Quality improvement in mental health

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Quality improvement can make a difference
Quality improvement takes time
Quality improvement means leading in a different way
Quality improvement requires fidelity to the chosen method
Quality improvement in mental health is broadly similar to quality improvement in other health care settings

Appendix 1: Quality improvement methods

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About the authors

Acknowledgements
Quality improvement in mental health

Key messages

- Quality improvement is a systematic approach to improving health services based on iterative change, continuous testing and measurement, and empowerment of frontline teams.

- There is a pressing need to improve the quality of mental health care, and quality improvement approaches have an important role to play in this.

- A growing number of mental health providers in the UK and internationally are making efforts to embed quality improvement approaches across their organisation, with some reporting promising results in terms of benefits for service users and staff.

- Our research found that there are no fundamental differences between mental health and other areas of health care in terms of how quality improvement approaches can be used. Tools and approaches increasingly being used in the acute hospital sector can be adapted for use in mental health care, including in community settings.

- Building an organisation-wide commitment to quality improvement requires courageous leadership, a sustained focus over time, and efforts to promote transparency, evaluation and shared learning across the organisation and beyond.

- The strong emphasis on co-production and service user involvement in mental health can be harnessed as a powerful asset in quality improvement work. This is one aspect of quality improvement where there is considerable potential for mental health providers to innovate and to share learning with others across the health system.

- Leaders play a key role in creating the right conditions for quality improvement. Mental health leaders seeking to adopt a quality improvement approach in their organisation should consider the following lessons.  
  - From the outset, it is vital to build board-level commitment to the principles of quality improvement and support for the rationale to shift the emphasis from assurance to improvement.
Quality improvement requires leaders to engage directly and regularly with staff and, critically, to empower frontline teams to develop solutions rather than imposing them from the top.

Doing quality improvement at scale requires building an appropriate infrastructure, including a robust support structure for frontline teams and mechanisms to spread learning across the organisation.

Fidelity to a chosen methodology helps to sustain and embed quality improvement in ways of working and in the organisation's culture.

Fundamentally, quality improvement rests on an understanding that those directly involved in giving and receiving a service are best placed to improve it, provided they are given the right tools and authority to do so.
Introduction

Improving quality and quality improvement

All health care organisations in the NHS are required to improve their quality of care. For example, one of the key lines of enquiry used by the Care Quality Commission (CQC) to establish if an organisation is well led is whether robust processes are in place to support learning, continuous improvement and innovation (see box, below).

What is quality in the NHS?

Improving the quality of care for NHS patients was the central theme in the NHS next stage review (Department of Health 2008), which defined quality based on the three criteria below. This definition has since been adopted throughout the NHS and was used as the basis of the NHS Outcomes Framework.

- **Safety** – doing no harm to patients.
- **Experience of care** – this should be characterised by compassion, dignity and respect.
- **Effectiveness of care** – including preventing people from dying prematurely, enhancing quality of life, and helping people to recover following episodes of ill health.

Elements of this definition of quality were subsequently incorporated into the NHS regulatory framework developed by the CQC in 2013. Thus, assessments of the quality of NHS services are based on the following questions, which are more wide-ranging and take into account the governance and leadership of care providers.

- Are services safe?
- Are they effective?
- Are they caring?
- Are they responsive to people’s needs?
- Are they well led?
The term ‘quality improvement’, as used in this report, has a specific meaning and is not synonymous with improving quality. Quality improvement in health care is based on a principle of organisations and staff continuously striving to improve how they work. There is no single definition, but it is generally understood to be a systematic approach based on specific methodologies for improving care – enhancing patients’ safety, outcomes and experiences (see Appendix 1). It puts significant emphasis on the role of frontline teams in consistently applying an agreed set of tools and techniques to test, measure and learn (Health Foundation 2013). Quality improvement is sometimes distinguished from quality assurance, which refers to the ongoing monitoring of the quality of care against agreed standards.

Quality improvement is a concept that has its roots in industries such as car manufacturing (Health Foundation 2013; Young et al 2004). Quality improvement methodologies such as Lean have been highly influential in health care too (see Appendix 1 for an overview of the main methodologies used in the health sector). Outside the UK, examples of successful improvement in health care settings can be found in organisations such as Jönköping County Council in Sweden (Alderwick et al 2015), Intermountain Healthcare in the United States, Canterbury District Health Board in New Zealand (Timmins and Ham 2013) and the Virginia Mason Medical Center (VMMC), also in the United States (Ham 2014).

The use of quality improvement is not new to the NHS. In England, quality improvement has been supported in the past by the NHS Modernisation Agency and then the NHS Institute for Innovation and Improvement. Both organisations saw quality improvement as key to tackling the challenges facing the NHS.

While the use of quality improvement has become increasingly common in acute hospitals (Care Quality Commission 2017a), until recently the approach has received less attention in organisations focusing on mental health or community services. This now appears to be changing, with organisations such as NHS Improvement, the Institute for Healthcare Improvement (IHI), the VMMC and others working increasingly with mental health care providers internationally and in England.
The purpose of this report

This report explores the potential opportunities arising from the application of quality improvement approaches in the mental health sector and identifies relevant learning from organisations that have already adopted these approaches. We are specifically interested in understanding how and why some mental health organisations have embraced quality improvement strategies and what has enabled them to do so. In particular, we explore what changes are needed from senior leaders to cultivate a quality improvement ethos within their organisation.

We have deliberately focused on examples where there have been concerted attempts to embed a culture of quality improvement across whole organisations. Our justification for this is the argument, made by several authors, that the impact of quality improvement work is often greatest when it forms part of a coherent, organisation-wide approach as opposed to discrete, time-limited projects (Dixon-Woods and Martin 2016). In the organisations we studied, the goal has been that quality improvement should become routine practice in all areas, supported by a process of cultural transformation.

While our primary focus is on mental health, several of the organisations studied also provide community health services for general physical health needs. We believe that many of the lessons described will be pertinent to organisations providing any form of care in hospitals or the community.

Our approach

Our aim was to capture the narratives and practical lessons from organisations that are attempting to embed quality improvement as a routine way of working. Therefore, we interviewed board members and senior leaders across NHS mental health and combined mental health and community health trusts. Through initial scoping work we identified organisation-wide quality improvement initiatives taking place at East London NHS Foundation Trust and Tees, Esk and Wear Valleys NHS Foundation Trust. We also studied the work done by the Devon Partnership NHS Trust, South London and Maudsley NHS Foundation Trust and the Institute of Mental Health in Singapore, to elicit further insights. In addition, we interviewed six experts in the field of health care quality improvement (from the Health Foundation, the IHI, the West of England Academic Health Science Network and the Scottish Patient Safety Programme). In total, we conducted 20 interviews.
To capture wider views from within the mental health sector, we also convened a half-day seminar at The King’s Fund in January 2017 attended by approximately 90 senior leaders to understand their roles in driving quality improvement. We also reviewed policies, literature and online resources relating to quality improvement in mental health.

**The structure of this report**

In section 2, we explore the rationale for embracing quality improvement approaches in the NHS in general and in mental health organisations in particular. We then present case studies of mental health organisations that have embedded quality improvement as a fundamental way of working and describe the benefits these approaches have led to (Section 3). Sections 4 and 5 focus on what can be learnt from the case studies about how mental health services can embed a culture of continuous improvement. Sections 6 and 7 consider the challenges and opportunities for improvement in the mental health care sector, as a whole, and how relationships with regulators could be reframed to enable mental health providers to focus on improvement. Section 8 concludes by summarising the key lessons from this research.
Why does quality improvement matter?

The NHS faces great challenges in delivering high-quality care at a time of severe financial constraints and workforce shortages (Dunn et al 2016; Addicott et al 2015). The King’s Fund and others have argued that the solutions will not come solely from large-scale reforms or from the ‘top-down’ imposition of targets, or even from external forces such as inspection and regulation (Ham 2014). These levers can only be effective if used in combination with a focus on ‘reform from within’, based on an understanding that those closest to complex quality problems (frontline teams, patients and carers) are often best placed to find the solutions. This is a core principle of quality improvement.

Transforming the NHS depends much less on bold strokes and big gestures by politicians than on engaging doctors, nurses and other staff in improvement programmes.

(Ham 2014, p 3)

The scale of the financial and workforce challenges across all parts of the NHS means it is more important than ever to find ways of improving the quality of care while tackling unwarranted variation and waste. This is not to suggest that quality improvement offers a quick solution to the pressures the system is under or that it presents an alternative to ensuring that adequate resources reach frontline services – sufficient funding and effective approaches to improvement are both needed. Quality improvement is not a quick fix but rather a continuous process and, as we will describe in the subsequent sections, it is a long-term commitment that requires a cultural shift in ways of thinking, leading and working. In this section, we consider the rationale for quality improvement and argue that it is time for mental health organisations to embrace it.

Studies have shown that quality improvement approaches can be adopted in health care to improve processes of care. For example, a review of studies where Lean thinking had been applied in health care settings found positive results for patient
care (Mazzocato et al 2010), and another systematic review found that most studies reported improvements in different aspects of surgical care (such as decreasing operative complications or length of stay in hospital) following the application of Lean, Six Sigma (see Appendix 1) or a combination of both (Mason et al 2015).

Many NHS organisations have started to explore quality improvement through discrete projects and using a range of methods. A smaller but growing number have developed more systematic, organisation-wide programmes to ensure that continuous improvement happens at scale and as part of their standard way of working. For example, the Royal Devon and Exeter NHS Foundation Trust has a long history of quality improvement, beginning in 2003 when, together with other local health and social care providers, it took part in the IHI’s Pursuing Perfection initiative. It subsequently took part in a number of other programmes, including Leading Improvement in Patient Safety and the Productive Ward (Jones and Woodhead 2015).

The potential of quality improvement in mental health

There is a pressing need to improve quality in mental health care, in response to both longstanding problems and more recent pressures (Care Quality Commission 2015a; Gilburt 2015). For example, the recent independent review of the provision of acute psychiatric care for adults commissioned by the Royal College of Psychiatrists (and chaired by Lord Crisp) found ‘a long list of problems’, including inadequate availability of inpatient care (or alternatives) when needed, wide variation in access to evidence-based therapies across the acute care pathway, a lack of clarity as to the outcomes expected, and significant differences in the quality of leadership and in organisational culture (Crisp et al 2016). One of the review’s key recommendations was that expanding the use of improvement methodologies in mental health could play an important role in addressing some of the quality problems identified.

The examples described in this report lend further support to this recommendation. Some of the reported benefits of quality improvement are illustrated in the following section. Several recent studies have also indicated that there is potential to enhance service users’ experience and improve outcomes by using a quality improvement approach in mental health care (Abdallah et al 2016; Poots et al 2014). For example, a recent evaluation of a quality improvement project to reduce the number of violent incidents on older people’s mental health wards found that not only did the number
of incidents decrease over one year but there was also a reduction in rates of injury among staff and an increase in the average number of days between incidents (Brown et al 2015).

It is important to note that it is relatively early days for evidence in this field and most impact data is self-reported. The data we have presented is not taken from independent evaluations and therefore we cannot say to what extent the reported outcomes can be attributed specifically to a particular quality improvement approach. Nevertheless, the examples indicate that quality improvement has something to offer in relation to a broad range of quality issues in mental health care.

We note that the evidence about the impact of quality improvement in health care suggests that in order to maximise success, a number of factors are important, including how rigorously the method is applied (Holt et al 2017; Fulop and Robert 2015; Kaplan et al 2012; Health Foundation 2011; Walshe and Freeman 2002). The challenges involved in doing quality improvement successfully have been reviewed in a recent article by Dixon-Woods and Martin (2016). The authors argue that little benefit will be gained if quality improvement methodologies are used in the absence of several enabling conditions, including:

- an ongoing organisational commitment as opposed to multiple, small-scale projects that are time-limited
- fidelity to the chosen quality improvement method
- devolution of decision-making responsibilities so that frontline staff are trusted and supported to make changes
- rigorous evaluation and sharing of learning across the organisation and beyond.

In the following sections, we explore in greater depth the conditions needed to make a success of quality improvement.
3 Case studies

The potential of quality improvement – and the challenges involved – are best articulated by describing the stories of organisations that have embarked on this approach. In this section, we outline three examples of mental health organisations (two in England and one in Singapore) that have adopted quality improvement as their routine way of working:

- Tees, Esk and Wear Valleys NHS Foundation Trust
- East London NHS Foundation Trust
- Institute of Mental Health, Singapore.

We describe the initial impetus for taking an improvement approach, organisational changes that have been required in order to put the ethos of improvement into practice, and some of the ways in which the impact of quality improvement has been felt.

Tees, Esk and Wear Valleys NHS Foundation Trust

Tees, Esk and Wear Valleys NHS Foundation Trust (TEWV), in the north east of England, provides mental health and learning disabilities services in inpatient and community settings. The trust was rated ‘good’ overall by the CQC following a comprehensive inspection in 2015, maintaining that rating in a follow-up inspection in early 2017 (Care Quality Commission 2017b; Care Quality Commission 2015b).

Conversations about quality improvement at the trust began in 2007 between the chief executive and clinical directors, and were influenced by improvement work that was taking place across the NHS in the north east at that time (through a partnership with Virginia Mason in the United States). At the same time, the trust was going through a period of organisational change following a merger with another trust. This also created momentum for developing a new strategy to improve care quality and reduce waste (and therefore costs).
The quality improvement journey started with board members, senior clinical leaders and managers jointly setting out the vision for the trust to provide the highest possible quality of care. The emphasis on quality as opposed to efficiency was seen as being key to engaging the workforce and service users. It was acknowledged at the outset that quality improvement would be a long-term journey and everyone in the trust would need to make a commitment to it.

There has been a strong emphasis on building capacity and capability for quality improvement throughout TEWV. Nearly all doctors (at all levels) are trained in Virginia Mason improvement methods (see Appendix 1 for a description of Lean) and their quality improvement training needs are identified through the job planning process. Training and involvement in quality improvement are reviewed at job planning meetings and form part of the appraisal process. There is also a central improvement team to support this work. More than 800 leaders and several people with lived experience of mental health problems have received a day of improvement coaching training so they can have coaching conversations with their colleagues and encourage improvement thinking based on the trust’s priorities, including extending the quality improvement programme to community-based services. The idea is that everyone has something to contribute.

Another key enabler was co-producing a ‘compact’ with staff at the trust, setting out what staff can expect from the organisation and vice versa. The compact is used to hold people to account for their work. It states that staff at TEWV are expected to ‘support, cooperate with and contribute to quality improvement activities’ and, in return, the trust will ensure that staff are involved in and supported through processes of change. In addition, the trust has a statement of values and behaviours, which includes a commitment to quality. The behaviours that demonstrate this commitment include:

- seeking and acting on feedback from service users, carers and staff about their experiences
- improving standards through training, experience, audit and evidence-based practice
- learning from mistakes when things go wrong and building on successes
• producing and sharing information that meets the needs of all individuals and their circumstances
• striving to eliminate waste and minimise non-value adding activities.

The focus on quality improvement is reported to have strengthened collaborative working with service users and carers. TEWV also employs people with lived experience of mental health problems to work alongside staff on some of its quality improvement activities.

Leaders and managers model quality improvement by critiquing their own non-clinical work using Virginia Mason improvement methods. As a result, they spend less time in monthly meetings and more time in daily or weekly ‘huddles’ to address issues as they arise. The trust has also made performance data more visible to staff and service users (using ‘visual control boards’) so that everyone can see what is happening in real time (as opposed to reviewing what has happened over the past month). The intention is to ensure that leaders and managers are more aware of pressures at service level and to allow decisions to be taken more quickly.

The most widely cited example of quality improvement at TEWV is the Purposeful Inpatient Admissions (PIPA) model, which was described in the report of the Commission on Acute Adult Psychiatric Care (Crisp et al 2016). Using a rapid process improvement workshop, a multidisciplinary team observed ward processes, identified areas of waste and proposed solutions that would represent a significant cultural shift. The key characteristics of PIPA were:

• making service users’ experience of care a core driver of change
• replacing ‘batched’ decision-making processes (such as weekly ward rounds) with a more continuous flow (minimising service users’ waiting times)
• agreeing standardised processes for each step of the patient pathway
• monitoring and measuring change.
Twelve months after the workshop, the trust reported that significant changes had been made to working practices, and that outcomes for the two wards initially included significant reductions in length of stay (57 per cent), bed numbers (21 per cent), bed occupancy (22 per cent), staff absence (63 per cent), violent incidents involving staff (79 per cent) and service user complaints (100 per cent). The trust was able to close beds and the PIPA model has been spread across other wards, releasing £20 million in efficiency savings (analysis undertaken by the trust and cited in Crisp et al 2016).

Improvements reported in other parts of the trust include the following.

- Ninety days after a rapid process improvement workshop for outpatient services at Durham and Darlington, the waiting time between referral and first appointment was reduced by 93 per cent (to seven days).

- In the trust’s child and adolescent mental health services (CAMHS), average waiting times were reduced from 98 days to 7 days by carrying out a rapid process improvement workshop, testing ideas proposed by members of the multidisciplinary team and changing processes (with support from the executive team to unblock barriers within the system where needed).

- One year on from implementation of the first phase of the ‘purposeful and productive’ programme in the trust’s community service (in North Yorkshire), the waiting time between referral and initial assessment by an adult community team has reduced from 21 days to 6 days.

Source: data obtained directly from the trust.

For further information contact Dr Ruth Briel (ruth.briel@nhs.net) or see The King’s Fund (undated).
East London NHS Foundation Trust

East London NHS Foundation Trust (ELFT) provides a wide range of mental health services and other community health services in London and surrounding areas (covering 1.5 million people). The trust has had a major focus on quality improvement in recent years, with the CQC identifying this commitment as a contributing factor to the trust’s ‘outstanding’ rating in 2016.

A number of factors set the trust onto its quality improvement journey, including a series of ‘sentinel events’ (unexpected instances of serious harm or death to patients) in 2010. These events prompted a great deal of reflection at board level about the culture of the organisation and what needed to change at every level. The following year, a new medical director was appointed who had previously worked for the National Patient Safety Agency and had experience of quality improvement. The trust spent 18 months preparing the ground for a new approach to quality, engaging internal and external stakeholders, working with members of the board, developing a strategy and a business case, and procuring a strategic partner for the long-term process. In 2014, ELFT launched its trust-wide quality improvement programme alongside the very clear aim to provide ‘the highest quality mental health and community care in England by 2020’.

ELFT has partnered with the IHI to develop a bespoke training programme (Improvement Science in Action) for those leading projects or in any management role, which requires participants to develop and run a quality improvement (QI) project. There is also a condensed version of the training called Pocket QI, consisting of two half-days designed to help participants find out more about quality improvement in smaller classroom-style sessions, through exercises and games. The idea is to build capacity and capability at all levels and in all areas of the trust, so the training is open to all staff (including non-clinical staff) as well as service users and carers.

In order to engage staff in quality improvement and to support a change in the power balance between leaders and frontline staff, the trust enabled everyone to be part of quality improvement from the very beginning and allowed teams to choose projects that had the most meaning to them and their service users. Over the past three years, this has gradually become more aligned with the trust’s strategic priorities, although there remains a strong focus on teams tackling complex quality issues that matter most to staff and service users.
More than 100 service users and carers at ELFT have undertaken quality improvement training, and around half of all the trust’s projects involve service users or carers as active participants. It aims to co-design its quality improvement work with service users on two levels:

- little ‘i’ involvement – regularly consulting and involving service users through a service user forum, in community meetings, in focus groups or through surveys
- big ‘I’ involvement – seeing service users as equal partners in quality improvement work.

Throughout the trust, clinical and service directors aim to provide the ‘visible leadership’ for quality improvement and develop the priorities for each directorate. The infrastructure to support large-scale application of quality improvement has evolved over the past three years and currently includes the following.

- **A central quality improvement team**: a central resource for the whole trust to draw support from individuals with expertise in improvement methods and tools. The team plays a key role in supporting other teams and directorates, delivering training, engaging and involving people in the work and providing strategic guidance.

- **Quality improvement coaches**: around 50 people have undertaken in-depth training in quality improvement and coaching skills and have dedicated time in their working week to coach and support local teams with their quality improvement projects.

- **Quality improvement sponsors**: each improvement project is sponsored by a senior member of staff who is a member of the directorate management team. The sponsor monitors progress, helps to unblock barriers within the system and champions the work.

- **People participation team**: to enable the voice of service users to influence the way the organisation is run. ‘People participation leads’ in each part of the trust support service users and carers to play an active role in quality improvement work.

- **Digital systems**: the trust has developed dashboards accessible from any computer to display quality and performance metrics over time, and a web-based platform to support teams with their quality improvement projects. This platform allows all staff to share their work and learn from improvement projects under way elsewhere in the organisation.
Leaders at ELFT said it was important that successes in quality improvement are celebrated and that staff take pride in what they have achieved. Teams have had their work recognised through national awards such as the British Medical Journal (BMJ), Patient Safety and Health Service Journal (HSJ) awards. A substantial amount of time is invested in using multiple channels for board members and improvement teams to connect with the wider workforce, including executive walkarounds, roadshows, podcasts and short videos.

There are currently almost 200 active quality improvement projects at ELFT. Reported impacts of the programme overall include a 42 per cent reduction in physical violence incidents across all East London wards (see Figure 1, below, for the most recent analysis of physical violence data at ELFT). This is reported to have had a major positive effect on service user and staff experience, leading to higher levels of staff satisfaction, improved retention rates and lower sickness absence. Staff at the trust undertook some analysis in 2015 to model the financial impact of the Safer Wards programme across six older adult wards in terms of reduced staff absence and injuries. They found a reduction in the number of incidents by 36 per cent, leading to a 49 per cent reduction in associated costs. Direct costs due to physical violence decreased from £119,988 in the six months prior to the improvement project, to £61,376 during the post-implementation period (the cost of making improvements to the ward environment were approximately £2,000) (Brown et al 2015).

The trust also reports a 25 per cent reduction in time from referral to assessment across 15 community teams (see Figure 2, below), and a 33 per cent reduction in first appointment non-attendances while seeing a 25 per cent increase in referral volume (see East London NHS Foundation Trust 2017c).

The 2016 NHS Staff Survey showed that ELFT had the highest staff engagement score for a combined mental health and community trust in the country (East London NHS Foundation Trust 2017a), and the highest score across all providers for staff feeling able to make improvements in their workplace.

For further information contact Dr Amar Shah (Amar.shah@elft.nhs.uk) or see East London NHS Foundation Trust (2017b).
Figure 1 Incidents resulting in physical violence, 2013–17 (ELFT excluding Luton and Bedfordshire)

Source: East London NHS Foundation Trust 2017c and data obtained directly from the trust

Figure 2 Average waiting time from referral to first face-to-face appointment, 2014–17 (ELFT)

Source: East London NHS Foundation Trust 2017c and data obtained directly from the trust
The Institute of Mental Health (IMH) provides an international example of a mental health provider that has embraced quality improvement approaches. IMH is the only acute tertiary psychiatric hospital in Singapore, offering a comprehensive range of psychiatric, rehabilitative and counselling services for children, adolescents, adults and older people, serving more than 5.5 million people.

Its quality improvement journey started in 2002 when it adopted the Clinical Practice Improvement Programme (CPIP). CPIP provides a platform for the training of clinical leaders and members of multidisciplinary teams (for example, nurses and allied health professionals) to learn how to lead improvement work. Undertaking this training and having an understanding of quality improvement is now a prerequisite for taking on a senior leadership role in the organisation.

Leaders at IMH also believe in the importance of learning and sharing through various internal and external events – for example, an annual IMH Quality Day. It is believed that events like this often generate further quality improvement work and new collaborations. Learning is also supported through in-house training for staff in basic quality improvement concepts, methodology and tools, delivered by trained CPIP facilitators.

The overall aim of quality improvement at IMH is to provide better, faster, more accessible and cost-effective care through a culture of continuous learning. Four main principles underpin its approach to improvement:

- providing patient-centred care
- applying systems thinking (specifically, understanding that sustainable improvement occurs when safer systems are put in place to reduce errors)
- building a learning organisation
- engaging all staff in quality improvement.

Leaders at IMH reported being inspired by the ethos of improvement at Jönköping County Council in Sweden – particularly its vision (shared by others) that all health care professionals have two jobs: one is to provide care and the other is to improve it (The King's Fund 2011; Nelson et al 2010).
One lesson learnt by leaders at IMH is that good leadership and governance are important to stimulate changes in mindset. One way in which the senior leadership team demonstrated this was by making it explicit that, when it comes to shortcomings in quality, the primary goal is to understand system issues as opposed to identifying individual errors and thus moving away from a blame culture.

IMH has set up a Quality Council chaired by the Chief Executive, which monitors the overall standard of care delivered to patients. There are regular updates to the board on quality and safety issues, and a presentation of a quality improvement project is the first agenda item at every senior management meeting. Senior leaders also do monthly patient safety walkabouts.

IMH uses a voluntary reporting system to detect harm or adverse events. A multidisciplinary staff team has also developed a mental health trigger tool (a modified version of the IHI's global trigger tool for patient safety). The tool is used to examine medical records for indications of harm or adverse events. This data can help to track instances of harm over time, and can be used to help drive improvements in the quality of care. IMH is required to report all patient safety events to the Ministry of Health in Singapore, but it also shares the anonymised information internally so that other staff can avoid future instances of serious harm.

*We were less concerned about identifying [individual] errors… Our intent was to see where we could improve and the best way to do that was to see what was happening on the ground… When we used the mental health trigger tool we found adverse events in one in five records.*

(Chairman, IMH Medical Board)

This openness, transparency and dialogue with staff, service users and carers, is seen as an important part of the organisation's approach to quality. IMH leaders use surveys, patient safety walkabouts and other sources of information to gain insights into the impact that improvement work is having on the ground.

IMH believes in improving care quality by listening to the concerns of service users. Since 2002, about 50 per cent of its CPIP projects have involved service users at all stages, including brainstorming, diagnostics, intervention design and implementation. CPIP also taps into IMH’s Voices of Experience programme, which started in 2014 to provide a platform for service users and carers to share their experiences. IMH
has four full-time peer support specialists who support service users with their recovery journeys.

Over the years, several quality improvement projects have been undertaken to reduce the rate of restraints to manage violent behaviour or safety issues on various inpatient wards. By reviewing and changing processes (or introducing new ones), IMH has seen a reduction in its restraint rate from 2.83 in 2013 to 1.46 in 2017. It has now removed the rate of restraints from its list of top clinical risks.

Current examples of quality improvement projects at IMH include work to help service users manage co-morbid diabetes more effectively during inpatient stays. Since 2014, IMH has been trying to reduce the proportion of inpatients with diabetes whose blood glucose goes out of protocol limits by 30 per cent. In April 2017, following various quality improvement interventions, it reported that the median percentage of inpatients with blood glucose outside of target range was 16.5 per cent (against a baseline median of 33.3 per cent).

For further information contact Ms Goh Siew Mui (siew_mui_goh@imh.com.sg).

**Summary**

This section has described the journey taken by three mental health organisations in relation to quality improvement. The stories presented illustrate that there is no single way to ‘do’ quality improvement. There are, however, some common themes. In the following sections, we analyse the lessons emerging from these and other examples.

The case studies also illustrate the potential benefits of using quality improvement approaches. Table 1 provides a summary of the key benefits reported by the three organisations.
Table 1 Reported benefits of quality improvement at case study organisations

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<td>Waiting times for first appointment in one community service reduced from 21 to 6 days.</td>
<td>42% reduction in violent incidents across all wards in East London.</td>
<td>Improved management of diabetes, including a 51% median reduction in the median percentage of inpatients with diabetes experiencing hypoglycaemia or hyperglycaemic episodes. Estimated 63% reduction in inpatient transfers to other acute care hospitals due to hypoglycemic or hyperglycemic episodes.</td>
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<td>Waiting times for CAMHS in Durham and Darlington reduced from 98 to 7 days.</td>
<td>25% reduction in waiting times from referral to first assessment across 15 community teams. 90% reduction in missed doses of medication across older adult wards.</td>
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<td>Significant reduction in service user complaints in some wards.</td>
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<td>More time available for patient-consultant discussions in learning disability wards.</td>
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<tr>
<th>Staff experience</th>
<th>Tees, Esk and Wear Valleys NHS Foundation Trust</th>
<th>East London NHS Foundation Trust</th>
<th>Institute of Mental Health, Singapore</th>
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<tr>
<td>63% reduction in staff absence and 79% reduction in violent incidents involving staff in 2 wards. Results from a recent staff ‘friends and family test’ show the trust scores higher than average for recommending it as a place to work and as a place to receive treatment. Staff in learning disability wards report spending less time writing reports and arranging meetings, and improved communication and decision-making within teams.</td>
<td>Days between staff injury due to physical violence increased from an average of 8 to 22 days on 3 older people’s mental health wards. Highest staff engagement score for a combined mental health and community trust in the 2016 NHS Staff Survey. Highest score across all providers for staff feeling able to contribute to improvements at work (East London NHS Foundation Trust 2017a).</td>
<td>Staff survey data indicates that staff are significantly more confident in handling inpatients who are hypoglycaemic or hyperglycaemic. 48% reduction in rate of use of restraints to manage violent behaviour between 2013 and 2017. Staff report better teamworking in multidisciplinary teams.</td>
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<td>Use of resources</td>
<td>Tees, Esk and Wear Valleys NHS Foundation Trust</td>
<td>East London NHS Foundation Trust</td>
<td>Institute of Mental Health, Singapore</td>
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<td>21% reduction in bed numbers and 22% reduction in bed occupancy in 2 wards. As the changes from this improvement work were rolled out across the trust, beds were reduced, releasing £20 million of savings that were able to be reinvested in community services.</td>
<td>Approximately 40% reduction in bed occupancy across 2 wards. 36% reduction in staff absence across 3 wards. Estimated savings from direct costs of physical violence (staff absence and injury): £119,988 in the 6 months prior to quality improvement project, compared to £61,376 post-implementation. Reduced time in hiring new staff and reduced length of corporate induction. Reduced time in completing the staff disciplinary process (avoiding £430,000 per year). 33% reduction in non-attendance at first appointment across 15 community teams.</td>
<td>Reduced number of inpatient transfers to other acute care hospitals for hypoglycemic or hyperglycemic episodes leading to savings of approximately S$11,355 (approximately £6,443) annually. Reduced time spent by staff carrying out physical restraints equates to 445 hours.</td>
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Leading quality improvement

In this section, we examine in greater depth the learning from the three case studies presented in the previous section, focusing on how senior leaders can create the right conditions for quality improvement to emerge and flourish. We combine insights from our case studies with the broader research literature on quality improvement and leadership. Our main message is that embracing quality improvement requires changing the traditional approach to leadership.

Building board-level support for quality improvement

Leaders in mental health services reflected on their experiences of building support for quality improvement at board level and immediately below it. One of the consistent themes that emerged from our interviews and seminar was the tenacity often required by improvement enthusiasts in having numerous discussions over several months to persuade other colleagues that committing to and investing in improvement is the right thing to do for service users, carers and staff.

At ELFT, for example, the business case drew on evidence of the impact of quality improvement in acute physical health care, and board members were asked to take a ‘leap of faith’ based on the argument that investing in quality improvement would lead to a range of benefits. As the Associate Medical Director for Quality and Consultant Forensic Psychiatrist explained:

We were clear what the benefit realisations would be – ie, not just the money. Our board was very clear there would be other, different benefits. There were multiple benefits in the business case: improved [service user] outcomes, improved staff engagement and productivity, cost avoidances, opportunities for cost removal, generating new business and revenue…

Leaders also considered other factors in making the decision to commit to quality improvement. Sometimes their discussions were about confronting ‘painful truths’ –
that the quality of care would be suboptimal and potentially unsafe if the organisation continued operating in the same way, without new approaches to leadership and culture.

At ELFT, a combination of events persuaded board members that a quality improvement strategy was required. Some board members were shocked into the realisation that things had to change following a series of sentinel events. For others, this realisation was more gradual and leadership teams took some time to be fully convinced of the benefits of taking an improvement approach. For example, board members were introduced to the potential impact of quality improvement through attending conferences, holding a bespoke board ‘learning evening’ and visiting other organisations that had successfully embedded a culture of quality improvement.

Mental health service leaders suggested that engaging board members and senior executives in quality improvement could be aided by something experiential, such as an action learning set approach, site visits or board development sessions. Buddying arrangements between individual board members and counterparts in other organisations were seen as being highly beneficial. These forms of development can help build understanding and commitment to quality improvement. Learning together with peers and supporting each other on the learning journey can be powerful enablers (Nath 2016).

When building support at board level, it is important to gain the backing of non-executive directors, as they play a vital role in holding the executive team to account. Some non-executive directors who have worked in other industries may already have a good understanding of quality improvement principles, while others will need to be engaged in the same way as their executive counterparts.

Delegates at our seminar reflected that in the current financial climate, many NHS organisations, including mental health care providers, are focused on achieving financial balance. This issue may dominate the narrative at board level and make it challenging for executives and directors to move away from a command-and-control approach to one that gives frontline teams, service users and carers the time, space and resources to develop solutions to quality problems. Leaders from mental health trusts that we spoke to acknowledged the difficulties in changing this mindset and pointed to the possibilities – and the benefits – of ‘finding places to start’ by building some small-scale capability for quality improvement. Allowing a small number of
Quality improvement projects to get off the ground as demonstrators can help to gain the organisational backing needed to commit to quality improvement in a more systematic way and embed it in organisational structures and processes.

Quality improvement means leading in a different way

Quality improvement is not a simple, technical fix to add on to existing practices. Fundamentally, it involves empowering frontline teams to understand quality problems and develop effective solutions. It also involves a cultural shift in which senior leaders model the values of quality improvement and influence its spread across the organisation. This can mean changing how leaders behave and the signals they send to other staff. The guidance provided in Developing people – improving care (NHS Improvement 2016) and the wider evidence base (for example, Dixon-Woods et al 2013) characterises effective leadership for improvement in the following ways:

- avoiding imposing solutions from the top and instead recognising that frontline teams, service users and carers are often better placed to develop solutions through a process of discovery
- trusting others and being comfortable with the risks and uncertainties involved in iterative change
- continuously using real-time data to guide decision-making
- allocating adequate financial and human resources and time for quality improvement
- allowing staff, service users and carers the time and space to solve complex problems by reducing, where possible, activities that do not add much value
- being clear what quality improvement is and is not (for example, proposed changes to service configuration or delivery should not be ‘disguised’ as quality improvement)
- avoiding creating unrealistic expectations about what quality improvement can achieve and how quickly it can happen
- celebrating successes and ensuring that staff take ownership and feel proud of their achievements.

These characteristics were also commonly referred to in our interviews.
In our research, we also identified some practical examples of how the members of the executive team changed their behaviours, so that they created and fostered different (and closer) relationships with members of staff. Examples might not appear to be radical, but the key is the intention behind the behaviours, the consistency with which they are performed, and how they link to the values of the organisation.

At ELFT, board members complete an annual survey as part of an annual mixed-methods evaluation to chart the progress of the trust’s quality improvement strategy. The survey asks whether a range of behaviours are ‘established’, ‘just beginning’ or ‘not in place’. A few of these behaviours are listed below to give an indication of the types of changes expected at leadership level to demonstrate a commitment to quality improvement.

- The board asks as many hard questions about the quality and safety dashboard as it asks about financial reports.
- The board has regular conversations with clinical leaders to ask how they are helping to achieve the organisation’s quality goals.
- The board is regularly exposed to learning from organisations (inside or outside health care) that are viewed as benchmarks in the area of quality.
- Executive performance reviews are directly tied to the achievement of measured quality and safety results.
- There is as much weight assigned in performance evaluation of executive directors to quality as there is to financial performance.

One tangible behaviour described as being important in most of the mental health organisations we studied was some form of executive ‘walk-around’. These were carried out in various care settings (inpatient and community) by members of the executive team on a weekly basis and by non-executives whenever possible. As one medical director described it, having regular and direct contact with members of staff felt like a ‘better use of time than sitting in meetings’ and provided deeper insights into quality issues in real time. Going to the ‘gemba’ (or the ‘real place’) to observe work and processes is another variant of this concept in Lean methodology (Toussaint and Berry 2013).
One of the biggest changes for leaders at ELFT was to let go of the control ‘from the top’ and instead empower clinical, nursing and management teams by giving them the time, space and skills needed for improvement (see also Institute for Healthcare Improvement 2016). To enable this, leaders and managers needed to take a different approach to support staff with improvement, such as providing access to coaching by someone skilled in quality improvement and ‘sponsoring’ quality improvement work – an approach that has also been taken at TEWV. This created a virtuous circle; the more that staff were trusted to solve complex quality problems, the more they were motivated to improve quality, and so on.

Board members that we interviewed also recognised the benefits of sharing power and collaborating with others. In mental health organisations where quality improvement had taken root, responsibility for leading improvement had been spread across the organisation. This is in line with research on transformational change in health care, which has found that continuous improvement depends upon distributing leadership at all levels (Erskine et al 2013). For example, research shows that staff engagement can be improved if frontline teams can influence their working environment and, on the other hand, that staff can disengage in work environments perceived to be overly hierarchical and controlling. This illustrates the importance of devolving decision-making so that staff at different levels are given the authority, responsibility and resources to improve care (Collins 2015; The King’s Fund 2011).

In our interviews, we also found there was a strong emphasis on building the will and enthusiasm for quality improvement among staff. Leaders have a key role to play in this; they can engage staff in quality improvement by listening to them and encouraging them to get involved in solving problems through taking part in training in improvement methods (we discuss training in more detail in the next section).

*Quality improvement starts with curiosity and a conversation. Start by asking staff, ‘What matters to you and your patients? What do you do on a daily basis that doesn’t add any value?’ And then give staff the permission to stop doing it.*

(Associate Medical Director for Quality and Consultant Forensic Psychiatrist, East London NHS Foundation Trust)

*It’s being given permission for what you know in your heart of hearts is right. It’s being given the permission and the support to deliver on that.*

(Head of Service, Adult Learning Disabilities, Tees, Esk and Wear Valleys NHS Foundation Trust)
Another theme that emerged from our interviews was the need for leaders to be transparent about the need for improvement. The goal should be to use data to really understand what the systemic quality issues are and where there is scope for improvement and learning, as opposed to identifying individual errors or apportioning blame. Accepting that care is not good enough and must improve can be a major first step for leaders.

*We’re not afraid to look at data that’s far from rosy. The whole point is we want to make things better. So, it requires some bravery.*

(Chairman, IMH Medical Board)

Leaders may not feel comfortable with sharing data that will invite scrutiny or criticism about shortcomings in care quality, but, as one medical director put it, 'being transparent puts you on the front foot and in control'. The absence of a culture of honesty and transparency has been implicated (by the Francis Inquiry and other high-profile inquiries) as a major contributing factor in serious failings in care quality ([Kirkup 2015](#); [Mid Staffordshire NHS Foundation Trust Public Inquiry 2013](#); [Department of Health 2012](#); [Flynn 2012](#)).

Linked to this point, our interviews also highlighted some deeply ingrained habits in terms of how the NHS uses data. Quality improvement requires not just looking at whether a metric has got better or worse, but also exploring the wider story – for example, examining variation in the data and interpreting what this might say about the underlying reasons as to why something has improved or deteriorated. The way in which data is used requires a cultural shift – again, this is something that leaders can model from the top of their organisation.

Finally, a process for accountability is important in sustaining these changes in leadership behaviours. In some instances, it is an external partner that holds the board to account. In other cases, it is up to the senior leadership to hold each other to account. The following quote is from a report of observations at ELFT made by consultants from the IHI:

*The change in attitude also affects the way the executives interact with one another. If an executive is not exhibiting the new standard of behavior [sic], one of the others will take him or her aside and talk about it. We’ve become rather*
good at policing each other around that [expected behavior], having honest conversations’, [board member name] notes. 
(Institute for Healthcare Improvement 2016, p 10)

Summary
This section has focused on the role of senior leaders in building the enabling conditions for quality improvement. In taking this focus, we do not intend to diminish the successes of those working at other levels in organisations. There are many examples of individual clinicians or teams achieving encouraging results by taking the initiative and using quality improvement methods on discrete projects (good examples in mental health can be found on the MINDSet website). However, based on our own research and that of others, we would advise that wherever possible, wider organisational backing for quality improvement is sought, as this can be instrumental in obtaining positive results at scale. Dixon-Woods and Martin (2016) argue that ‘time-limited small-scale projects’ may not address the real causes of poor-quality care. Diagnosing the real causes and redesigning services requires dedicated quality improvement resources and ‘the clout to support the changes needed’ (p 192). Therefore, our messages are directed at the leaders of mental health organisations, who are uniquely placed to engage frontline staff and teams and support them to continuously improve the quality of care.
5 Sustaining quality improvement

In this section, we explore how to make quality improvement part of an organisation's culture and identify enabling factors that help to maintain the momentum. These factors include building a strong infrastructure that supports quality improvement, developing an engaged and empowered workforce, and securing the support of an external partner.

Building an infrastructure for quality improvement

Our interviewees were very clear that organisations must develop the necessary infrastructure to enable quality improvement to thrive and spread. As one medical director pointed out, without the infrastructure to support quality improvement, any type of training for staff will be like ‘throwing seeds on fallow ground’.

Some mental health organisations, including TEWV and ELFT, have invested in central quality improvement teams with expertise in improvement methods. Team members (around 12 in TEWV and 15 in ELFT) provide additional support for projects and play a key role in managing and promoting quality improvement. They should know the organisation well and have the respect of clinicians and managers to ensure that improvement work is given some traction, particularly in the early stages (Jones and Woodhead 2015).

In two of our case study organisations, members of the board or executive teams act as ‘sponsors’ for each improvement project and play a key role in helping to unblock barriers and championing the work at a senior management level. This ‘direct line of sight’ between the leadership and frontline teams leading quality improvement projects is key.

A useful method for supporting staff with quality improvement projects is improvement coaching. Both TEWV and ELFT have invested in training hundreds
of their staff in coaching skills. At ELFT, quality improvement coaches have in-depth knowledge of improvement methods and tools, as well as the skills to help others to develop their own insights, skills and capabilities. At TEWV, leaders and several people with lived experience of mental health problems have received training and coaching, and are encouraged to use those skills in prompting each other with ‘high-quality questions’ to monitor the progress of the trust’s ‘purposeful and productive’ quality improvement programme in community-based teams.

Information technology (IT) systems are an essential part of the infrastructure for quality improvement because of the way in which data is used to understand variation and to produce analytic tools such as ‘run charts’, showing whether changes have resulted in sustained improvements or not. According to leaders at ELFT, there was substantial investment in improved IT systems. However, the IT overhaul was described as an opportunity not just to redesign systems to support quality improvement, but also to address many of the longstanding problems with the old systems – not least reducing the amount of time members of staff spent trying to find IT workarounds. While fit-for-purpose IT systems can be an important enabler, the expense of installing these should not be seen as a barrier to adopting quality improvement approaches; significant progress can often still be made using existing systems.

Recognising that doing quality improvement work needs to be made as easy as possible for frontline teams, ELFT have put in place a web-based platform called ‘QI Life’. All projects are managed through the platform and staff can also use it to create driver diagrams, log their data from Plan-Do-Study-Act (PDSA) cycles (see Appendix 1) and chart progress. In addition, data from the trust’s central ‘data warehouse’ has been made available at directorate and team levels so that staff have ready access to it.

Quality improvement should run alongside robust governance and performance structures. Existing quality assurance processes may need to be adapted to ensure that audit and assurance can go ‘hand in hand’ with measuring and understanding variation and improving quality, without being duplicative (Jones and Woodhead 2015).
Building capability and capacity in the workforce

Committing to quality improvement as the standard way of working across organisations is in the gift of the leadership, but ultimately it depends on there being sufficient capability and capacity within the wider workforce. Individuals carrying out improvement work need a sufficient understanding of the methodologies and the underlying principles and theories.

In *Building the foundations for improvement*, the Health Foundation outlines several pieces of advice in terms of preparing the workforce to take on quality improvement alongside their routine work (Jones and Woodhead 2015). These include:

- allowing individuals to ‘learn by doing’ (eg, some practical and work-based activities)
- combining classroom-based learning with access to online resources
- building up a network of ‘graduates’ who can champion quality improvement and mentor future participants in training
- evaluating the training offer regularly and adjusting the programme where necessary and to meet changing needs
- going ‘where the energy is’ in terms of working with quality improvement enthusiasts to begin with, empowering individuals to focus on issues that really matter to them and gaining some early ‘wins’.

We found that different approaches to building capability and capacity for improvement had been developed in each of our case study sites. At TEWV, executives and senior clinical leaders were trained first so that they had expertise in the chosen method before sponsoring the improvement activities of others. Thereafter, all medical and senior nursing staff have been trained in order to embed quality improvement into the ‘language’ of the organisation and to make quality improvement the default way of working. At ELFT, there has been substantial investment over three years in training 1,500 members of staff (including all executives, clinical and service directors) while service users have either undertaken the six-month Improvement Science in Action training programme or the shorter overview, Pocket QI. Participation in training is voluntary, but there is an expectation that anyone with leadership aspirations should take part. Similarly,
IMH in Singapore also requires anyone aspiring to take on leadership roles to undertake quality improvement training.

Two key lessons that have emerged from the training programme at ELFT are:

- tailoring the training messages differently for different audiences
- targeting groups in key leadership roles at service level such as general managers and heads of nursing, as failing to get their buy-in can stall progress.

An important function of training is to ensure fidelity to the chosen method. While there is no single ‘right’ methodology for quality improvement, it is important that the method chosen is applied consistently across an organisation. Studies suggest that poor fidelity to improvement methodologies has led to disappointing results (Dixon-Woods and Martin 2016; Taylor et al 2014). Therefore, using an explicit quality improvement method, and adhering to it strictly, are vital.

**Partnering for quality improvement in mental health**

Quality improvement is not a journey to travel alone. Our research showed that partnering with another organisation was a key enabler. Most of the mental health services in our research have had formal or informal support from an external partner, such as the IHI or VMMC. In England, support for quality improvement can be given by national or regional bodies such as NHS Improvement and academic health science networks (AHSNs). Health Education England also has a national lead and team for quality improvement. Having an external partner with relevant experience and expertise is particularly important when not all staff have been trained in the principles and methods involved in quality improvement. An external perspective can also help once quality improvement programmes are under way – for example, by guiding organisations to apply the chosen methodology robustly and consistently.

In some instances, mental health trusts can help each other to develop their improvement capabilities through formal or informal peer support or buddying arrangements. These kinds of arrangements have been developed between Devon Partnership NHS Trust and South London and Maudsley NHS Foundation Trust as part of collaborative work on violence reduction (see box).
Mental health trusts working together to reduce violence on inpatient wards

South London and Maudsley NHS Foundation Trust piloted a quality improvement project to reduce violence across some of its inpatient wards using evidence-based safety tools and predictive assessment. The project was successful in sustaining a substantial reduction in violence against staff for two years. The trust applied to the Health Foundation in 2015 for a grant to scale up the project across the trust. Devon Partnership NHS Trust also applied separately to the Health Foundation for a grant to support the piloting of the intervention. The grant was awarded jointly on the basis that both trusts would collaborate and learn together, given the intervention expertise at South London and a wide range of quality improvement expertise at Devon.

The Four Steps to Safety programme is now running in both trusts, aiming to reduce violence against staff in inpatient units by 50 per cent by September 2017. It uses the Model for Improvement and PDSA cycles (see Appendix 1).

As well as the two trusts partnering with each other, each trust has partnered with consultants with lived experience of inpatient care to co-produce the project. The consultants work alongside teams in both trusts on every element of the improvement programme, which puts strong emphasis on proactively engaging with service users and greater involvement of service users in keeping wards safe. The teams at both trusts regularly engage with service users in tea and coffee mornings and at patient council meetings. Service-users are also involved in testing new processes within the Four Steps programme.

The programme is being independently evaluated by King’s College London. One reported benefit for both trusts has been the value of learning quality improvement together and developing relationships between clinical teams. This has been particularly helpful in the context of doing quality improvement with a relatively small resource compared to some other organisations.

For further information contact Dr Michael Holland (Michael.Holland@slam.nhs.uk) or see Health Foundation 2017

Finally, there is a global quality improvement network that connects individuals and mental health organisations, called MHImprove (see Appendix 2 for further details).
Challenges and opportunities

A key question in our research was whether there was anything ‘different’ about doing quality improvement in the mental health sector. Interviewees told us that in terms of the improvement methodologies themselves, the approach is broadly the same in physical and mental health care. However, there are some contextual differences to consider, some of which lend themselves to improvement while others can create challenges. In this section, we focus on three notable characteristics of mental health care and their relationship to quality improvement:

- the community-based model of care in mental health
- diversity of provision in mental health
- the history of service user and carer involvement in mental health.

Mental health care is spread across hospital and community-based settings, with increasing emphasis on the latter. We found a perception among some people that quality improvement may be more challenging outside of a hospital setting. The hypothesis was that certain factors would be harder to control in a community-based setting, and that it may be harder for work to be standardised. However, this view was challenged by our interviewees. In the organisations involved in our research, quality improvement approaches had been successfully applied beyond the traditional inpatient setting; they also reported a good appetite for quality improvement and relatively few obstacles. For example, TEWV is undertaking a large piece of work on applying quality improvement to more than 90 of its community-based teams, and has reported finding that the process is mostly the same as for inpatient settings – apart from the workforce being split across multiple locations.

The success (or otherwise) of quality improvement work in community settings has relevance beyond mental health, as it speaks to the future vision for health care more broadly as the NHS moves away from hospital-centric models of care. Mental
health provides a useful testbed for doing quality improvement in community settings, and the lessons learnt will be highly valuable across the health system.

The mental health sector is also more diverse than many other clinical areas, in that it has a greater proportion of (often smaller) non-NHS providers, including voluntary sector and for-profit providers. This raises the question of the extent to which the learning from the case studies we have presented (mostly in the English NHS) can be translated and applied to non-NHS providers. Again, the answers to this question will be of interest beyond the mental health sector itself.

Mental health care has a long history of service user and carer involvement. Mental health policy in the UK has promoted such involvement for more than 20 years (Omeni et al 2014), although often this has been an aspiration rather than a reality. More recently, this ethos of co-production is being applied to work on quality improvement. ELFT has made sustained efforts in this regard, and aims to eventually have service users and carers involved in all of its quality improvement activities. This includes ensuring that service users have the opportunity to enrol in quality improvement training programmes. Similarly, the quality improvement partnership between Devon Partnership NHS Trust and South London and Maudsley also sees service users being key partners in the quality improvement process (for example, in the Four Steps to Safety testing process).

The West of England AHSN has developed the MINDSet resource, which includes examples where mental health service user leaders are trained in quality improvement (West of England AHSN, undated). The hope is that by applying the systematic methods of quality improvement and integrating it with co-production, there is scope to involve service users in designing and planning services to maximise their effectiveness and impact.

Co-production in quality improvement is not a very well-developed space, but it is ripe for integration. People aren't doing that very well at the moment; they're missing a trick. They might get someone with lived experience to help redesign a service but they're not using a quality improvement methodology. So, they're missing out on the process mapping, the testing and the learning... I think if you combine co-production with quality improvement methodology, the quality improvement methodology is stronger for it and vice versa.

(Director of Quality, West of England AHSN)
One example of this type of work is the recovery college model (see box) that was co-produced, delivered and evaluated by people with lived experience of mental illness, using a quality improvement approach throughout the process. Other good examples of mental health services partnering with service users and carers in quality improvement work include using ‘experience-based co-design’ to redesign procedures on an acute ward at Oxleas NHS Foundation Trust (see Springham and Robert 2015; The King’s Fund 2013; The Point of Care Foundation, undated).

### The Severn and Wye Recovery College

In mental health, the term ‘recovery’ is used to refer to building a life that is meaningful and satisfying to the individual, whether they continue to experience symptoms or not. Recovery colleges are based on the premise that people with experience of mental health problems who are further along in their recovery journeys will be able to support, educate and coach others. Recovery colleges perform a range of functions, often including providing ‘students’ with peer-led seminars about self-management techniques and creating a forum for sharing recovery stories to promote hope and a sense of inclusion. One of the aims is to help people to understand more about their diagnoses and make informed choices about their treatment.

2gether NHS Foundation Trust applied for a Shine grant in 2012 from the Health Foundation in order to adapt the recovery college model (previously trialled in urban areas of England) to a more rural setting as a quality improvement project. From the outset, it was made clear that there was no differentiation between service users, carers or staff from the mental health trust and voluntary sector organisations involved. Everyone was given an equal stake in designing how the colleges would function (across two counties), what the course structure would be and agreeing course materials. The communications and evaluation methods were also co-designed.

The quality improvement methodologies used to underpin the project were the (NHS) Model for Improvement PDSA cycles, plus some elements of experience-based co-design. Three PDSA cycles were run to test course content and another three tested different course structures. Data from each cycle was used to assess whether there was any difference between each type of course structure in terms of outcomes and qualitative feedback.

See Burhouse *et al* (2015) and Health Foundation (2015) for further details.
Previous work by Ham (2014) has posed the question of what role different approaches can play in driving up quality in the NHS, including targets and performance management, inspection and regulation, and competition and choice. It has been argued that external stimuli such as these will not be effective unless there is also a focus on enabling improvement within organisations.

We wanted to know what kind of relationship with regulators and commissioners would help mental health organisations with their improvement journeys. To put the question more broadly, how can regulators and commissioners enable a culture of quality improvement to develop in the NHS?

The evidence on the impact of inspection and regulation on care quality is inconclusive (Sutherland and Leatherman 2006) and we have previously argued that we must move beyond inspection, markets and ‘hierarchy’ in order to transform NHS care (Ham 2014). Participants in our expert seminar agreed that, at worst, the unintended consequences of regulatory interventions can actively deter organisations from focusing on improvement – for example, by creating a sense of fear and reinforcing an emphasis on quality assurance rather than improvement.

However, it was also argued that provider organisations need not be passive participants in their relationships with regulators, and that they could make more of opportunities to collaborate with them. For example, mental health providers can use the inspection process to create compelling narratives within their organisations about the need for quality improvement, and can actively explore how to continue working with the regulator throughout the improvement journey.

Since 2013, one of the key lines of enquiry within the CQC’s well-led domain has been whether providers have robust processes for learning, continuous improvement and innovation. This potentially provides one lever that service providers can use to justify moving away from quality audit and assurance and towards improvement.
Accepting these arguments, it remains the case that changes are needed at the national level for continuous improvement to thrive in the NHS. Delegates at our expert seminar reported that their organisations would need some assurance that improvement activity or programmes will not be curtailed by national organisations before they have had time to fully embed. Just as the leaders of mental health trusts need to create a culture where individual members of staff are able to be candid about quality problems, national organisations need to create an environment that fosters honesty and transparency among service providers.

Delegates at the seminar gave us some insights into the types of changes that people working in mental health care believe would create the right conditions for quality improvement. Areas for national system leaders to consider include the following.

- Helping mental health providers to share good practice on quality improvement and connecting organisations with each other.
- Ensuring there are clear messages from NHS Improvement, the CQC and NHS England about their respective roles and strategies in relation to quality improvement, how these roles join up, and what support they can offer to local providers.
- Supporting mental health organisations to focus on issues of local importance and giving them the flexibility to adapt national guidance to local contexts.
- Allowing providers to challenge requirements from commissioners and others in some circumstances, such as measuring things that ‘do not add value’. This could help free up some time to focus on quality improvement.

On the first of these we note that earlier this year, NHS Improvement launched a new offer to build a mental health associate network so that NHS mental health trusts struggling with particular quality issues can be partnered with another trust that has successfully addressed the same or similar issues. Also, the Royal College of Psychiatrists has established the College Centre for Quality Improvement, which provides access to various networks, through which clinical teams can support and learn from each other. The College Centre has established a quality improvement committee to provide advice. More information about these networks and other sources of support can be found in Appendix 2.
Key lessons

Through our research, we heard about inspirational work that is taking place across the NHS (and beyond) to ensure that mental health service providers are continuously challenging themselves to improve the experiences and outcomes of care. In this final section, we draw together some of the key lessons that have emerged.

Quality improvement can make a difference

We found a high level of ambition from those involved in quality improvement in the mental health sector about its potential to improve treatment and support. Across our case studies, there were examples of how quality improvement programmes had helped to: reduce the length of time people need to wait to get help; improve safety in inpatient settings; and develop new services to aid recovery. Quality improvement was also reported to have fostered changes in organisational practices and cultures, with greater emphasis on engaging staff, service users and carers in finding solutions to problems, and creating a more open and transparent approach to reporting quality issues – and acting on them.

Quality improvement takes time

Our research also found that the high level of ambition for quality improvement needs to be balanced against realism about the time it will take to see impacts. The improvements we have outlined above were the results of years (sometimes a decade) of sustained effort. Getting buy-in from senior leaders as well as the wider workforce for a change of approach can take many months. Learning how to do quality improvement in practice also takes time; teams must be given the time to understand quality issues, standardise processes, test, adapt, learn – and to share what they learn. Quality improvement will have only limited impacts if it is treated as a one-off project; success is most likely when it is a continuous process of improving the quality of care.
Quality improvement means leading in a different way

Quality improvement programmes were embedded successfully once senior leaders adapted their behaviours to signal their commitment to a new way of working. Leading in an improvement-focused organisation involves recognising that frontline teams, service users and carers are often best placed to develop solutions, through a process of discovery. This requires trusting others and being comfortable with the uncertainties involved in iterative change. Modelling behaviour change from the top of the organisation made it easier for everyone else to follow suit and to see what role they needed to play in improving quality.

Quality improvement requires fidelity to the chosen method

One explanation for the limited impact of some quality improvement programmes is poor fidelity in the use of methods such as PDSA cycles (Dixon-Woods and Martin 2016; Taylor et al 2014). Our interviewees were clear that, without the appropriate application of a method, any positive outcomes will be superficial and there will be no learning about the mechanisms that led to the change.

Quality improvement in mental health is broadly similar to quality improvement in other health care settings

Overall, the approach taken by mental health services to embed a culture of quality improvement has been very similar to other types of care providers – albeit with some adaptations to improvement methods designed for use in acute hospital settings. There are some contextual differences, including the community-based model of care in mental health. However, there are also some potential enablers. Bringing together the emphasis on service user involvement and co-production in mental health with the systematic tools and methods of quality improvement could be a very powerful combination, from which other sectors could learn.
Appendix 1: Quality improvement methods

We have outlined a few quality improvement approaches below but the chosen methodology will vary according to local circumstances and we urge further reading on the subject before undertaking any work in this area.

A practical guide to quality improvement is available via the MINDSet website (see Appendix 2). There is no single quality improvement methodology that is recommended for mental health. Techniques that have been applied in health care can all be adapted for mental health settings. The most common approaches in UK mental health settings described in the MINDSet guidance include the following.

**Experience-based co-design** – This approach supports people with lived experience of mental illness to work in partnership with staff to design services and pathways. Data is collected through in-depth interviews, observations and group discussions. It is then analysed to understand what the current experience is and to identify areas for improvement. [www.pointofcarefoundation.org.uk/our-work/quality-improvement/about-our-quality-improvement/#tab-4](http://www.pointofcarefoundation.org.uk/our-work/quality-improvement/about-our-quality-improvement/#tab-4)

**Lean** – Originating from the car manufacturing industry, this approach aims to deliver value as quickly as possible by ensuring that products flow through the system with minimal mistakes and waste. The focus is on creating a culture whereby all employees can suggest and make improvements that can affect the whole organisation. Lean is a key element of the Virginia Mason Production System (see Section 3, Tees, Esk and Wear Valleys NHS Foundation Trust case study).

**Microsystems coaching** – This approach is based on the premise that health care systems are made up of multiple and linked ‘microsystems’ or single teams/units working to achieve a common purpose (for example, a recovery team in the mental health setting). The approach emphasises the need for an in-depth assessment of purpose, patients, professionals, processes and patterns (known as the 5 ‘Ps’) in the relevant systems before undertaking any quality improvement work.
Quality improvement in mental health

Model for Improvement – This approach has been developed by the Institute for Healthcare Improvement and is based on systematically testing ideas for making improvements (see Figure A1). The model is based on three questions:

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

The questions are answered by testing change ideas using Plan-Do-Study-Act (PDSA) cycles. This means taking ideas, trying them out in practice and learning what works (or does not work) before deciding how to proceed (see section 3, East London NHS Foundation Trust case study).

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Figure A1 Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

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Source: Institute for Healthcare Improvement 2017
Six Sigma – This approach originated in the telecommunications industry and aimed to eliminate defects in the production of items in order to control variation. It draws on statistical methods to develop standards for variation in quality (in the manufacturing process, this is less than 3.4 errors per million products made).

Theory of Constraints – This approach is based on understanding the blockages or bottlenecks in health care systems. By identifying where the blockages (constraints) are, it is then possible to focus improvement efforts where they will have the biggest impact on overall flow across the system. There are five key steps to the process:

1. Identify the system's constraints.
2. Get the most out of the constraints ('exploit' them).
3. Support the system's constraints (subordinate everything else to the decisions made at steps 1 and 2).
4. Elevate the system's constraints.
5. Once the constraints have been addressed, go back to step 1 (do not allow inertia to become a system constraint).

Total Quality Management (also known as continuous quality improvement) – This management approach focuses on quality and the role of people within an organisation to develop changes in culture, processes and practice. It is described more as a philosophy that can be applied to a whole organisation, encompassing factors such as leadership, customer focus and making evidence-based decisions.
Appendix 2: Quality improvement resources

College Centre for Quality Improvement
www.rcpsych.ac.uk/workinpsychiatry/qualityimprovement/abouttheccqi.aspx
www.rcpsych.ac.uk/workinpsychiatry/qualityimprovement/usingqualityimprovement.aspx


East London NHS Foundation Trust online repository of information on the application of quality improvement in mental health https://qi.elft.nhs.uk

GenerationQ – A leadership and quality improvement programme run by the Health Foundation www.health.org.uk/programmes/generationq


MHImprove – A global network of people leading quality improvement work in mental health. It began in 2010 as an informal group chaired by the IHI. MHImprove is currently co-chaired by the Scottish Patient Safety Programme for Mental Health and ELFT. Through the network, members can exchange their ideas and experiences of quality improvement either in person during its bi-annual meetings or virtually through its ‘collaboration platform’. To join, email: qi@elft.nhs.uk

MINDSet – Practical case study examples of quality improvement in different mental health care settings. Projects have reported improvements in access to services, crisis care, perinatal mental health, physical health and recovery. http://mindsetqi.net/
**Point of Care Foundation** – An independent charity offering training and support for experience-based co-design and patient centred quality improvement

www.pointofcarefoundation.org.uk/our-work/quality-improvement/what-we-offer/

**Q Community** – An initiative connecting people with improvement expertise across the UK, led by the Health Foundation and supported and co-funded by NHS Improvement  www.health.org.uk/programmes/the-q-initiative

**Strategic quality improvement: an action learning approach** (case study published by The King’s Fund, 2016)  www.kingsfund.org.uk/publications/strategic-quality-improvement
References


The Point of Care Foundation (undated). 'Home'. The Point of Care Foundation website. Available at: www.pointofcarefoundation.org.uk/ (accessed on 16 June 2017).


About the authors

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Before joining The King’s Fund in 2009, Shilpa’s research focused on the resettlement of offenders and substance misuse treatment. She has extensive experience in qualitative research with practitioners, service users and policy-makers. Shilpa holds a BSc in psychology and criminology.

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Chris is also an executive coach and works with leaders in the health system to support change at the local level. Chris holds an MSc in public health from the London School of Hygiene & Tropical Medicine and a BA in natural sciences from the University of Cambridge, and has previously worked in research teams in a number of organisations, including the Institute of Psychiatry, Psychology & Neuroscience, and the Public Health Foundation of India in Delhi.
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Can quality improvement – increasingly well established in acute hospital care – play a role in driving up the quality of mental health care? Mental health organisations are beginning to embrace quality improvement approaches, with some promising results. But what do senior leaders need to do to embed a quality improvement ethos in their organisation?

*Quality improvement in mental health* explores the journey taken by three organisations (two in England and one in Singapore) that have embedded quality improvement as a routine way of working. It is based on in-depth interviews with a range of stakeholders, as well as expert interviews and a half-day seminar convened by The King’s Fund in January 2017.

The report finds that:

- quality improvement tools and approaches used in the acute hospital sector can be adapted for use in mental health care
- leaders will need to think and behave differently, devolving decision-making to frontline teams and service users who are best placed to find solutions to problems
- achieving results takes time and requires a long-term commitment to do things differently
- doing quality improvement at scale requires a support structure to assist frontline teams and to share learning across the organisation and beyond
- success is most likely when there is fidelity to the chosen improvement method.

The strong emphasis on co-production and service user involvement in mental health should be harnessed as a powerful asset in quality improvement work. By doing so, the mental health sector can generate valuable lessons for the broader health system about collaborative approaches to quality improvement.