asked how likely they were to use quality improvement to solve complex problem and how prepared they felt to lead a quality improvement project in their area of work, using a 5-point Likert scale (1=very unlikely; 5=very likely).

For the improvement coaching programme, reaction was assessed by asking how satisfied participants were with the programme on a 5-point Likert scale (1=very unsatisfied; 5=very satisfied) and how likely they were to recommend it to a colleague (1=very unlikely; 5=very likely). Assessment of learning was assessed using a pre- and post-course surveys of participants' knowledge across 20 core learning domains covered during the course. The surveys used Bloom's taxonomy measure (Athanassiou et al, 2003), with participants self-rating their skills on a scale of zero (no knowledge) to five (expert). The mean average scores for the cohort were then calculated.

Qualitative data were also collected as part of the evaluation of the improvement coaching programme and improvement leaders programme. After each day of the course, participants were asked to provide feedback through two questions: 'what did you find most valuable about the day' and 'please briefly share where we could improve the day'.

Results

Organisational results

One of the key outcome measures was the proportion of quality improvement projects that have shown improvement by the time they were closed. Since ELFT adopted quality improvement methodology in 2014, there have been 943 recorded projects covering a broad range of issues related to the priorities of the trust and the populations it serves. Projects addressed topics such as access to and flow through services, safety on inpatient mental health wards, staff wellbeing and service user experience. There was also a range of improvement projects to support services such as finance, human resources, and information technology.

Projects progress along a scale from 0–5, which was developed by the Institute for Healthcare Improvement:

- 1–1.5 indicates that a charter and team have been identified
- 2–2.5 indicates that planning and initiation of testing change ideas is taking place using plan-do-study-act cycles
- 3–3.5 indicates that improvement has been observed, using standard run or control chart rules
- 4 and above indicates that significant improvement has taken place, with the project aim being met and the team moving towards implementation.

Figure 2 shows the scores of all projects that have been closed at ELFT between 2014 and 2022. Of the 943 projects, 31% demonstrated improvements towards their stated aims (score of 3 or above), with 13.4% showing significant improvement and implementation of work (score of 4 or above). 42% did not progress beyond the development of a charter or closed without testing changes. However, once projects started the testing phase (541 in total), 53% achieved improvement.

Programme results

Since 2019, a total of 2444 people have completed the pocket QI course, of whom 1256 were still employed at ELFT at the time of writing; 1274 people have completed the

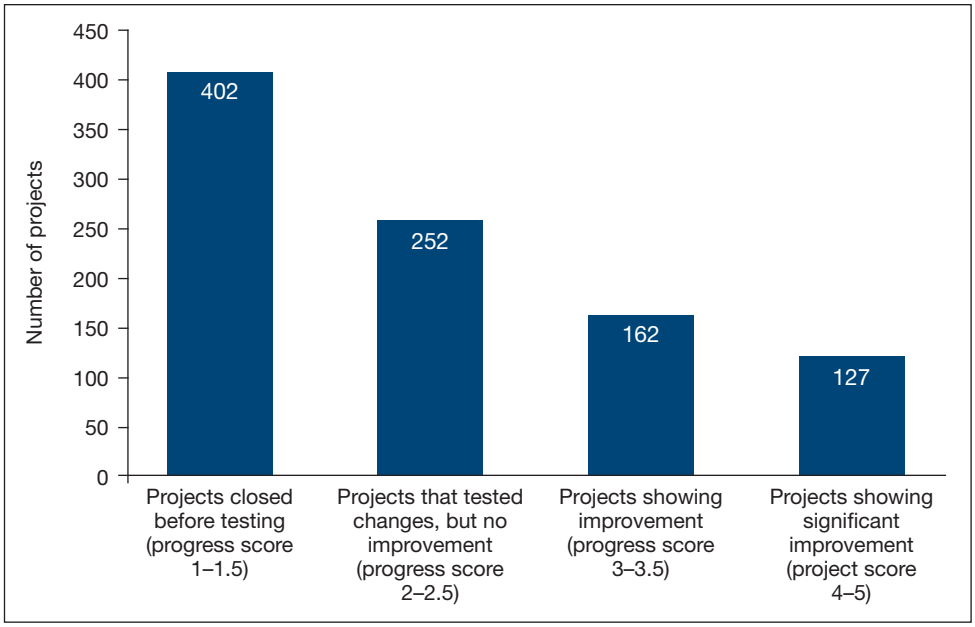

Figure 2. Number of projects closed at each stage of development between 2014 and 2022 at East London NHS Foundation Trust, using a project progress scale of 1–5.

improvement leaders programme across the 11 waves of this programme, of whom 693 are still employed at ELFT; and 291 people have completed the improvement coaching programme across seven cohorts of the programme, of whom 160 are still employed at ELFT. Figure 3 shows the number of people trained since the start of the trust's quality improvement programme in 2014, representing the dosing strategy.

Pocket QI course

Based on the responses of 266 attendees, 88% of respondents agreed or strongly agreed that they would recommend the training they received in the pocket QI course to a colleague, while 77% reported feeling confident to participate in or start their own quality improvement project following training.

The tools that participants frequently reported that they would use following the training included tools to understand the problem (including process maps, fishbone diagrams and pareto), driver diagrams to visualise the work, and plan-do-study-act cycles to test change ideas.

Improvement leaders programme

Evaluation was performed with waves 10 (2020–1) and 11 (2021–2) of the improvement leaders programme, which had 157 and 89 participants respectively. A total of 246 participants responded to the pre-programme survey and 158 to the post-programme survey across the two cohorts.

Overall, 95% of respondents were satisfied or highly satisfied with the programme and 97% would recommend it to a colleague. 97% said they would be likely or very likely to use quality improvement to solve complex problems, while 94% felt that this method was likely or very likely to have an impact on their area of work. 85% agreed or strongly agreed that participating in the improvement leaders programme had improved outcomes in their areas of work.

A comparison of participants' scores on the pre- and post-programme surveys measuring knowledge and confidence across the nine core learning domains are shown in Figures 4 and 5, indicating increases across all areas.

Improvement coaching programme

Evaluation was performed with cohorts six (2020–1) and seven (2021–2) of the improvement coaching programme, with 75 and 31 participants respectively. Across the two cohorts, 75 people completed the end-of-course survey, of whom 80% were satisfied or very satisfied with the programme, while 83% felt confident or very confident to coach a team to use quality improvement methods.

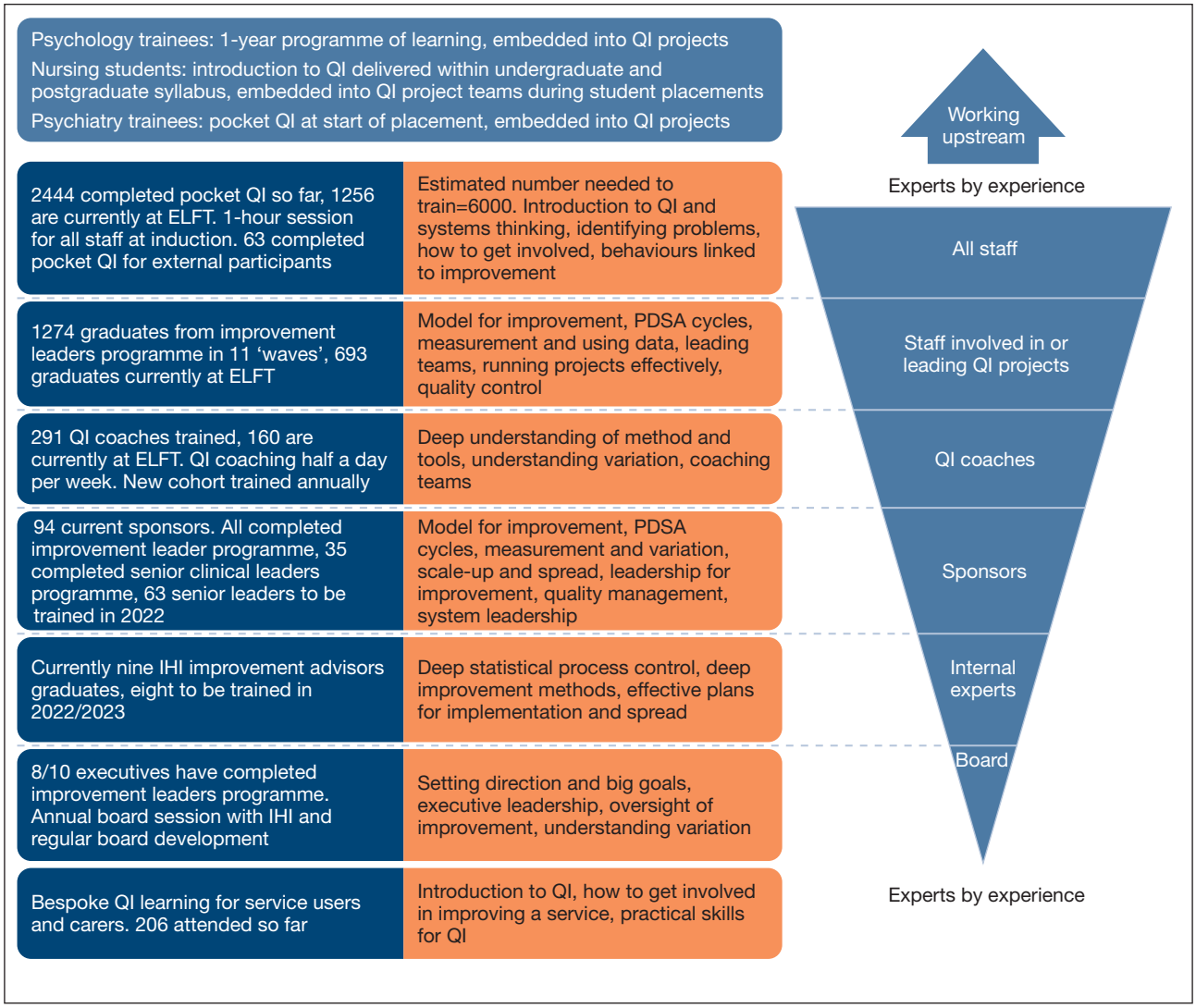

Figure 3. Improvement coaching programme quality improvement dosing strategy for capability building, showing the needs of different groups and the number of people trained between 2014 and 2022. Based on 2022 data. ELFT=East London NHS Foundation Trust; IHI=Institute for Healthcare Improvement; PDSA=plan-do-study-act; QI=quality improvement.

The pre- and post-programme surveys to assess learning was only introduced for cohort seven; of the 31 participants in this cohort, 20 completed the pre-programme survey and 19 completed the post-programme survey. The results showed an increase in knowledge across all 20 key domains (Figure 6).

Qualitative feedback

Across the improvement leaders programme and improvement coaching programme, the key positive themes that emerged from the qualitative feedback included the interactivity of sessions, the opportunity to network with colleagues, time spent doing small group work, opportunities to apply learning to their own work, the availability of experienced faculty and facilitators and the general organisation of events. Negative themes included the pace of the day (some felt it was too slow and others felt it was too quick) and general comments about logistics and the venues.

Discussion

Based on learning from the last 9 years of designing and delivering improvement capacity and capability programmes across a large complex healthcare organisation, the authors offer the following recommendations for other healthcare organisations to consider.

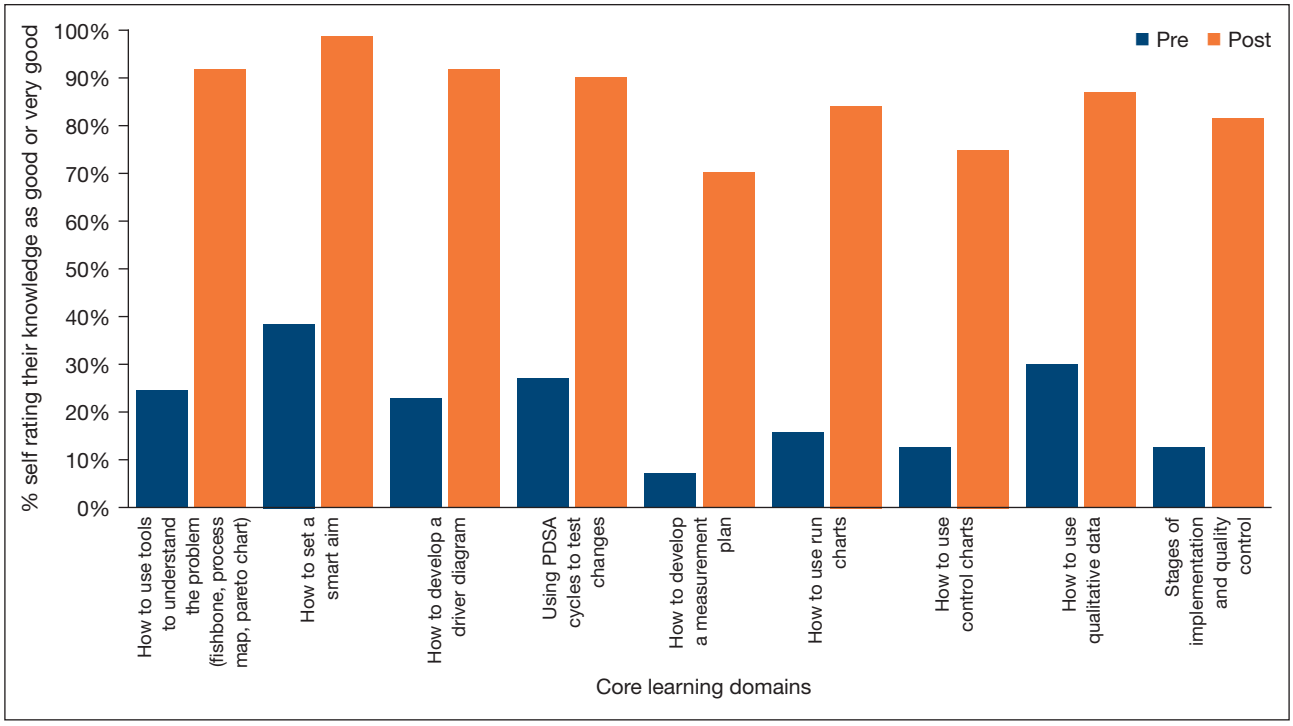

Figure 4. Pre- and post-programme self-ratings of knowledge of quality improvement methods and tools from improvement leaders programme participants (0=no knowledge; 3=very good knowledge). PDSA=plan-do-study-act.

Understand who needs to be trained and at what level

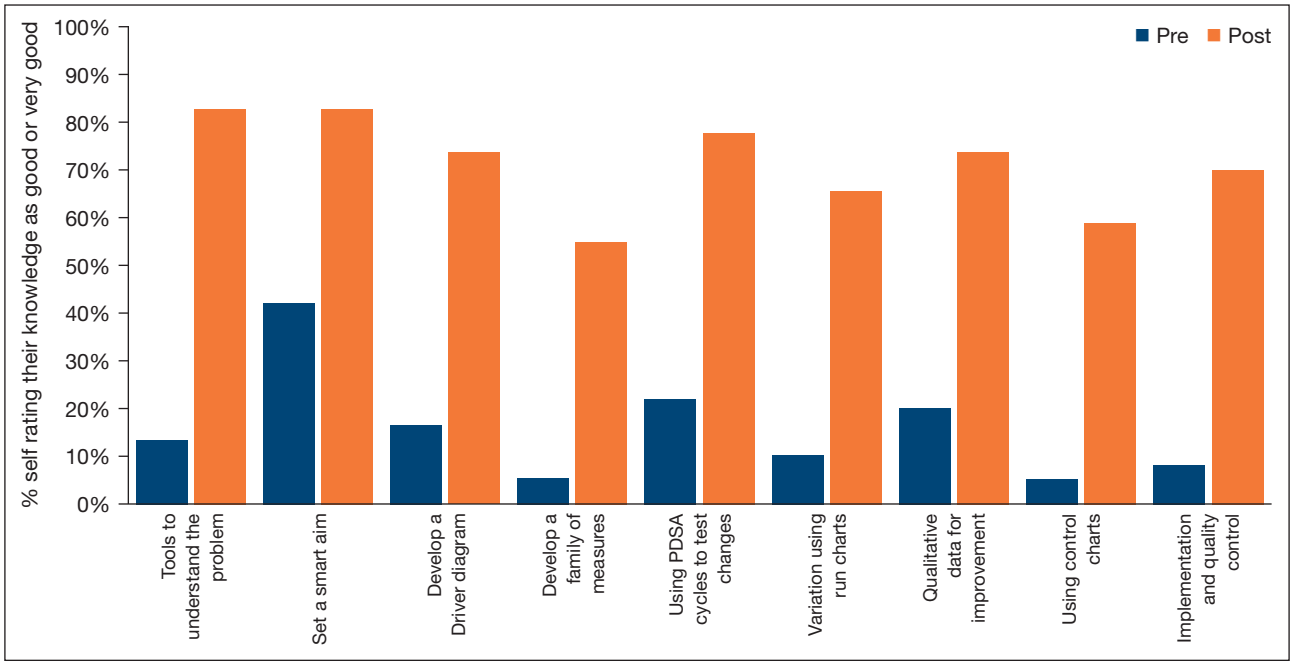

Figure 5. Pre- and post-programme self-ratings of confidence in the application of quality improvement methods and tools from improvement leaders programme participants (0=very unconfident; 3=very confident). PDSA=plan-do-study-act.

Training should be tailored to the learning needs of participants and the wider organisation. The dosing concept is critical to understanding the role of different groups in quality improvement work, the capability and capacity needed, and the learning programmes required to meet these needs. This approach can be applied at macro, meso and micro system levels.

The dosing concept should also be considered when improvement initiatives are being scaled and spread from one site to another. The capability of a team in which a successful

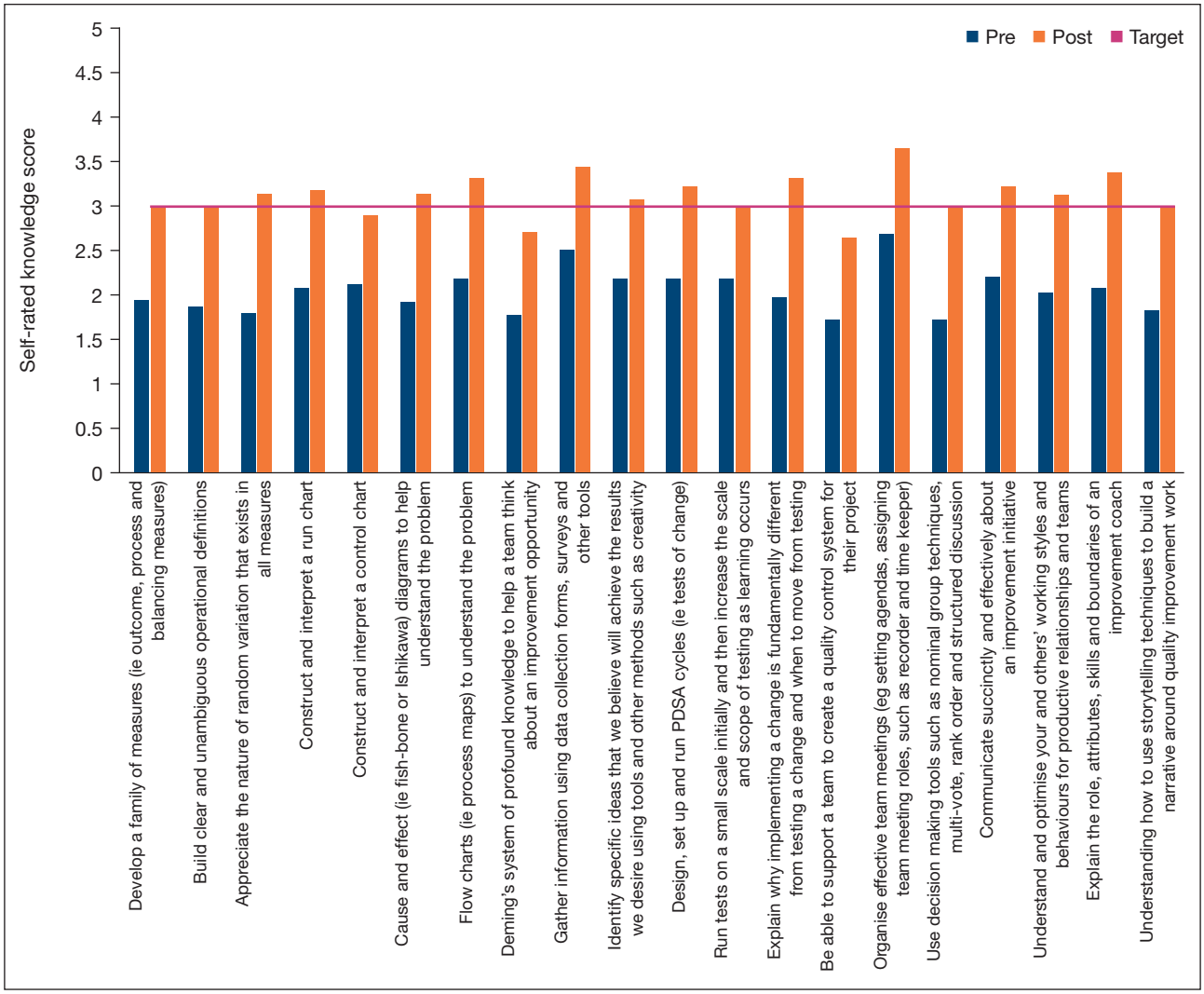

Figure 6. Pre- and post-programme self-ratings of knowledge of quality improvement methods and tools by one cohort of improvement coaching programme participants (0=no knowledge; 5=expert). PDSA=plan-do-study-act.

improvement was achieved should be noted as a contextual factor and considered in respect to the team where the work is being scaled to (Horton et al, 2018).

This approach can also inform a developmental pathway for people to build experience and knowledge as they progress into different roles. An individual can progress sequentially through the different improvement capability programmes over time. AT ELFT, several quality improvement coaches have gone on to take up improvement advisor roles, now working as full-time improvers at the trust. Learning programmes are increasingly recognised at ELFT as a route for development and progression.

Adopt a standardised approach to the development, delivery and evaluation of capability

ELFT has benefited greatly from adopting a standardised approach to delivering capability building. Standardising the approach has saved a significant amount of time in managing the programme, allowing the trust to concentrate more on developing new content and supporting participants. ELFT's approach to evaluation has also proved beneficial, allowing identification of areas where the programmes are going well and where they could be improved.

Use experts to design and deliver the learning packages

At ELFT, the most experienced senior improvement scholar practitioners deliver the learning packages, with current faculty members including a chief quality officer, associate directors

of improvement, head of improvement capability, head of improvement programmes and senior improvement advisors. All are graduates of the Institute for Healthcare Improvement's improvement advisor course, with significant experience supporting improvement. Learners on ELFT's programmes frequently cite the opportunity to interact with experienced faculty as important in their learning. This also gives the faculty members the opportunity to further develop their skills and receive feedback on their content knowledge and presentation skills, as well as allowing the trust to ensure that the programmes delivery high-quality information and experience. This differs to other organisations where a 'train-the-trainer' approach may be adopted, with information cascaded through an organisation. The evidence base for this type of approach is mixed, particularly as individuals frequently do not return to the programmes to teach what they have learnt (Burr et al, 2006).

Develop a community to support learners

Research suggests that teams with a greater sense of community can better navigate change processes within organisations (Montgomery et al, 2020). At ELFT, quality improvement learning programmes encourage people to create and build on their relationships, so they can draw on others for support as they progress in their improvement journey. Feedback from the learning programmes showed that being able to network and connect with others doing similar work were valued by participants. These observations are supported by the wider literature, which suggests that developing a sense of community and facilitating peer-to-peer support can support the learning process among adults (Cherrstrom et al, 2018).

Make training relevant and action orientated

Implicit in Bevan's (2010) definition of capability is that a purely theoretical programme without application is insufficient. This links to Deming's (1994) sixth point for management, which suggests that training packages should allow people to apply learning to the context in which they work.

The quality improvement learning programmes at ELFT are intentionally designed to prioritise group work, coaching circles and action learning sets over didactic styles of teaching. Assessment of these programmes found that participants valued being able to apply the learning to their own projects and use of practical examples in content delivery. For example, individuals undertaking the pocket QI course are encouraged to apply the tools to their own areas of work, while those on the improvement leaders programme are required to apply the learning to a real-life quality improvement project as part of the course. Participants undertaking the improvement coaching programme coach a quality improvement project from the start of the course and have opportunities to practice throughout the programme with facilitators.

Co-producing quality improvement training with the community is one way to ensure that it is relevant to delegates. The programme for medical trainees is co-delivered with junior doctors, while the learning programme for psychology trainees is co-led by two psychologists, one of whom is a member of the quality improvement team. This helps the facilitators to tailor the programme using their professional experience to better engage with the audience.

Involve local leadership

Local leadership is important and has been identified as a wider contextual factor in the success of quality improvement work (Kaplan et al, 2013). Many service, department and directorate leaders at ELFT have processes in place to ensure that all staff connect with quality improvement work as soon as they join. Some directorates, such as ELFT forensic services, are working towards having two improvement coaches in each of their inpatient wards and community services, to ensure that the application of quality improvement is core to how teams are led and solve problems on a day-to-day basis. Many of these quality improvement coaches are unit leaders or middle managers—an important group in supporting effective improvement work (Wilson, 2011). ELFT's experience has been that support from local peers and leaders plays a key role in encouraging staff to try learning and applying quality improvement concepts, methods and tools to their daily work.

Key points

- Building capacity and capability in quality improvement is a key part of an organisation's infrastructure for improvement.
- Knowing who needs to be trained and at what level (dosing) should form the basis of an organisational approach to building capacity and capability in quality improvement.
- Standardising an approach to developing, delivering and evaluating quality improvement learning programmes can help organisations to scale their approaches, learn what works and does not, and demonstrate impact over time.

Limitations

This evaluation has been presented as a case study, so there are potential limitations regarding the generalisability of these findings to a wider context. It should be noted that the evaluation instruments used to assess the learning programmes were not validated, which is a limitation. There were also inconsistencies in the types of tools used to evaluate the programmes, such as using four- and five-point Likert scales in the pre- and post-programme assessment of knowledge and confidence among improvement leaders programme participants.

As part of the evaluation, the authors explored projects that resulted in an improvement, noting that many did not lead to an improvement or were closed before they reached the testing phase. Exploring the reasons for this in depth was outside the scope of this study, but represents a potential area for further research within the field. Building understanding of why quality improvement projects do not succeed could help to strengthen learning programmes and provide more support to those leading improvements.

Conclusions

Through a case study of ELFT's learning programmes and relevant findings, the authors have highlighted some of the key structures and processes required for building improvement capability at scale. A dosing approach is a key aspect of this, allowing organisations to understand who needs to be trained, in what and to what level.

While evaluating improvement capability can be challenging, using the Kirkpatrick framework to assess reaction, learning, behaviour and results can be effective. However, an effective approach to building capacity and capability does not only involve creating and delivering training programmes. Understanding who needs to be trained, adopting a standardised approach to design, delivery and evaluation, employing an expert faculty, creating a community to support learners, making training relevant and action orientated, and appreciating the role of local leaders are also crucial components. The authors believe that these principles apply regardless of the scale of an organisation.

Author details

[1]Quality Improvement Department, East London NHS Foundation Trust, London, UK

[2]Institute for Healthcare Improvement, Boston (MA), USA

Conflicts of interest

The authors declare that there are no conflicts of interest.

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