Research report February 2017

The London Quality Standards

A case study in changing clinical care

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nuffieldtrust

About the report

The London Quality Standards (LQS) were conceived as part of a longer journey to reduce variation and improve quality of care. The programme was distinctive in its scope of ambition, aiming to improve the care of acutely unwell patients admitted to London hospitals.

This report reviews the construction, impact and implications of the LQS in acute medicine using a mixed-methods approach. The programme was, as a whole, well constructed, fuelled by strong clinical leadership, highly active professional and public engagement and the use of experience-based co-design to develop the standards. This led to a remarkable degree of clinical and managerial buy-in and a genuine sense of ownership by London clinicians and hospitals. However, changes in the political landscape prevented the programme from directly intervening in hospital service redesign and delivery. This was intensified by mounting service pressures and hospitals' overall lack of capacity to manage complex change.

The programme undoubtedly focused attention on the gaps in the delivery of care and drove varying degrees of service redesign within hospitals. However, no single organisation fully implemented all the standards and a link between the implementation of the standards and better patient outcomes was unable to be made.

The report presents insights about the implementation of complex intervention in the NHS. This work provides critical learning for future similar initiatives, particularly the Seven Day Services Clinical Standards being introduced across England.

Suggested citation

Vaughan L, Machaqueiro S, Gaskins M and Imison C (2017) *The London Quality Standards: A case study in changing clinical care.* Research report. Nuffield Trust.

Acknowledgements

We would, first and foremost, like to thank the NHS staff who participated in the various aspects of this study. The generosity shown with their time and candour in their opinions is much appreciated. This work was partly funded by the Healthy London Partnership. We are grateful for their support, particularly that shown by Patrice Donnelly (Programme Lead), Shaun Danielli (Director) and Dr Andy Mitchell (former Medical Director, NHS England (London Region)). This study received expert guidance from its Study Steering Group: Dr Marilyn Plant (General Practitioner and Medical Director for South West London Strategic Planning Group), Dr Dimitrios Spryidonidis (Associate Professor, Warwick Business School), Doug Lewins (Public Patient Voices and Member, London Clinical Senate) and Varun Malhotra (Public Patient Voices and Member, London Clinical Senate). We are also grateful for the input of Stuart Green (Public Health Research Fellow, Northwest London CLAHRC) in the early stages of the project.

The report was much improved by the suggestions of our external reviewers: Dr Anita Donley (Independent Chair, Essex Success Regime), Dr Chris Roseveare (Consultant Physician in Acute/General Internal Medicine, Southern Health NHS Foundation Trust) and Dr Ian Scott (Director, Department of Internal Medicine, Princess Alexandra Hospital, Australia). At the Nuffield Trust, Dr Alan Shaw (visiting Master's student) and Dr Chris Sherlaw-Johnson (Senior Research Analyst) undertook the statistical components of this study. We are appreciative of the time and advice given by other colleagues at the Trust, including Martin Bardsley, John Appleby, Sandeepa Arora, Mark Dayan, Rowan Dennison, Meilir Jones, April McMullen and Ruth Thorlby. Louella Vaughan was funded by The Health Foundation, an independent charity working to improve the quality of health care in the UK.

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1 Executive summary

Introduction

In 2011, London Health Programmes, a coalition between NHS London and London's primary care trusts (PCTs), embarked on a London-wide attempt to improve the quality of acute and emergency care. The primary vehicle for improvement was the development and implementation of professional consensus standards, the London Quality Standards (LQS). The standards set out the minimum quality of care that patients with medical illnesses should expect when admitted to hospital. They stipulate, for example, that patients should receive timely clinical reviews by medical and multidisciplinary staff, have key diagnostic investigations (such as CT scans) and critical interventions (such as endoscopy) promptly and should be robustly monitored for clinical deterioration. The standards also mandate patterns of extended working seven days per week for consultant medical staff (see Appendix 1). The programme was led by a PCT chief executive, together with the NHS London Medical Director, and was distinctive in its high degree of clinical engagement. In 2013, London Health Programmes ceased as a separate NHS organisation, a consequence of the restructuring of the strategic health authorities (SHAs). A number of the key London standards have subsequently been captured by the national Seven Day Services Clinical Standards,[1] led by Sir Bruce Keogh, which are designed to drive improved seven-day working across the NHS.

1 For more information on the Seven Day Services Clinical Standards: www.england.nhs.uk/ourwork/qual-clin-lead/seven-day-hospital-services

Key findings

- The LQS worked well as a means to raise awareness of the deficits in emergency care, and drove forward change at a local level, but primary statistical analysis was unable to establish a link between the implementation of the standards and consistent improvements in patient outcomes.

- While there was strong evidence behind the need for change, there was little evidence available that compliance with the LQS would reliably improve outcomes. Caution should be exercised in developing mandatory input standards where the evidence for the prescribed interventions is limited or partial.

- Where the LQS were implemented, this was heavily driven from the bottom up by clinicians convinced by the case for change, rather than by top-down processes or commissioning mechanisms.

- Our study revealed marked deficiencies within hospitals around complex change management, including:

  - an almost complete disconnection between frontline clinicians and senior managerial staff
  - a lack of strategic thinking at multiple levels
  - a lack of knowledge around, and failure to consistently use, change management/quality improvement tools
  - a heavy reliance on individuals
  - failure to address underlying cultural and organisational matters
  - long-term lack of capital investment in diagnostic and other critical services.

  These were all amplified by managerial 'churn' and an absence of consistent leadership over time. The combination of rising service pressures and clinician burnout emerged as a major barrier to change.

- The switch from the more supportive model of earlier London change programmes was not helpful, with clinical and managerial teams expecting, but not receiving, the levels of support provided for previous major service reconfigurations.

- Many of the perceived weaknesses in the programme appeared to stem from the insertion of commissioning into the process. Primarily, the commissioners did not appear to understand the workforce and financial implications of complying with the standards. Other major criticisms included: the lack of visibility of the economic and workforce analyses; the lack of a consistent mechanism to support the introduction and ongoing expense of the standards; and the absence of 'carrots' and the threat of reconfiguration as a 'stick'.

- In some areas, threatened penalties for non-compliance with the standards were used by some CCGs to drive service reconfiguration. This became a governing motive for some hospitals and pushed aside the original aim of improving patient safety, demotivating some staff. It also proved an unreliable driver, as hospitals eventually came to see the threat as empty. Professional standards that describe complex behaviours should not be used rigidly nor have major penalties attached without a detailed exploration of the potential for unintended consequences and perverse behaviours.

- The use of peer audit was seen as helpful to drive the implementation of the standards. However, there were problems with the level of complexity involved, and some degree of gaming was an issue.

This report

This report outlines the findings of a year-long research project that explored the strengths and weaknesses of the LQS programme and its impact. We investigated these through interviews, focus groups and a survey of those who developed and implemented the LQS.

We focus specifically on the development and implementation of the 21 standards for acute medicine, rather than the whole LQS programme which also covered other areas with high emergency caseloads, such as paediatrics and maternity. Our findings will be relevant to those continuing to implement the LQS and the Seven Day Services Clinical Standards, as well as others considering the use of clinical standards as a means to drive improvement. Thematic summaries of the research are given at the end of each section.

LQS – part of a longer journey of improvement in London

The development and subsequent implementation of the LQS were part of a longer journey of improvement in London. The team leading the LQS programme had a proven track record in complex system change at a regional level, having previously delivered successful changes to trauma and stroke services as part of the 'Healthcare for London' programme.[2] As with trauma and stroke, they found evidence of wide variation in the care of acutely unwell patients and their outcomes both between different hospitals and within individual hospitals depending on the day of admission (weekday versus weekend).

Strong professional consensus but lack of hard evidence to support standards

However, while there was a strong case for change, there was a paucity of evidence, unlike with stroke and trauma, to guide which changes in the clinical pathways and processes would be most likely to improve outcomes for patients. The standards therefore relied on professional consensus rather than hard evidence. This consensus was achieved through a clinically led and experience-based co-design process, and included well-constructed patient and public involvement. As a result, the programme achieved wide clinical engagement and general buy-in for the need for change.

2 For more information on the Healthcare for London programme: www.londonhp.nhs.uk/healthcare-for-london

A changed policy environment – lack of regional oversight

The approach the LQS programme took had to adapt to a changed policy and regulatory environment. The Health and Social Care Act (2012) removed the regional infrastructure and oversight that was responsible for the successful re-engineering of stroke and trauma care across London. Successful implementation therefore became reliant on local clinical commissioning decisions and negotiations. We found considerable variation in how local commissioners applied and supported the implementation of the standards; some commissioners provided additional funding to support implementation and resulting additional costs, while others did not.

The pursuit of secondary agendas

Consensus was lacking at all levels about the degree to which the standards were mandatory or aspirational. Additionally, the standards were used to pursue a number of secondary agendas, ranging from changes in behaviour by individual clinicians, through to wholescale reconfiguration of acute services. Many clinical commissioning groups (CCGs) were pursuing strategies that relied on hospital closures and the presumed incapacity of some hospitals to comply with the standards was seen as a potential mechanism for deciding which acute services should be closed or downgraded.

Variation in provider response

The provider response to the standards was also variable and driven by a range of factors. Some early adopting organisations were alert to the potential commissioning threat posed by non-compliance with the standards and invested early and heavily in the LQS. A number of late adopting organisations were resistant on the grounds that their good patient outcomes demonstrated that their systems and processes were not in need of change, or that the LQS conflicted with existing improvement strategies.

There was variation in trusts' responses to individual standards. Hospitals actively prioritised the implementation of some standards over others, based on a complex calculus of cost, feasibility, alignment with existing plans for change and the perceived credibility of the prescribed interventions.

Implementation challenges

Most hospitals struggled with implementation. The lack of financial support from commissioners was a major impediment, and was in marked contrast to the trauma and stroke changes, where trusts had received significant financial support. The lack of compelling evidence for the standards compounded the problem, as trusts were reluctant to invest their own resources in the implementation of relatively untested changes to clinical processes.

Other key obstacles were the lack of improvement capacity and receptivity to change. Few trusts consistently used formal quality improvement approaches to change. Some of the LQS required major reconstruction of consultant working patterns, something that managerial and even clinical colleagues often had great difficulty in negotiating, and was occasionally a show-stopper to successful implementation. Interviewees talked extensively about the gulf between managers and clinicians, as well as the board and the front line, with these groups seeming to pursue different agendas. Trusts told us that a high degree of frontline clinical engagement was critical to success.

The use of audit as a means to drive compliance and improvement

London Health Programmes undertook two peer-led audit cycles to assess progress in implementing the standards (one in 2012 and the second in 2013). The first audit included a self-assessment followed by a well-structured validation audit visit; the second audit involved a follow-up self-assessment.

The audits aimed to encourage LQS compliance, but also identify organisations and service areas which might need additional support. Most respondents saw the audit process (particularly the visits) as beneficial and felt that the audits had acted as a spur to the engagement of senior management and LQS implementation. However, the value of the audits was hindered by the complexity of the audit tool and the accompanying information burden. Although no hospital admitted to deliberate manipulation, individual clinicians confessed to having witnessed ‘gaming’ of the standards to mitigate the threat of negative consequences of failure to meet the standards.

Progress made on implementing the standards

The original compliance with, and progress made in implementing, the standards varied considerably. Four trusts were consistently high performing (meeting 13+ of the 21 standards) over both audits. Seven sites were high performing (meeting 10+ standards) on the first audit and then improving on the second audit. Five sites were low performing (meeting <10 standards) and then improving. Three sites were consistently low performing, and unable to meet more than eight of the 21 standards over both audit cycles.

There was no direct relationship between organisational size and the ability of hospitals to implement the LQS. However, hospitals with either highly specialised services, such as stroke or trauma, or reputations for academic excellence, were more likely to fully implement the LQS – indicating that access to a wide range of 'resources', such as additional diagnostic services and a larger consultant body, was more of a factor than size per se. Commissioning and the threat of regional reconfiguration also seem to have played a major role in implementation – ten of the 13 less well performing hospitals were in trusts where mergers took place, or were in areas where plans were in place for hospital closures.

Of the 21 standards for acute medicine, those which were most consistently met were the requirements to deliver core services, including the provision of critical care, acute assessment and ambulatory care units. The standards for which compliance improved the most included: extended consultant working hours; screening by the multi-professional team; access to key diagnostic services; and discharge planning and a structured medical handover. There were standards that a significant proportion (over 40 per cent) of the hospitals never met. These included twice-daily ward rounds on the acute medical unit; consultants reviewing high-risk patients within an hour; psychiatric liaison and assessment services being available 24/7; and the use of a shared record by all professionals involved in the care across the emergency pathway. The first three of these standards are now also Seven Day Services Clinical Standards.

Impact of the standards

The LQS drove some significant improvements in patient pathways, and multidisciplinary and cross-departmental working, as well as encouraging boards to put a greater focus on issues that threatened patient safety, particularly in the district general hospitals. The standards encouraged trusts to recruit additional consultants in order to deliver extended cover and ensure timely consultant review out of hours and on weekends. However, it was felt that the standards had also had a number of negative effects. The introduction of complex patterns of shift-working for all medical staff was considered to have triggered a retreat of a number of experienced consultants from the hospital front door, increased reliance on locum staff and contributed to the further fragmentation of clinical teams. The emphasis on consultant-delivered care was perceived to adversely impact on the training of junior doctors. Some also felt that the standards encouraged junior doctors to defer decisions until consultant review, delaying care for some patients. Importantly, the use of 'input' standards hindered local service innovation, which may have delivered the desired outcomes more cost effectively. We have not been able to show that the introduction of the LQS improved hospital performance or outcomes relative to other parts of the country (further statistical analysis is planned).

2 Introduction

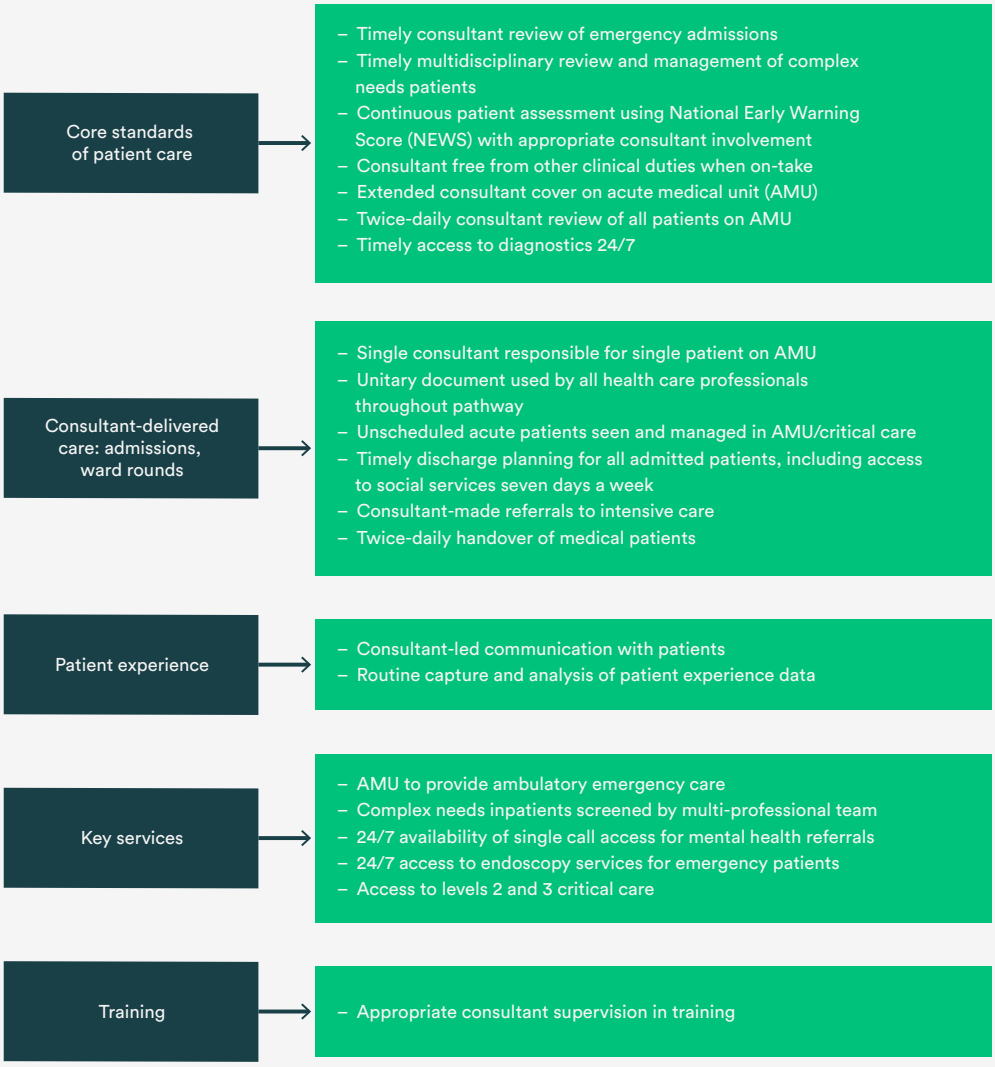
In 2015 the Nuffield Trust was commissioned by the Healthy London Partnership – a partnership between NHS England (London region) and all London clinical commissioning groups (CCGs) – to explore the processes of developing and implementing the NHS London Quality Standards (LQS), and the impact that these standards have had on acute care trusts in London.

Developed and launched in 2011, the LQS are professional consensus standards designed to address the unacceptable variations found in the provision of unscheduled care. They mandate timely clinical review by junior, consultant and multidisciplinary (MDT) staff; timely access to key diagnostic, interventional and other allied clinical services; robust monitoring of patients with appropriate responses to clinical deterioration; and patterns of extended working seven days per week (see Appendix 1 for a detailed overview of the LQS for acute medicine and emergency general surgery).

While first developed for acute medicine and emergency general surgery, the LQS were later extended to include suites of standards for other clinical services with high emergency caseloads, such as emergency departments (A&E), critical care, paediatric emergency services, maternity services and orthopaedics (fractured neck of femur). This meant that hospitals were ultimately asked to comply with 133 standards, including 21 standards for acute medicine.

The LQS programme was highly ambitious and sought to drive through wide-scale change explicitly using a quality improvement approach. The standards themselves are very similar to the national standards for care published by the royal colleges and the overall approach follows the blueprint of the more successful national audit programmes, particularly the use of rounds of audit to measure and drive change. However, they differ from college standards and national audit programmes in that they were compulsory from the start and were eventually tightly tied to clinical commissioning from 2012/13.

Figure 1: Key areas of the LQS for acute medicine
(Source: London Health Programmes, 2011b)



The attention drawn to major gaps in service provision and variability in patient outcomes, and the perceived success of the programme in initiating change, has led to it serving as a template for changes in service delivery. The Seven Day Services Clinical Standards for seven-day working, led by Sir Bruce Keogh and developed by the NHS Services Seven Days a Week Forum, draw directly on the LQS and cover virtually identical domains. With hospitals now expected to meet four of the ten Seven Day Services Clinical Standards, review of the LQS seemed not only appropriate, but urgent.

This study focuses specifically on the development and implementation of the LQS for acute medicine, rather than the whole LQS programme. This choice was predominantly pragmatic – acute medicine was one of the two sets of standards initially developed (the other being emergency general surgery) and the only stream to undergo two audit cycles. It therefore offered the best opportunity to study the programme across the full range of its activities. Moreover, it was considered that studying multiple clinical areas in multiple organisations would add markedly to the complexity of conducting the research without necessarily providing more insight.

In addition to providing a broad overview of the LQS programme, a number of key lines of inquiry were pursued. Our research questions were:

1 Which aspects of the construction of the LQS programme contributed to its perceived success and where were the weaknesses? This is relevant learning that might be incorporated into other major change programmes.

2 What were the approaches used by different hospitals to translate the LQS into service change, and the factors that acted as enablers and barriers at multiple levels? We examined factors such as leadership, the deployment of resources, available workforce, staff relationships, hospital size and type, and organisational culture. We also looked for unintended positive and negative consequences of the implementation of the LQS.

3 What were the experiences of staff involved in change?

The nature of the construction and implementation of the LQS also formed a case study for exploring the underpinning assumption that externally imposing standards to care delivery organisations, along with attaching penalties for non-compliance, must necessarily result in better quality of care.

Structure of the report

This report presents our research through two fundamental perspectives: that of those responsible for developing the LQS and that of those responsible for implementing the LQS on the ground.

The structure of the report seeks to reflect these two perspectives: chapters one and two describe the objectives of this study and provide essential context for the reading of the report. Chapter three provides relevant background for the LQS, including an overview of the processes that led to the development of the standards and how these were introduced. Chapter four presents the results from our research about the approaches that trusts and hospitals used for implementing the LQS. Chapter five describes the development and conduct of the audit process, as well as people's perceptions about it. In chapter six we describe the main aspects that enabled or otherwise hindered the implementation of the LQS. Chapter seven presents an analysis of the impact of the LQS using a quantitative and qualitative approach. Chapter eight discusses the key strengths and weaknesses of the LQS programme and provides key learning points for improving the implementation of this type of programme in hospitals. Chapters nine and ten provide forward-looking views and recommendations for policy-makers and trusts. We draw the report to a close in the conclusions.

Notes on the methodology

Although the LQS encompassed a comprehensive range of acute clinical services, we have focused almost solely on the LQS for acute medicine. While comparisons of how different specialties implemented the LQS would have been instructive, a task of this magnitude was beyond the scope of this investigation.

The research findings presented in this report were the result of a suite of research methods, which included:

- an initial methodological seminar
- a scoping seminar
- an online survey
- 24 interviews
- four case study visits to acute hospitals
- four focus groups with managers and clinicians who implemented the LQS
- a workshop with audit team members.

The total of 95 respondents resulted in a representative sample of the senior and middle managers, clinicians, and public and patient representatives involved at every stage of the process. A complete description of our methodology can be found in Appendix 2.

The complex nature of the LQS programme meant that a number of individuals played multiple roles both for NHS London and their own organisation. A number of individuals also participated in more than one portion of our study. We have, therefore, considered emerging findings as a whole, rather than demarcating rigidly between the different portions of the study.

We have kept all quotes from, and references to, our research participants anonymous to protect their and their organisations' identity.

3 The development of the London Quality Standards

Our first aim was to explore the process of developing the LQS. In order to do this we conducted a document review and a series of interviews with members of the NHS London team and those senior clinicians intimately involved in the setting of the standards. We additionally organised a workshop with clinical and non-clinical staff who had participated in the expert panels and the hospital audit visits to investigate the intellectual underpinnings of the LQS programme and the motivations of those involved.

Background to the London Quality Standards

The LQS programme was developed in the context of Lord Darzi's strategy for London, as outlined in *A Framework for Action* (Healthcare for London, 2007). This had been commissioned by NHS London to identify and address London's health needs. The report recognised the major inequalities in the provision of health care across London and the failure to meet the expectations of London's population with regard to their care. Major reconfigurations of services (including the centralisation and creation of networks for major trauma, heart attack and stroke) were recommended, coupled with a more rigorous approach to the issues of patient safety and quality improvement.

Following a London-wide consultation, the development of improved pathways for acute stroke and major trauma were established as a priority. The Healthcare for London programme[3] team then developed and put in place plans to reconfigure these services in London, which led to the implementation of eight hyper-acute stroke centres and four major trauma centres in 2011. Subsequent evidence demonstrated that these service reconfigurations led to improved outcomes for patients with acute stroke (Davie and others, 2013) and trauma (Trauma Audit and Research Network, 2015; Cole and others, 2016).

Although the reconfigurations of stroke and trauma services were not entirely complete at the time of the inception of the LQS, the NHS London team nonetheless had substantial experience in building evidence-based cases for change, setting comprehensive operational standards, running engagement programmes and overseeing major reconfigurations of services.

Overview of the approach to developing the London Quality Standards

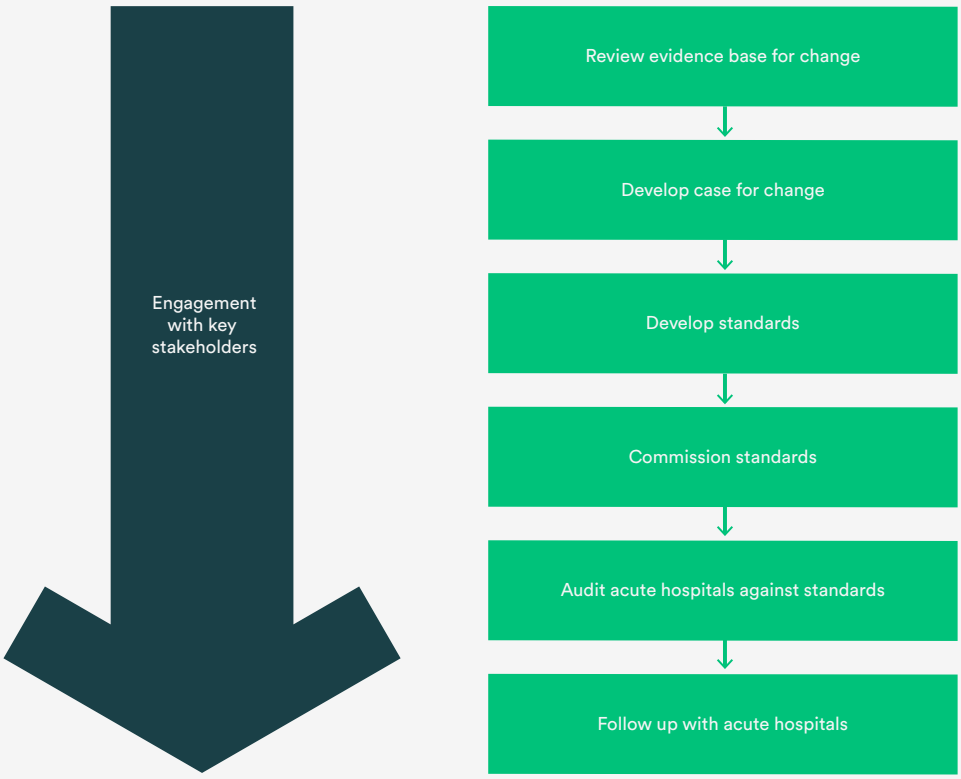
London Health Programmes[4] (LHP) developed the LQS jointly with NHS London in response to increasing emerging evidence of variability in the way acute and emergency services were provided in London. The LQS were developed through several stages. Figure 2 provides an overview of the LQS development and implementation process in retrospect.

3 The Healthcare for London programme was funded by all London primary care trusts (PCTs) to support them in delivering the improvements to London's health services described in *A Framework for Action* (Healthcare for London, 2007). The programme was responsible to the PCT boards and NHS London through the London Commissioning Group (LCG), which included the chief executives of eight PCTs, the chief executive of NHS London, the London medical director and the director of Healthcare for London.

4 London Health Programmes was set up in 2011. Their work evolved from the work of the Healthcare for London programme and NHS Commissioning Support for London. London Health Programmes worked on behalf of all PCTs in London.

A comprehensive timeline of events related to the development of the LQS is included in Appendix 3.

Figure 2: Overview of the key steps in the development of the LQS
(Source: Bell, 2013)



The emerging evidence for poor quality of care

The inception of the LQS can be traced back to 2010, when increasing evidence was being brought to NHS London's attention about 'inadequate early senior medical involvement, poor illness severity assessment and recognition and subsequent sub-optimal management of acutely ill patients' (London Health Programmes, 2010).

Although poor quality of care and an indifference to patient safety had been the subject of a number of reviews and reports over many years, the near-simultaneous publication of three works on deficiencies in acute care was cited as being seminal. The National Confidential Enquiry into Patient Outcome and Death's 2009 report, *Caring to the End* (NCEPOD, 2009), pointed to major gaps in service provision, particularly with respect to an absence of senior clinical leadership, delays in accessing key diagnostic services, and an over-reliance on relatively junior and inexperienced staff to deliver care. Notably, *Caring to the End* contained marked similarities with older NCEPOD reports, implying that little had been done to improve care. Aylin's paper on outcomes for patients admitted on weekdays versus weekends confirmed long-standing speculation that poor care on weekends posed a major risk to patient outcomes (Aylin and others, 2010). The Royal College of Surgeons' *Emergency Surgery: Standards for unscheduled surgical care* (2011) explicitly linked the failure of some hospitals to implement robust processes of care and systems of governance with a twofold variation in mortality for acutely unwell surgical patients.

Although none of these papers explored causal links between gaps in service provision and poor patient outcomes, the evidence was considered sufficiently compelling that the status quo could no longer be tolerated.

> "The reality is that there's just massive variation [in service provision]… so I think that the case for change is hugely compelling."
> LQS programme team member

> "It's really hard when you are faced with papers that say if you come in at weekends you are more likely to die, even although we don't know why that is."
> LQS programme team member

There was also growing concern about the reliance on junior doctors, which resulted in royal colleges questioning the appropriateness of the tasks these doctors were being asked to do and the quality of supervision (Goddard and others, 2011).

Other evidence that created pressure for change, mentioned by our interviewees, included:

- recommendations for minimum standards of care from the royal colleges
- the national surveys of doctors in training, which supported the reports of minimally supervised work by junior doctors
- other publications and reports that highlighted differences in outcomes, such as mortality rates during weekdays and weekends for specific patient groups
- concerns raised by the London Clinical Senate around the quality and safety of services at weekends at the time that the LQS were being initiated
- direct witnessing of variability in acute care during the reconfigurations of the stroke and trauma services.

Building the case for change

Having reviewed the evidence around variation in quality of care, LHP undertook a survey of current service arrangements across acute care trusts in London in March 2011.

> "The first thing we thought we'd do would be… a self-reported survey against those key parameters… to ask the trust where are you in meeting these requirements at present, how often, timing of ward rounds, length of working day, weekend availability…"
> LQS programme team member

This was coupled with an analysis of inter-hospital variability in outcomes, including Hospital Standardised Mortality Ratios (HSMRs), length of stay and readmission rates for patients with respiratory illnesses, as well as weekend versus weekday mortality for the whole London region. These confirmed not only marked differences in service provision between hospitals and within individual hospitals during weekdays and weekends, but also differences in patient outcomes. Most notably, the data suggested

that there was a minimum of 500 deaths in London each year which may have been avoided with higher quality care on weekends (London Health Programmes, 2011a).

Additional evidence for variation in care was sought directly by Dr Andy Mitchell, Medical Director at NHS London, who engaged in safety assurance discussions with the medical directors of every acute care trust in London.

All three elements were brought together in a case for change (London Health Programmes, 2011a). In addition to poor patient outcomes, the report laid bare marked deficiencies in care and problems with service provision, including:

- failure to meet minimum national standards for consultant involvement in patient care
- inadequate access to key diagnostic services
- inconsistent ambulatory care provision
- inadequate usage of modern surgical techniques
- poor communication with patients and their families
- increasing pressures on workforce at both consultant and middle-grade level.

The case for change concluded with a call for 'robust minimum standards which should be adopted by all services'.

The political context in which these issues were being brought to public attention was somewhat convoluted. In 2010 there was a change in government, which introduced the Health and Social Care Bill in 2010/11 under Secretary of State for Health, Andrew Lansley. The Bill led to a major reorganisation of the NHS, including the abolishment of strategic health authorities (SHAs) and primary care trusts (PCTs). The latter were replaced with CCGs in 2013, signalling a shift in the health care commissioning landscape. At the same time, the notorious inquiry into standards of care at Mid-Staffordshire NHS Foundation Trust (2013) contributed to a reinforcement of the importance of provider oversight and regulation.

Setting the standards

The setting of the individual standards for acute medicine was devolved to a clinical expert panel, headed by Professor Derek Bell, with input from a patient panel. The latter also fed into the clinical expert panel for emergency general surgery, led by Mrs Celia Ingham Clark. Simultaneously, LHP embarked on an ambitious programme of stakeholder engagement. The standards were finally published in September 2011, after endorsement from the London Clinical Senate.

Clinical expert panels

The clinical expert panels involved 11 members each. Panels were constituted through a nomination process, accepting proposals both from individuals and from hospital trusts. Applications were sifted with the primary aim of including consultants and other health professionals who were considered as highly experienced leaders in their fields with a broad knowledge of local hospitals and networks. Care was taken to consider the type and seniority of staff, and the geographical location and type of hospital (i.e. major teaching versus smaller or non-teaching) at which they were based.

> "It was really about getting the right people around the table – dominantly in the design phase, lead clinicians – to take the development of the standards on board."
> LQS programme team member

The standards were then developed through a process of co-design, with a number of iterations. Rather than presenting a prepared initial set of standards and asking for endorsement, the expert panels were asked about their personal experiences and their opinions on how to achieve safer practice in key domains identified in the case for change, and were then tasked with drafting the standards. There was then a robust dialogue with LHP, leading to a number of iterations of the standards.

> "We were challenged, you know, appropriately. I felt that there was quite a good process of challenge by the board."
> Clinical expert panel member

LHP then took the draft standards out to the wider clinical audience, with a number of events designed to ensure that the standards were acceptable to the target audience. After a further set of amendments, the LQS were signed off by all members of the expert panels.

> "We went through a process of agreement, endorsement and then took it out to a wider field, took them all across London in many different settings and came up with a bunch of standards that said 'this is what we think'."
> LQS programme team member

The co-design process was thought to be highly successful and one of the stronger elements of the programme by the LHP team. It was considered to be particularly useful in obtaining consensus around contested areas of practice and where the evidence to guide change was less firm.

> "This actually did get from reports to getting agreement to getting action in a very structured way."
> LQS programme team member

These opinions were echoed by clinicians and other professionals recruited to the clinical expert panels. Although only six survey respondents had participated in these, five rated the experience as being 'very useful' or 'extremely useful', and opinions expressed in other study components were equally positive.

The main motivations cited by clinicians for being involved in developing the LQS included:

- awareness of the existing unwarranted variation in care provision and service arrangements
- wanting to play an active part in influencing the contents of the LQS
- belief that the LQS would be a powerful tool to influence the system to achieve better outcomes
- wanting their area of care to get more visibility.

Some clinicians were also motivated by the prospect of obtaining early insight about the LQS for their trusts.

Engagement of patient and lay representatives in the development of the LQS

> "We were part of the team in no uncertain terms."
> Patient panel member

Lay members who participated in the development of the LQS told us they were recruited to the patient panel through an application process. One of the requirements for people to be recruited onto the panel was having access to local networks, such as community groups and provider organisations, in order to facilitate the dialogue and dissemination of information. Patient representatives worked with clinicians in drafting the LQS and some later participated in the audit visits to hospitals across London.

LHP had two clear goals with its engagement of patient and lay representatives. The first was to hear the patient voice and spot flaws in the broader programme that were invisible to clinicians. This led to a number of key changes, including: more assertive language in the standards and their accompanying narrative; being sensitive to the potential impact of reconfiguration on patients and the public; and addressing the issue of transportation in accessing services. The second goal was more strategic, with the lay voice being used to overcome professional barriers and push clinicians to commit to change.

> "We would get the patient group chair to go to the clinical meeting and… that completely changed the dynamic in the sense of the patient just simply saying 'well how can you justify this being different?'."
> LQS programme team member

The success of the patient and lay representative involvement was attributed to the care taken to ensure that participants engaged in positive, constructive dialogue that incorporated their views throughout the whole programme. Lay representative participants believed that one of their key contributions was to be able to help drive the LQS programme from the 'bottom up', which was viewed by them as one of the programme's strengths. However, the criticism was made that the involvement of patient and lay representatives was dominated by North West London members, who were occasionally unable to step back from regional concerns to take a pan-London view. The programme

was also seen to have not fully engaged with a number of prevailing lay issues, such as self-care and prevention, as well as concerns about potential reconfiguration and hospital closures.

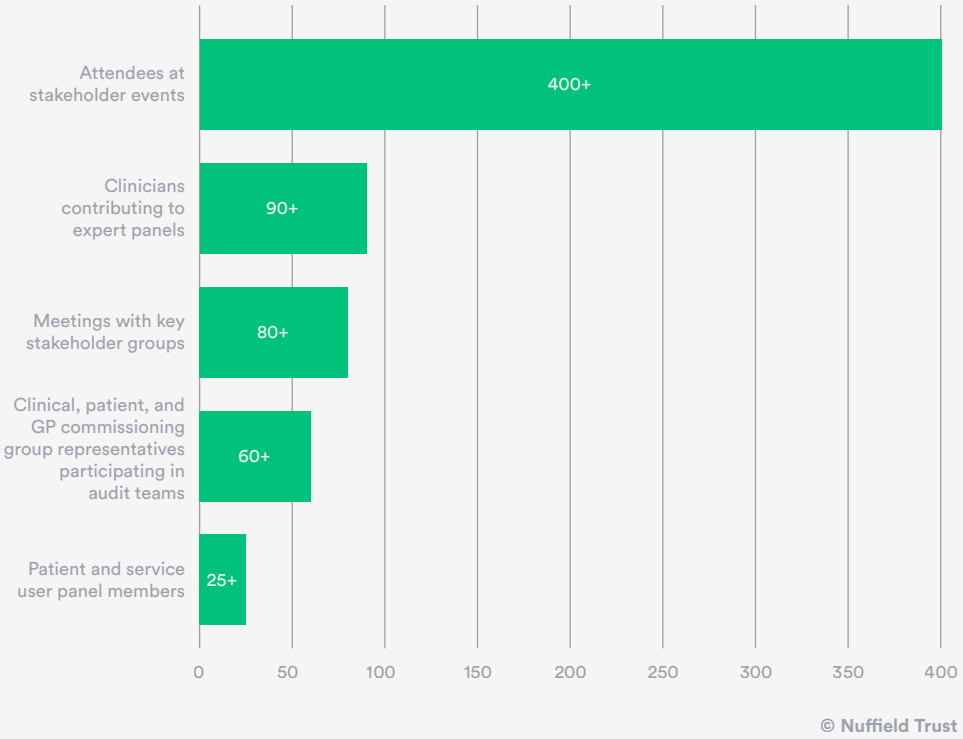
Overview of stakeholder engagement

The development of the LQS was informed by continued engagement with wider stakeholder groups – including primary and secondary care clinicians, representatives from professional bodies, commissioners, and patient and public group representatives – in different forums across London. These included: large briefing and engagement events organised by LHP; ad hoc meetings between the LHP team and local groups; and talks and presentations given at a number of events (e.g. meetings organised by the pan-London acute medicine network) by the programme leaders (see Figure 3). LHP additionally engaged with other bodies, for example by attending CCG meetings in all clusters, directors of nursing forum, the London Clinical Commissioning Council, the London Clinical Senate, pan-London patient and public involvement forums, and trust chairs and chief executives' meetings (London Health Programmes, 2013c).

The purpose of the engagement programme was twofold. Firstly, it was conceived to be part of the standard co-design process. Events were designed to allow the constructive exchange of ideas and to 'thrash out the areas of controversy'. In this way, broader consensus could be reached across London, while providing an opportunity for minor modifications to the standards. The second goal was to build and sustain momentum for change in the wider hospital community.

> "It was a public meeting… and I think what was helpful was seeing what the standards were, although that was done vaguely."
> Focus group participant

Figure 3: Stakeholder engagement snapshot
(Source: Bell, 2013)



The senior LHP team adopted a highly hands-on approach to the engagement process. Not only was a near-constant dialogue maintained with London hospitals, but the team made themselves readily available to address the concerns of individual clinicians.

Piloting of the standards

The standards were piloted in two organisations. The purpose of the pilots was to explore whether the standards were feasible to implement, rather than using the pilots as demonstration sites with the intention of sharing learning.

Commissioning the standards

Large-scale reforms to the NHS were announced by Andrew Lansley in early 2011, with the intention that the planning and funding of services would shift from the PCTs to general practice consortia (later to become the CCGs). Where the PCTs had collectively created a vision for care and strategically planned across London through LHP, this was devolved to individual CCGs, who were also responsible for the accompanying transactional and contracting processes. As a result, LHP could not manage the introduction of the standards in the same way that it had the stroke and trauma reconfigurations. So although LHP still centrally set the standards, the process of implementation was entirely shifted to providers through the mechanisms of the CCGs.

With this new caveat in mind, LHP undertook a review to assess the best way to introduce the LQS for acute medicine and emergency general surgery and encourage trusts to implement them across London. Two of the review's main recommendations were that: the LQS should be included in commissioning intentions; and LHP should work on standards for the whole care pathway, beyond acute medicine and emergency general surgery.

This review led the LHP to expand their appraisal of London service provision to include emergency departments, critical care, fractured neck of femur pathway, paediatric emergency care and maternity services. These were other areas where there was evidence of differences in service provision between hospitals and across the week. Those who developed the LQS for acute medicine and emergency general surgery thought that the approach to developing these was very useful for subsequently developing the other sets of standards.

The final step in developing and introducing the LQS was obtaining the London Clinical Senate's endorsement. Some interviewees thought this was a somewhat informal process, but it was considered to be crucial as the Senate was viewed as an ultimate decision-making body.

LHP then developed pan-London commissioning intentions to be translated into contracts with acute care trusts. The LQS were commissioned from 2012.

Themes from the development of the LQS

The gaps in the evidence base

A recurrent theme in our interviews was the tension between the very clear-cut case for change overall and the paucity of evidence for which specific types of service change would improve outcomes for patients. While the case for change was considered to be entirely compelling, the standards themselves were a combination of existing recommendations from the royal colleges, as well as a number from NCEPOD, medical sub-specialty societies and the National Institute for Health and Care Excellence (NICE), and the professional consensus opinion of the clinical expert panel.

> "The evidence for this is expert opinion, slash, at best, experience… having seen knowledge of systems that are perceived to be successful."
> Clinical expert panel member

> "So it was nowhere near as clear as something like the stroke evidence base was. There were just a number of different indicators, which were a cause for concern."
> LQS programme team member

These gaps in the evidence led to the LQS being constructed as a set of 'input' standards, which clearly dictated certain types of behaviour by medical and allied health staff. Despite this, several members of LHP believed that the standards were outcome based and did not mandate specific types of service change.

The conflict around input/outcome was compounded by the decision not to systematically measure patient outcomes or other aspects of hospital function as part of the programme.

> "I also think we went for input focused standards as a proxy for outcomes where it was not possible to easily define the outcomes."
> LQS programme team member

This led to 'a great deal of discussion about whether they were aspirational or minimum standards'. Although the result was that they were to be considered minimum standards, they were initially launched without any consequences for non-compliance.

Competing agendas

There was no strict agreement amongst the LHP team as to the exact nature and intentions of the LQS programme. While there was consistent agreement that the primary purpose was to drive quality and improve patient safety, every interviewee was explicit that there were secondary agendas attached to the LQS; the opinions of what these were varied markedly. Team members from a clinical background commented on the need for behavioural change by individual doctors and cultural change at hospital level to improve quality of care. Managerial staff considered that the ultimate desired secondary outcome from the LQS was the wholescale reconfiguration of acute services.

> "Eventually we'll just have a whole sea change in consultant or medical behaviour that is agreed and accepted as the norm, albeit we may not be entirely meeting the standards in all cases."
> LQS programme team member

> "So although the purpose of the standards wasn't to reshape services, it was generally agreed, unofficially, that that would be a by-product."
> Patient panel member

This, coupled with the lack of clarity around the nature of the standards, led to several comments that the standards were 'woolly' or 'fuzzy'.

Theories of change

Concepts of how the programme would drive change were not consistently articulated by the senior LHP team. It was clear that the team hoped that by presenting of a clear case for change and 'holding up a mirror' to poor performance, change would be galvanised through a combination of the desire to do the 'right thing' for patients and the natural competitiveness of doctors. Beyond this, however, the message was that hospitals would have to 'change themselves' without additional support or resources. While much

of this approach was dictated by the Lansley reforms – which clearly favoured bottom-up approaches to service changes i.e. putting standards out to providers – some had hoped that commissioning would be a powerful driver for innovation and collaborative working. However, at least one senior clinician recognised that setting standards without providing a clear path for transformation was problematic from the outset:

> "[NHS London was] just developing a set of standards and this is the gold standard and then [the hospitals] implement it, and service change and transformation is a different conversation altogether. So there was that tension."
> LQS programme team member

Similarly, LHP deliberately backed away from including any detailed analysis of the financial and workforce implications of the programme; this work instead was handed to the PCTs and then the regional CCGs. This division of labour meant that only one interviewee was aware of these analyses; all other interviewees considered that they had never been performed.

Some interviewees viewed the lack of visibility of detailed workforce and financial data as being appropriate, as the high cost and workforce shortages might act as a 'distractor' from the quality and safety agenda, and give hospitals an easy excuse to disengage immediately from the process. Others hoped that hospitals would be able to recognise that investment in quality and safety would reap long-term rewards. Most, however, felt that the lack of freely available financial and workforce data was a distinct oversight. While having these analyses available would allow hospitals to plan better for change, some considered that publishing the extent of the financial and workforce constraints would have led hospitals more quickly to the conclusion that the standards were impossible to implement without major reconfiguration at hospital level, which the CCGs viewed as the real end-game.

Motivations for participation

The motivations for both health care staff and lay representatives to participate in the development of the LQS were explicitly explored in our workshop with audit team members but also naturally emerged in the interviews with the LHP senior team. The dominant motivator was altruism and the desire to

improve care for patients. However, overall commitment to the LQS appeared to be a function of the degree to which the LQS aligned with professional and personal interests. For some, it chimed with a general interest in the quality and safety agenda or it was seen as a personal learning opportunity. For many, however, interest was piqued by quite specific pre-existing views around service redesign and the LQS were seen as a vehicle by which change could be driven through in their own organisations. A small number admitted that participation in the LQS was heavily driven by the desire to push personal agendas and the wish to influence the standards to specific ends, such as giving greater visibility to certain clinical specialties.

4 Trusts' response to the LQS

We explored the ways in which individuals and organisations responded to the LQS and the processes through which the LQS were implemented in hospitals through the online survey and a series of case studies, which included site visits and focus groups. We also conducted a number of supplemental interviews.

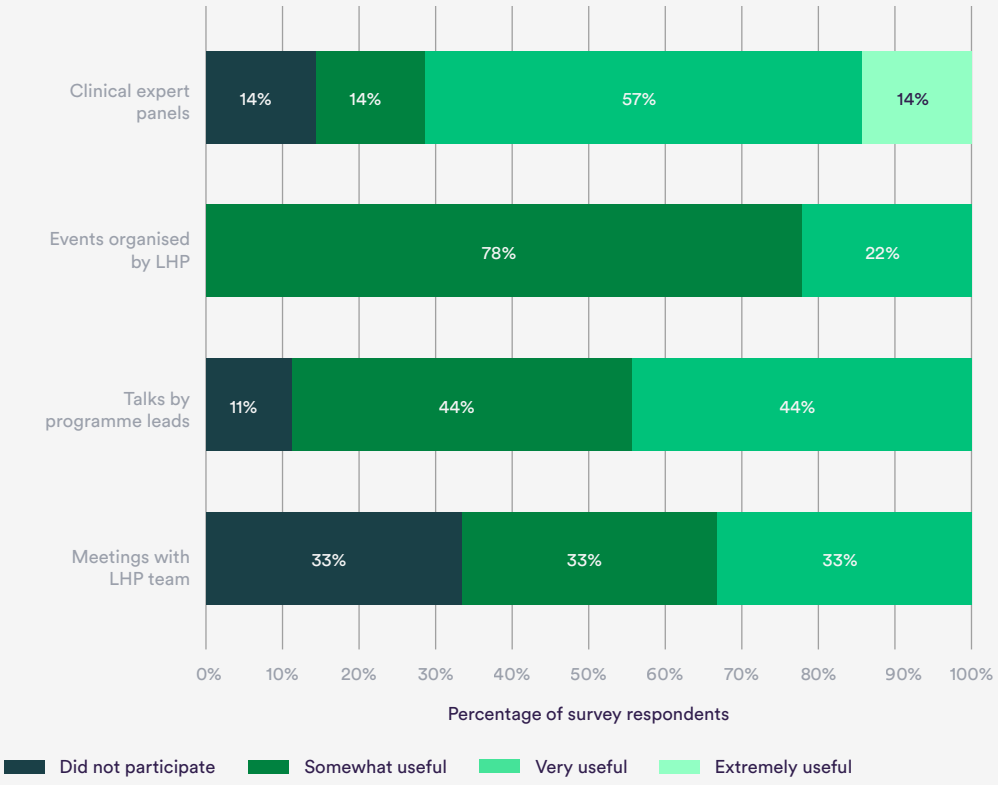
Reported engagement of NHS London and LHP with trusts

The survey results suggested that the engagement programme did not fully penetrate all London hospitals. Just over half (56 per cent) of respondents were aware of someone at their hospital being involved in the development of the LQS; and only 38 per cent had personally attended any engagement event. Of those who had not participated in any events, three had not received any information about the LQS prior to the self-assessments.

> "… it was a sudden big shock, because it was like 'oh here you go, there's some standards'. So no, definitely, no one here was involved."
> Focus group participant

There was no discernible relationship between a hospital's size or location and the degree of reported engagement with the LQS.

Figure 4: Usefulness of each of the engagement events in helping hospitals prepare for the implementation of the LQS in acute medicine*



* The percentages in the graphs throughout the report have been rounded up, so total percentages may not always amount to exactly 100 per cent.

Among those that had participated in one or more engagement events, the clinical expert panels and the talks given by the LQS programme leads were thought to be the most useful events for helping hospitals prepare for implementing the LQS (Figure 4).

The reception of the LQS

The LQS programme, as a whole, appears to have been met with little initial resistance from hospitals. The framing of the evidence and the passion of the LHP senior leads, notably Dr Andy Mitchell, resulted in almost no argument from clinicians and the comprehensive programme of engagement achieved its aim of building a broad consensus that 'something needed to be done' to improve patient care.

At individual clinician level, however, two separate processes of coming to terms with the standards and what they might mean were described. There were several descriptions of the classic 'change curve', where resistance was followed by acceptance and commitment (Cameron and Green, 2015). By contrast, a different path was followed by others, where there was initial acceptance of the need for change, but the emergence of resistance *after* a realisation of exactly what the financial and workforce implications of the LQS were.

At hospital level, the usual pattern of innovation adoption was visible, with innovators, early adopters, the majority and then the laggards. It is clear that LHP had expected this. But what is interesting is that a number of hospitals did not behave as LHP predicted that they might.

Innovation/early adoption is usually associated with the characteristics of risk-taking and a desire to demonstrate leadership, backed by stability and large financial resources (Greenhalgh and others, 2004). While, as predicted, a number of the more enthusiastic sites were financially stable, high-performing sites, they were explicitly motivated, at least in part, by the desire to *avoid* risk as much as seeking benefit.

> "If you're looking for a trust who wants to put their hand up and go first, this seems to be a trust that does that more because the feeling is that, if you go first, no one gets too cross and you perhaps get some benefit of being first."
> Frontline clinician

A number of other larger, high-performing trusts that had been expected to embrace the LQS were actually highly resistant, on the grounds that their good patient outcomes demonstrated that their systems and processes were not in need of change.

> "All of the senior people… essentially saying 'we don't meet the standards at the moment, but if you look at our mortality in line with everyone else'…"
> LQS programme team member

Some of the smaller, less well performing trusts that had been expected to be late adopters latched onto the LQS quickly. While this was heavily clinician-driven in some places, other hospitals appear to have been alert to the potential implications of the LQS being commissioned. For these hospitals, the LQS represented an opportunity to 'get ahead of the pack' and demonstrate objectively that they were capable of delivering high-quality care, thus minimising the threat of forced reconfiguration.

> "… if there was lobbying to be done about who kept their A&E and who didn't, you needed to be at the forefront of this."
> Focus group participant

Some hospitals that were late adopters/laggards did prove sensitive to the usual driver of potential negative perceptions of a failure to adopt innovation.

> "… once it was known that they were going to be published, then, suddenly, the management in these other trusts were starting to take notice and going, 'all right, well how do we now achieve these?'"
> Frontline clinician

Others, however, gave unexpected reasons for slowness in introducing the LQS. Several interviewees presented narratives where the hospital had already embarked on a quality and safety journey, or the LQS were so similar to systems and processes already in place that there was little point in further change.

> "Yes, it was clear what they were trying to do, but… it still felt very aspirational. We kind of thought 'we're trying to do that anyway'. So did it make a huge difference to what we were doing? I'm not sure it did."
> Frontline clinician

Approaches to implementation

The way the LQS were implemented across London varied greatly according to local circumstances and organisational specificities. The approaches that hospitals used for implementing the LQS, the changes that they made to their services to try and meet these, and the challenges they encountered are described in this chapter.

Responsibility for implementing the LQS

According to our survey results, the decision to implement the LQS rested in most hospitals with either the trust board or the medical director. Only in two organisations was the decision made solely at these levels; all others seemed to report processes of joint decision-making with other managerial staff, particularly departmental and clinical leads.

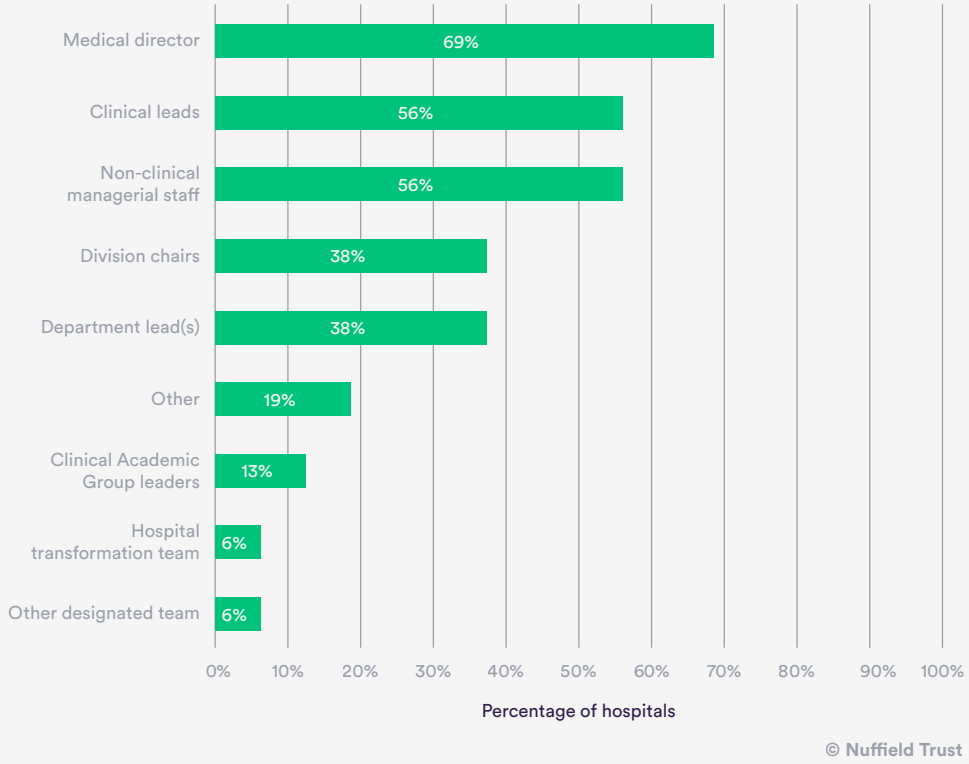
The medical director was most commonly identified as being primarily responsible for the actual implementation of the standards in hospitals (Figure 5). Again, however, there was almost always a delegation downwards to varying combinations of departmental and clinical leads, managerial staff, and divisional chairs. Four hospitals reported no senior oversight of implementation; three of these were smaller or medium sized, while the fourth was a large teaching hospital. Two of these hospitals were also in a state of flux due to emerging service reconfiguration.

There was no apparent major shift in responsibilities at most trusts before and after 2013.[5] While two hospitals did report changing the way the standards were approached in direct response to commissioning, another two cited

5 The LQS were commissioned from 2012/13, so it was hypothesised that there could have been differences in the types of approaches used before and after the introduction of commissioning.

that shifts in responsibility were the result of other structural changes within the organisation.

Figure 5: Responsibility for implementing the LQS at hospitals



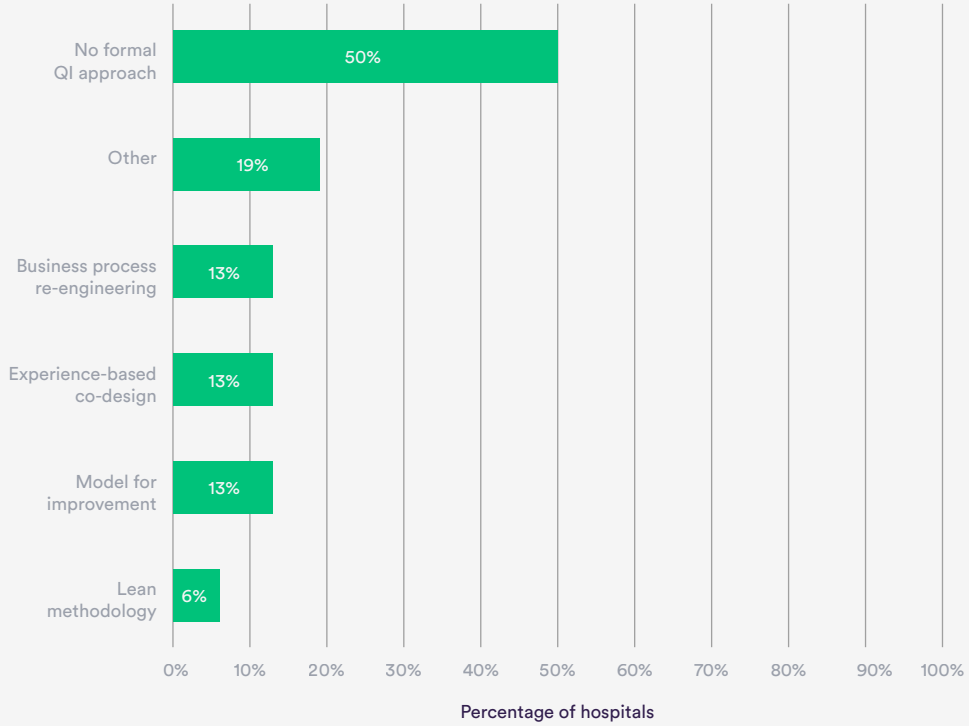
Use of quality improvement approaches for implementing the LQS

Although the LQS were introduced as a quality and safety improvement initiative, half of the hospitals that completed our survey did not use any formal quality improvement (QI) approach to implement the LQS (Figure 6). Among the hospitals that did not use a QI approach, two reported undertaking an assessment of the gap between their current practice and the aims of the LQS, and then developing business cases for investing in the priority areas of change; and one hospital reported using 'usual business processes'.

Hospitals do not seem to have used different approaches to implementing the LQS from 2013 onwards.

There was no apparent association between the methods used and the size and type of organisation, or the degree of compliance with the standards.

Figure 6: Use of quality improvement approaches to implement the LQS at hospitals



A striking feature of our interviews was the gap between the survey responses and reports of structured approaches to LQS implementation. Although eight organisations claimed to use a formal approach, this was not supported by the interviews; only three interviewees reported recognised change management processes being used in their hospitals. Only one interviewee articulated a comprehensive and coherent theory of change.

Use of specific resources and tools for implementing the LQS

Hospitals had very few specific resources for implementing the LQS (Figure 7).

Of those that did have resources, financial resources to support the direct costs of implementation (e.g. funding for recruiting additional staff) were considered by far the most useful. Support from the trust transformation team was also valued and the marked difference between the additional resources allocated for the reconfigurations of stroke and trauma services and the lack

of resources for the LQS were recurring themes in the focus groups. Survey respondents had highly mixed views of the usefulness of all other resources.

> "... it was just one of the things we had to do, there was no additional resource for it."
> Frontline manager

Figure 7: Resources used by hospitals to implement the LQS and how useful they were

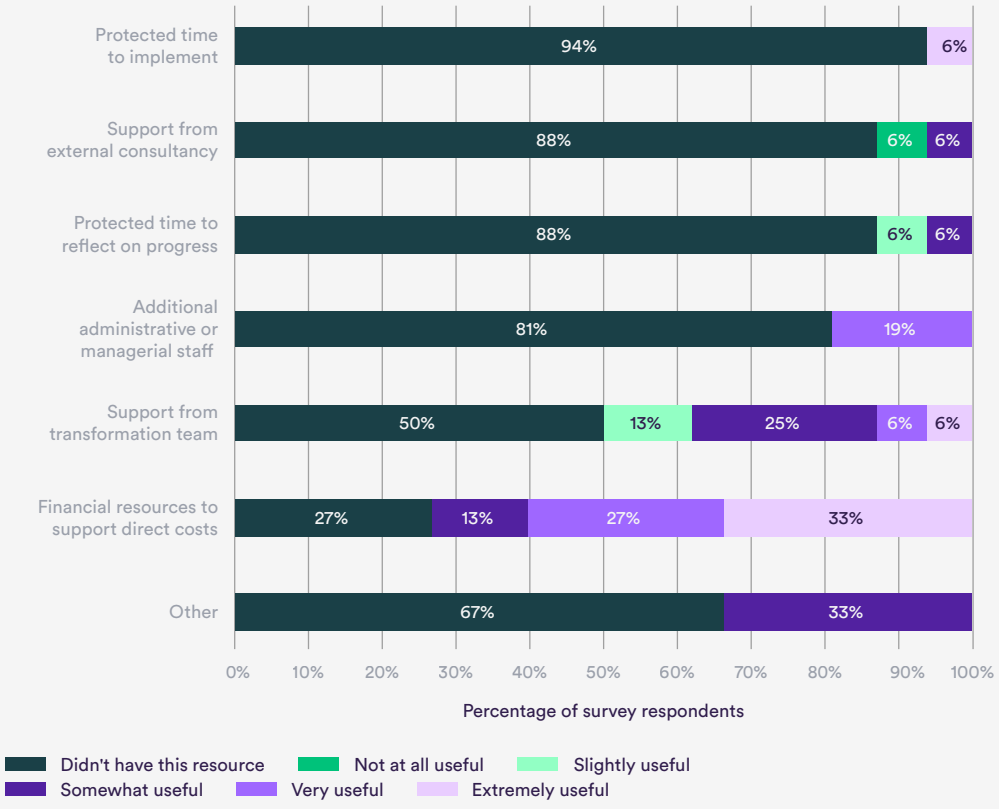
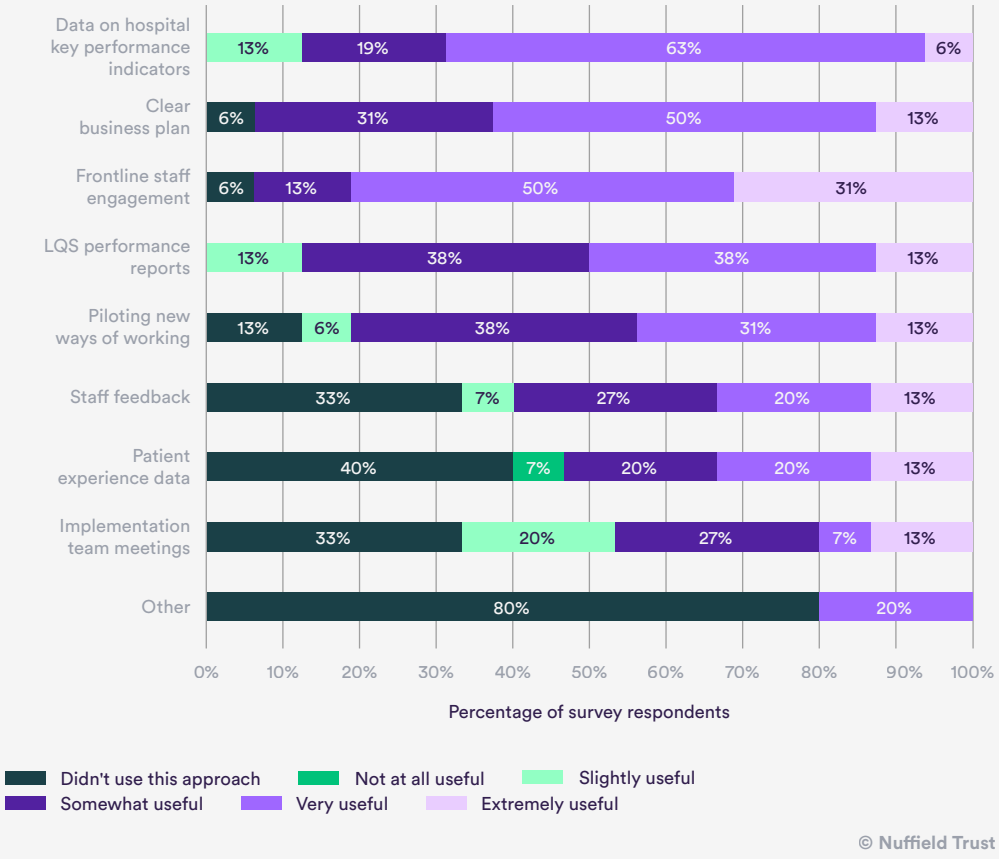


Figure 8: Tools and approaches used by hospitals to implement the LQS and how useful they were



Actively engaging frontline staff was seen as the most useful approach to implementing the LQS, followed by access to key hospital performance indicators and a clear business plan (Figure 8). The least relevant tools and approaches were meetings of the implementation team, collecting data on patient experience and collecting feedback from staff.

There does not seem to be an association between organisation type, Care Quality Commission (CQC) performance rating and hospitals' ability to use these tools and approaches.

These findings were reinforced by the interviews. Most hospitals reported a heavy reliance on business case planning, with varying degrees of success. In several instances, the business case was used to gain access to additional financial and other resources beyond those needed for LQS implementation.

This ability to 'leverage' the LQS appeared to be a function of the experience and sophistication of individual clinicians and managers, rather than other factors.

The importance of engagement of frontline clinical staff was a recurrent theme in the interviews. While many became passionate advocates of the LQS, stories emerged of often quite difficult negotiations between clinical and managerial leads and their colleagues. In many cases, changes in consultant working emerged only after protracted and often painful negotiations. These negotiations were often reported as being more important than any other aspect of change management.

It is notable that monitoring service performance was seen as more useful than performance against the LQS themselves. Not receiving regular data and support from the trust management was often cited as an impediment to service improvement. The absence of regular data was seen as more of a hindrance than its presence was perceived as an enabler.

Emerging themes

Drivers for implementing the standards

Multiple drivers for implementing the standards emerged from the interviews. As might be expected, clinicians and managers diverged on which factors were most important, but broad consensus emerged on the following:

- concerns about patient safety, triggered by the presentation of the evidence underpinning the LQS
- threat of imposed major service reconfiguration or hospital closure
- opportunity to push forward existing, or to formulate new, business plans
- opportunity to gain additional resources, particularly additional consultant staff
- opportunity to improve performance against targets
- opportunity to improve relationships with non-clinical services
- loss of hospital reputation
- loss of personal reputation through working in a poorly performing hospital.

Overall, clinicians were much more likely to cite concerns about patient safety as the driver for implementing the LQS, while managers more often mentioned hospital-level aspects. The threat of reconfiguration, however, was a very powerful driver for both groups. While it loomed largest in hospitals directly under threat, it was still a source of potential anxiety even in some major teaching hospitals.

Negotiating and prioritising the standards

Both clinicians and managers were highly sensitive to the distance between the LQS as a comprehensive quality and safety programme, and the evidence for, and the implications of, individual standards. Hospitals and individual clinicians broadly accepted the need to improve the quality of acute care. However, certain standards were viewed as being unrealistic, given existing constraints on workforce and finances. Some people also questioned whether other standards would actually result in better patient care.

> "Having interventional radiology to hand at all times, that's just not real world medicine."
> Frontline clinician

> "Some of them were impossible… well, no trust in the country would have met it then or will meet it now."
> Audit team member

The lack of clarity around whether the standards were meant to be mandatory or aspirational was a source of confusion for clinicians, managers and hospitals. Many interviewees described an extensive process of discussion and negotiation, which occurred at multiple levels. Several interviewees reported that direct conversations with NHS London/LHP were useful.

> "They're too wide… some of them… and too fluffy."
> Focus group participant

> "All of these standards imply that they should be met 100 per cent of the time and that has never been clear, what is acceptable, what we're aiming for."
> Clinical manager

At most hospitals, a process of prioritisation appears to have occurred, with explicit decisions about which standards they would attempt to implement. Priority was given variously to standards:

- where the potential benefits were most clearly visible
- with the greatest potential impact on hospital targets
- that aligned with existing service reconfiguration and/or patient safety programmes
- requiring little or no additional resource to implement
- for which a clear business case could be constructed.

There were reports of decisions being made not to implement specific standards, as they were either considered to be insufficiently evidenced or unlikely to result in any improvement.

> "There are a couple of standards that we don't meet because we don't think it's the right way…"
> Senior manager

> "… it seems unlikely that that would deliver a significant improvement…"
> Senior manager

Sitting underneath all this was a fundamental questioning of whether prescribing input standards was appropriate. While clinicians were universally comfortable with standards for specific clinical conditions, such as myocardial infarction, acute medicine was considered to be a less tractable area for this approach, caring for a diverse patient population with highly individual needs.

Disconnectedness between senior level staff and clinicians 'on the floor'

One of the most striking features of this aspect of the study was the disconnectedness between senior hospital managers and frontline clinicians (Davies and Powell, 2016). This was most visible where we were able to interview managers and clinicians from the same hospital (seven trusts), with almost completely different accounts emerging of how the LQS were implemented.

This disconnectedness was evident right from the start of the LQS programme. While senior clinicians and managers felt that they were well engaged with and informed about the LQS, many frontline clinicians reported being almost entirely unaware of them until they were asked to enact them by their managers. Interestingly, this occurred even in hospitals that considered themselves to be, if not early adopters, then at least in the early majority.

While the LHP team had theorised that hospitals where the higher level managers were most engaged would deliver the best results, we did not find clear evidence of this. Instead, we had numerous accounts of the LQS being driven from the bottom up, rather than from the top down.

> "The hospital didn't implement the standards, we drove it, it was coming from the department, it didn't come from the manager or the clinical director… I'm not aware of the managers coming around and saying here it is."
> Frontline clinician

In places where senior managers were driving change from the top down, the engagement of the clinicians was usually poor, leading to feelings of disempowerment.

> "We were often just observers to this juggernaut that was pushing through hospitals to try and organise the whole acute medicine side."
> Focus group participant

Moreover, the clinicians, as a whole, tended to have very negative views of the effectiveness of the senior management teams and viewed them very much as an impediment, rather than an enabler of change.

> "You watch what happened and think, 'that could have been done so very differently with somebody with a bit of common sense sitting up at executive level'."
> Focus group participant

> "You've got someone who is the equivalent of a mum or dad telling people to do their homework, just walking around every day and shouting at you…"
> Focus group participant

Reported feelings of disengagement and disempowerment were even more acute when transformation teams or external consultancies were used. At several hospitals, frontline clinical and managerial teams gave accounts of being vaguely aware of often frenetic activity on the part of the transformation team and senior management, the results of which were completely opaque.

> "I know there was a lot of work going on but none of us had sight of that – like I say – everything here's a bit of a closed shop."
> Focus group participant

While clinical staff had a strong tendency to cast themselves as the 'heroes' of their stories – driving forward service change with little or no assistance from senior managerial staff – there were very specific accounts of quite extraordinary efforts on the part of senior clinicians to push through the LQS. These narratives are, nonetheless, a sign of deep disconnectedness between senior hospital managers and clinical staff.

5 The LQS audit process

Building on the acute medicine and emergency general surgery work, the LHP created the Quality and Safety Programme in 2012. The programme was supported by the clinicians in the clinical expert panels and it also involved service users. The programme aimed to audit acute hospitals in London against the LQS and drive standards in other areas that had not been previously addressed.

LHP's audit programme – first self-assessment, audit visit and second self-assessment – was an important element in supporting hospitals to implement the LQS. While the self-assessments in 2012 and 2013 provided hospitals with a baseline of how far their services were from meeting the LQS, the site visits in 2012/13 were an opportunity for hospitals to receive peer review advice and feedback.

The development of the audit process

The purposes of the audit process were twofold. First, the audits were to be a measure of the extent to which hospitals had implemented the LQS. Second, LHP believed that the process of the audits would drive hospitals to further implement change. It was believed that the prospect of being measured and have the results made public would push organisations that had previously been resistant into taking the LQS more seriously.

In order to test the audit process, LHP conducted a pilot audit in two acute care trusts in London (who had volunteered), ahead of the full roll-out of the audit process. These pilots helped inform how the full audit was rolled out across London (London Health Programmes, 2012b).

The first step of the London-wide audits (Figure 9) was a self-assessment survey that each acute hospital in London had to complete. Together with their self-assessment, hospitals had to submit supporting evidence (e.g. standard operating procedures and anonymised extracts from patient

notes). The LQS programme board and multidisciplinary panels then reviewed this evidence and used it as a baseline for establishing further lines of inquiry.

As a follow up to the self-assessment, the LQS programme team organised and conducted audit visits to each hospital. The primary purpose was to 'triangulate' or 'quality assure' the returns from the self-assessment. These visits were also seen, perhaps more importantly, as an opportunity to identify areas where hospitals needed to make further improvements. It was intended that the process should be facilitative rather than punitive.

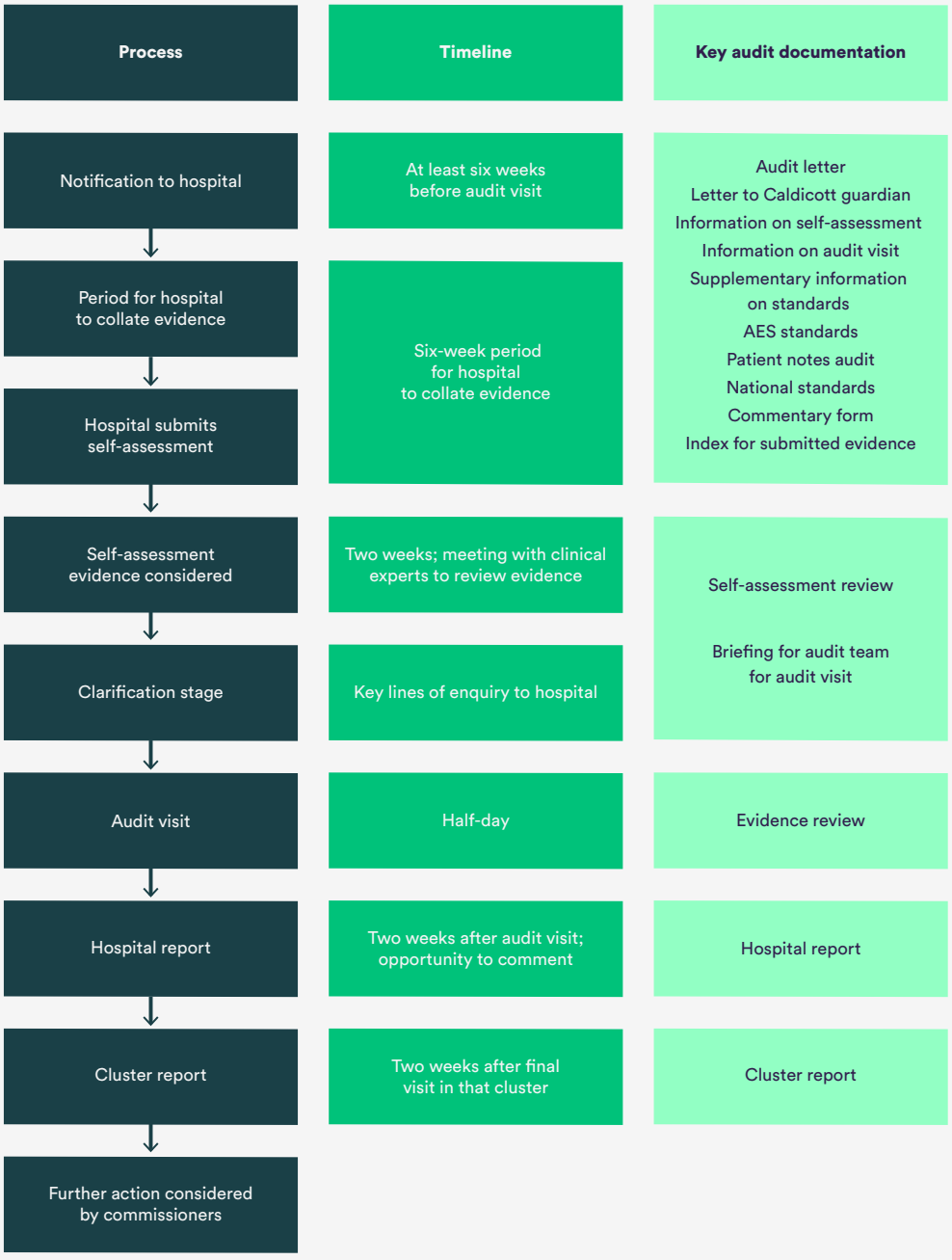
> "… because if it just changed their mark, then frankly what's the point of that? But if it stimulated or acted… as a catalyst for them to do more, then that would be a good outcome."
> LQS programme team member

The audit visits were predominantly peer-led, with the original expert panel recruiting additional specialty-specific consultants from within London. A smaller number of consultants from outside of London were invited to join, along with patient and lay representatives, to ensure both independence and due process.

Extensive preparatory work was done prior to each site visit. The evidence submitted by each trust was reviewed by the audit teams prior to the visits. The teams specifically scanned for any potential differences between the self-assessment returns and what was known locally about services. This allowed for areas of key interest to be identified prior to the visits.

The audit visits were highly structured. They included: an initial presentation from the LQS audit team; a presentation from the hospital team on how they were implementing the LQS; a site walk-around in the emergency department, the acute surgical unit, the acute medical unit (AMU), the diagnostics department and often the intensive care unit; a focus group with junior doctors, therapists and junior nursing staff (without the presence of senior staff); and a final feedback session by the LQS audit team on the hospital's compliance with the LQS.

Figure 9: Overview of the audit process undertaken by LHP
(Source: London Health Programmes, 2013b)



During the visits, members of the audit teams were also encouraged to engage with other staff and members of the public on the wards or in the corridors to further triangulate the information. As a product of the audits, the LQS programme team produced reports with the results from individual sites and a pan-London findings report, with scores for performance against the individual standards being revised by the audit teams.

During the first part of the audit process, some of the LQS for acute medicine and emergency general surgery were challenged and later reviewed by the Quality and Safety Programme Board. The revised standards were used in the second self-assessment that took place in November 2013 (London Health Programmes, 2013b). This second self-assessment did not involve an audit of patient notes or the peer-review hospital site visit by an audit team (NHS England, 2014).

In 2014, NHS England organised a meeting for hospitals to share how they were implementing the LQS and to share good practices. Although it was not clear at the time, this was the last event held by NHS London in promoting the LQS.

The conduct of the audit process

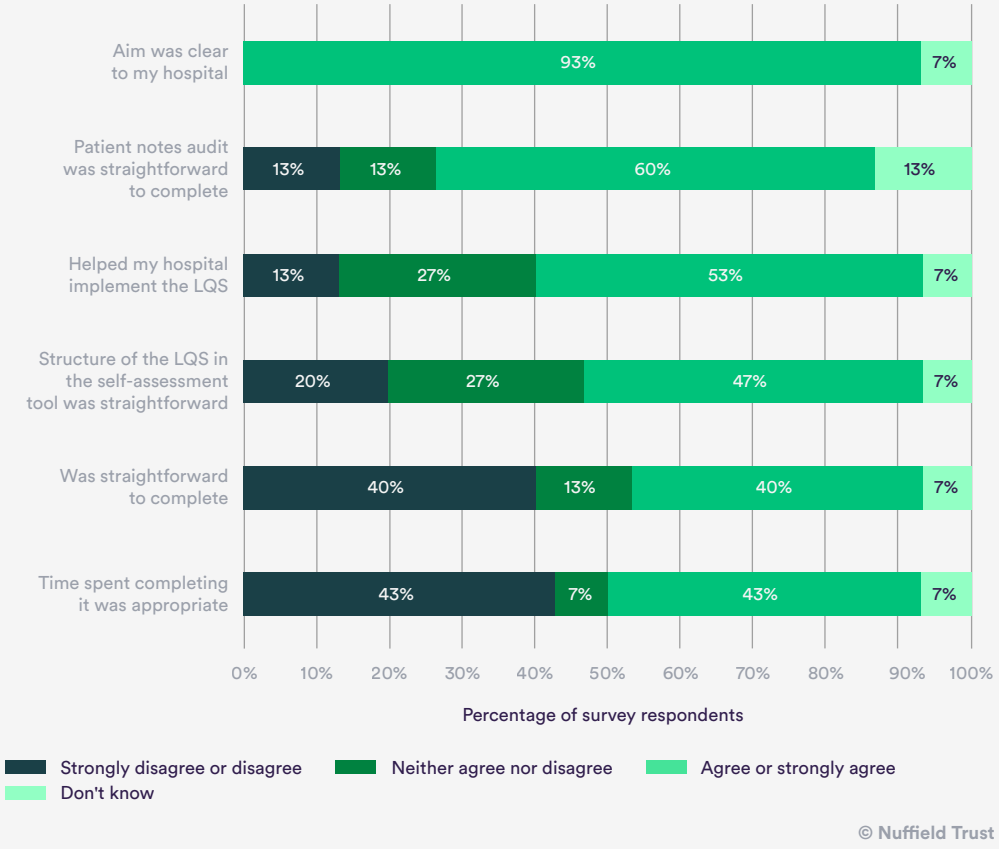
The self-assessments

The aims of the self-assessment exercises were overwhelmingly clear to most survey respondents. However, opinions were divided as to how straightforward the self-assessments were to complete. Around 40 per cent or more of respondents strongly disagreed or disagreed that they were straightforward to complete and that they took an appropriate amount of time (Figure 10).

Over half of respondents believed that the first self-assessment helped their hospital implement the LQS. Only two people disagreed with this. One respondent pointed out that this helped the hospital understand their baseline.

Some respondents had no knowledge of a second self-assessment at their hospital. Among those who did, nearly 67 per cent thought that the aim of the self-assessment had been clear to the hospital. Forty per cent believed it helped their hospital implement the LQS. One of the respondents mentioned that this second self-assessment was 'much more difficult to complete'.

Figure 10: Perceptions about hospitals' first LQS self-assessment and how useful it was



There was no apparent association between people's perceptions about the self-assessments and the size of the organisation. Similarly, the way respondents viewed the self-assessment does not seem to be associated with hospitals' performance against the LQS.

The interviews provided a more nuanced view of the self-assessment process. In a number of organisations, clinicians asked to complete the self-assessments had been entirely unaware of the LQS prior to having the task assigned to them. The complexity of the information that trusts were required to gather was often seen as burdensome.

> "… the finding of the information is terribly challenging, because it's all there in the hospital somewhere, but not all in one place. So you have to go running around and collating is quite an operation…"
> Audit team member

A number of the standards were compound in nature, with multiple components. Moreover, the scoring system asked, if sites were not compliant with standards, whether plans were in place to address how the standard was going to be met. This created a degree of confusion in hospitals, who were unsure about how to use the scoring system.

> "… you could be compliant with some of it… another part of it… you were non-compliant, what do you put?"
> Focus group participant

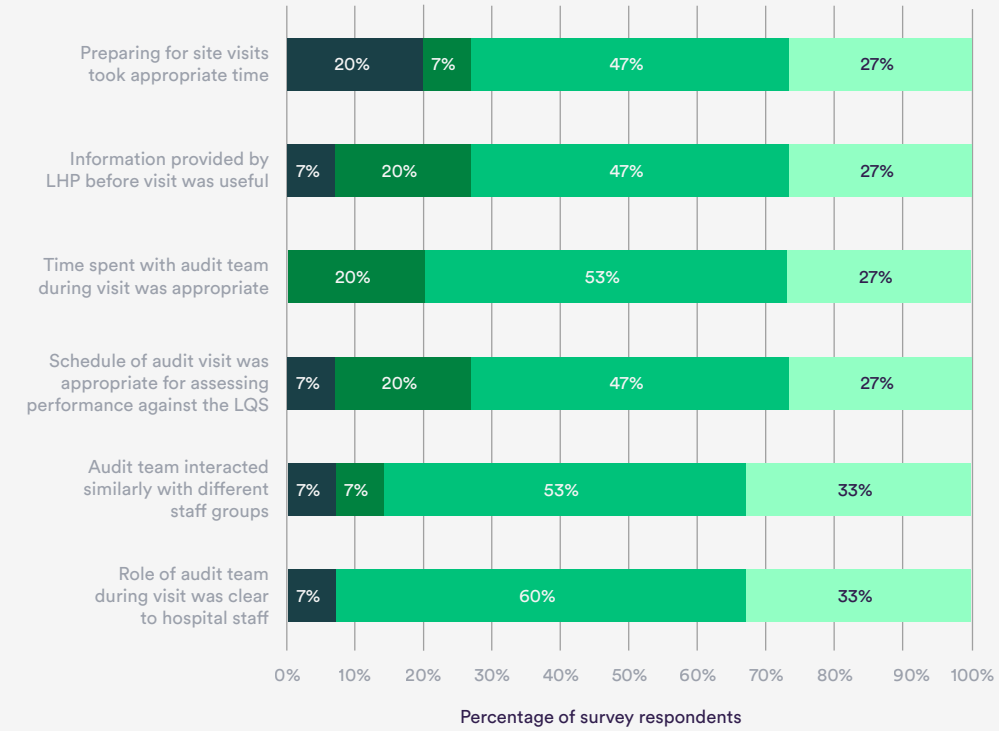
There were also reports of conflicts between management and clinical staff about whether services were genuinely compliant with the standards.

> "In the usual way of trusts, there was the temptation to say 'everything's fine', until the clinicians… [say] it's demonstrably not."
> Frontline clinician

The hospital audit visits

Views expressed in the survey of the processes involved in the hospital audit were mostly positive (Figure 11a). Sixty per cent of respondents were clear about the role of the audit team during the visit to their hospital. However, about half the respondents indicated that insufficient information had been provided ahead of the visits.

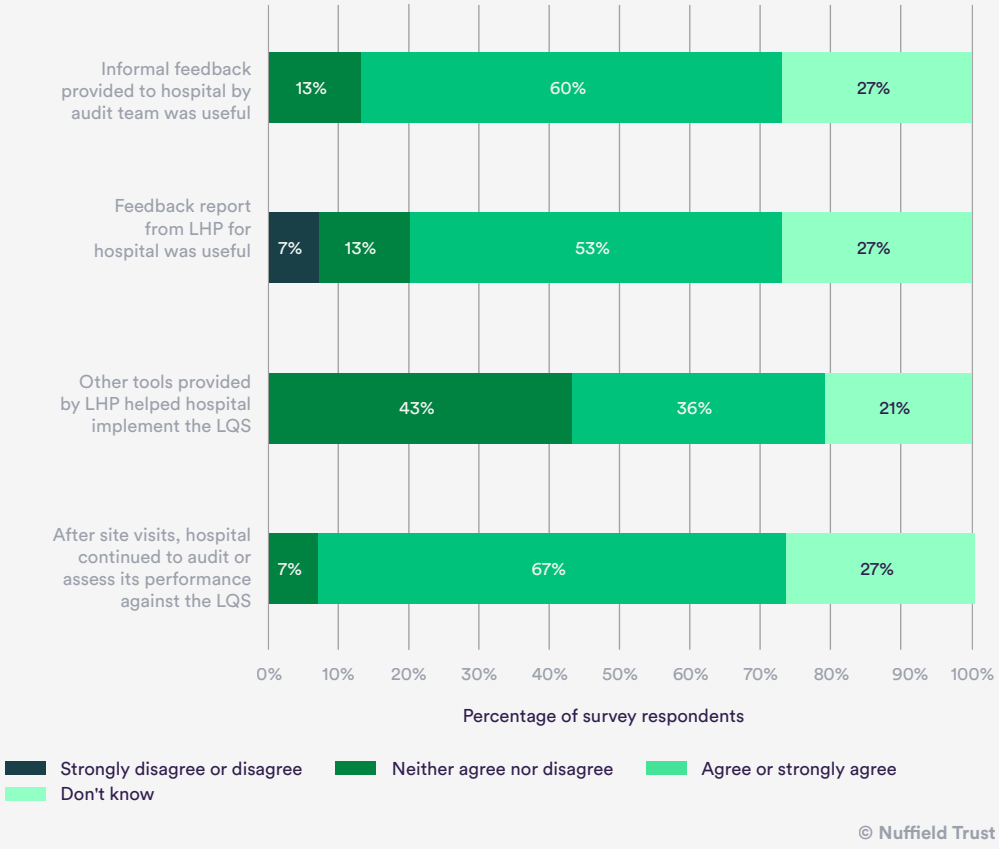
Figure 11a: Hospital managers' and clinicians' perceptions about the LQS audit site visits



Almost all who were involved in the audit visits agreed that the informal feedback provided to the hospital by the audit team was useful. Respondents were slightly less positive about the usefulness of the formal feedback report produced for each hospital (Figure 11b).

Interviewees were inclined to view the audit visits as being resource intensive, although it was acknowledged that LHP had organised the visits in a way that minimised the time commitment of any single individual.

Figure 11b: Hospital managers' and clinicians' perceptions about the LQS audit site visits



The usefulness of the audit process

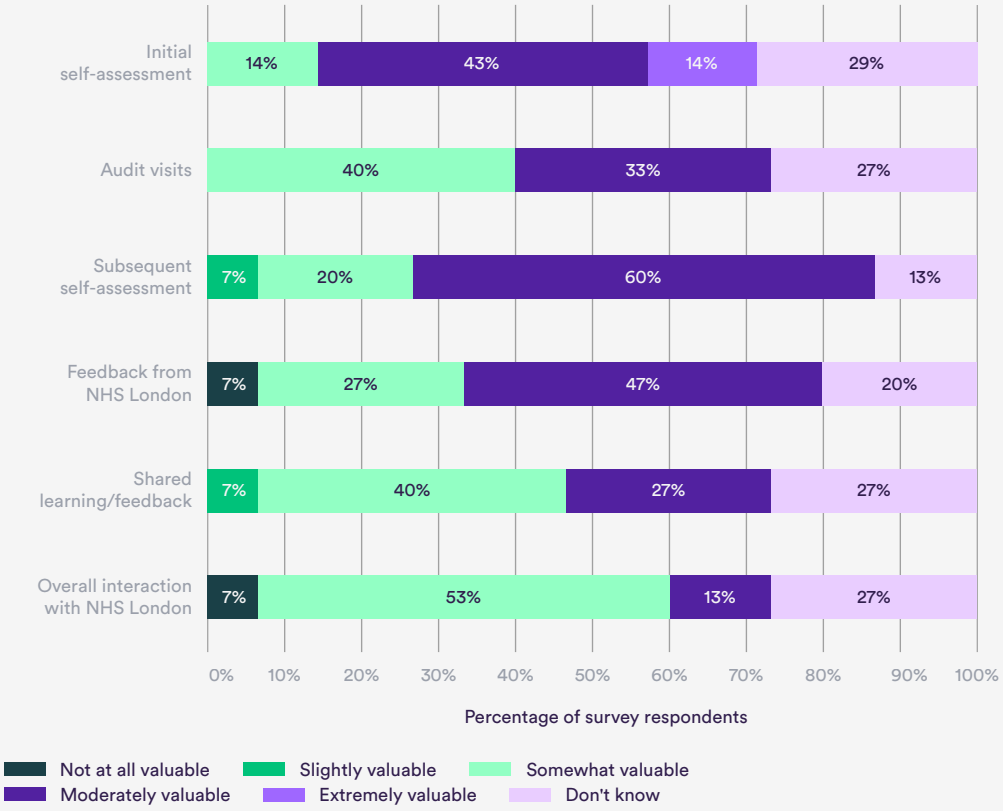
Hospital perceptions of the usefulness of the audit process

Interestingly, there did not seem to be an association between how useful individual components of the audit process were perceived to be and how well each component was executed.

However, the interviews suggest that hospitals appear to have judged the usefulness of the audit process by two standards: the extent to which it helped them to implement the LQS per se and the extent to which it helped to further the existing goals of the hospital.

The audit process was clearly a spur to the further implementation of the LQS in many organisations. A number of interviewees pointed to the fact that it was only the impending site visits that prompted senior managerial staff to engage with the LQS. Others found that it helped them focus more clearly on what more there was to be done and found the suggestions from the audit teams as to how services could be improved to be quite helpful.

Figure 12: Perceptions about the usefulness of the audit process



"People just didn't think that NHS London would score us red, so it was a real shock that they needed to make some changes in some places."
Frontline manager

"It was a helpful exercise because it helped to highlight where we weren't meeting the standards."
Focus group participant

Trusts that had been slow to implement the LQS tended to find the audit process more difficult. The threat of reconfiguration for some trusts also coloured their perceptions of the audit process, making them substantially more suspicious of the audit teams and more likely to report a negative experience.

> "The site visit… did feel slightly punitive."
> Focus group participant

An interviewee at one well performing trust, however, described the scoring system attached to the audit process as negating other positives attached to the programme.

> "[It was] quite demoralising for teams that have gone quite some way to get the changes on the ground and then you're still red."
> Focus group participant

Most survey respondents did not participate or were not aware of their hospital having participated in the shared LQS learning event in 2014.[6] Only 20 per cent of the respondents confirmed that their hospital had been able to share important learning at this event and only one respondent thought that the event had been useful for implementing the LQS at their hospital. One hospital, however, pointed out that 'more shared learning from similar trusts may have been helpful'.

London Health Programmes' perceptions of the usefulness of the audit process

From LHP's perspective, the audit process was key in driving forward and embedding the LQS as a permanent part of health care services in London. It particularly provided validation that the LQS programme was headed in the right direction and had genuinely been responsible for initiating change. Although no one hospital had implemented all of the standards, each of the standards had been met in at least one hospital. This confirmed for the LHP

6 This event gathered hospitals that had showed progress or sustainability in meeting the LQS, to share good practices, challenges and future direction.

team that, contrary to objections, the standards were realistic and achievable, providing additional confidence in the process.

The site visits were considered to be especially important, as they provided the opportunity in those late adopting organisations to investigate the causes of this. They were also considered to be extremely useful in facilitating quite open and frank conversations about gaps in patient safety that would have been difficult to broach in other circumstances.

> "That was an excellent process. It had lots of people who knew what they were talking about going to the hospitals, meeting the right people and saying 'here is the evidence', 'where are you at?', 'how do you think you're going to tackle it?'."
> Audit team member

Emerging themes

Discrepancies in the results of the audit process

Not unexpectedly, there were discrepancies detected between what was submitted on the self-assessment returns and the findings of the subsequent site visits. Some interviewees did report that they were overly optimistic in their returns. Others said that they had found the self-assessment scoring confusing. While no hospital admitted to deliberate manipulation of the system, a small number of interviewees were highly candid and confessed to degrees of 'gaming'. Where reasons for this were given, fear of negative consequences was most commonly mentioned.

> "… instead of actually remembering why the standards are there and trying to make the standards work for the pure intent and the goodness of the standard, you start looking at ways of gaming the standard…"
> Frontline clinician

The managers and the clinicians on the audit teams were split on how they viewed the gaps between the self-assessments and the site visits. The managers were inclined to give hospitals the benefit of the doubt and attribute gaps to either over-optimism or 'misunderstanding'. The clinicians were

more cynical. One attributed the differences to the fact that senior managerial staff, who were often tasked with completing the self-assessments, did not actually have a good idea of 'what is going on' in their organisations. Others suggested that the gaps pointed to covert agendas; some trusts, it was thought, had decided that presenting themselves as failing against the LQS might demonstrate service needs and therefore make it easier for them to secure more investment.

> "I mean the gaps were not huge, but there was an optimism bias in the self-assessment."
> LQS programme team member

> "It was interesting… some seemed to take it as… 'we're going to say we've met them even if we haven't and then we're going to hope we don't get caught'. Others approached it from the point of view of 'well, this gives us a potential lever'… so they would be much more likely to declare certain areas red'."
> Clinical expert panel member

Self-presentation of hospitals

As the LHP team expected, hospitals were not uniformly receptive to the site visits. In some cases, this was clearly because the organisations were aware of how unprepared they were for the visits. In others, this appears to have stemmed from feelings of overconfidence generated by low mortality and reputations of excellence.

> "… others were 'well we're not really aware of what this is all about, this has all come as a bit of a surprise'."
> LQS programme team member

> "There were two or three sites… designed to tell us how good it was… that kind of 'we're fantastic, why are you bothering us?' type of attitude."
> LQS programme team member

Of those organisations that were more open to the visits, some were clearly looking for praise, while others saw the visits as genuine opportunities to help improve their services.

> "Some organisations arguably were more or closer to meeting the standards, so they were delighted that they were going to get a group of peers come around and say how brilliant they were."
> LQS programme team member

> "Some departments had clearly been very honest about where they were and very clear that they had clear recovery plans."
> LQS programme team member

The reliability of informants during the audit visits

The audit teams were split on the matter of who they thought were the most important informants in the hospital. Auditors from a managerial background tended to view the senior management team as the best indicator of how well the standards were implemented. The clinicians on the team, however, were often more sceptical of the presentations by senior management and were of the opinion that frontline staff, particularly the junior doctors, were the most honest and accurate in their assessments of processes and standards of care.

> "You'd get [the] juniors to come to a separate meeting where the seniors weren't present… and they would tell you something very different."
> Audit team member

6 Barriers and enablers to implementing the LQS

> "… my sense was nobody had an issue with the overall objectives. It was just about the realism of getting there and 'what is the timescale to get there?'…"
> Patient panel member

The perceived barriers and enablers to individual hospitals implementing the LQS were a major line of investigation. While no single standard was unattainable, the standards demanded that trusts improve care delivery across multiple domains to quite tight time targets, making the programme challenging and ambitious.

> "… probably a lot of clinicians could see, logically, it made perfect sense but they would have probably said, 'with all the local challenges we face and all the directives we get from X, Y and Z, we're not quite sure. We can't actually see how we would get from where we are now to where we need to be.'"
> Patient panel member

Main barriers and enablers

The main enablers and barriers to implementing the LQS as identified in the survey are outlined in Figure 13 and Figure 14.

Figure 13: Enablers of the implementation of the LQS at hospitals

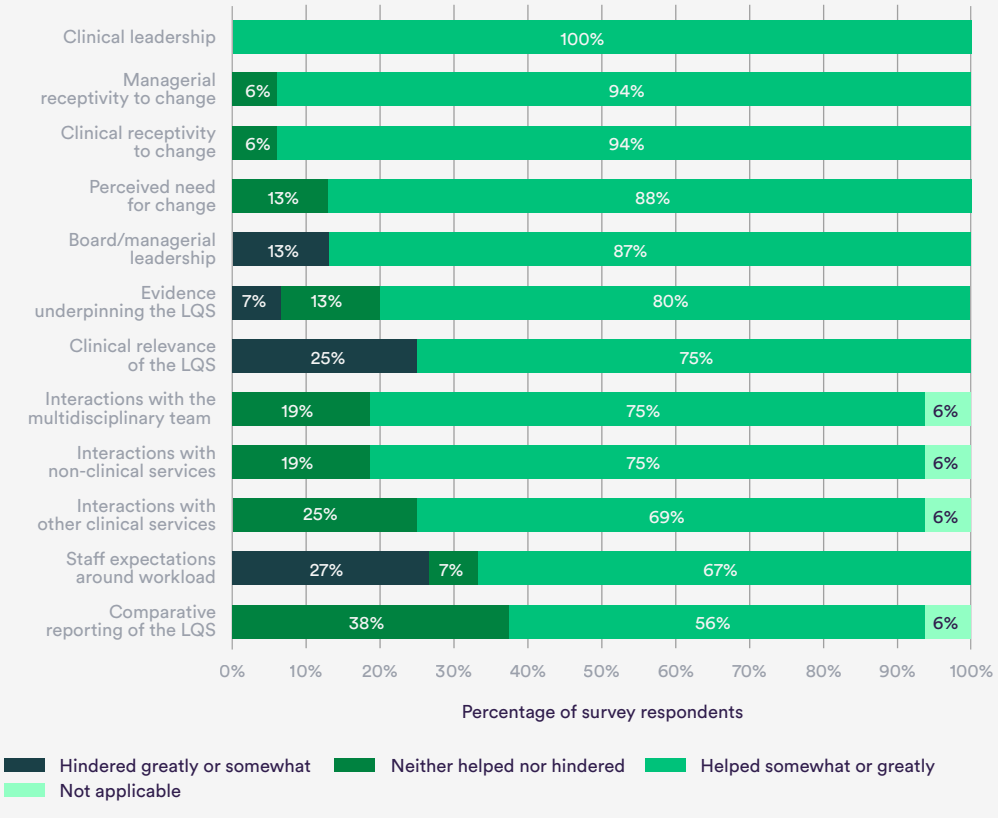
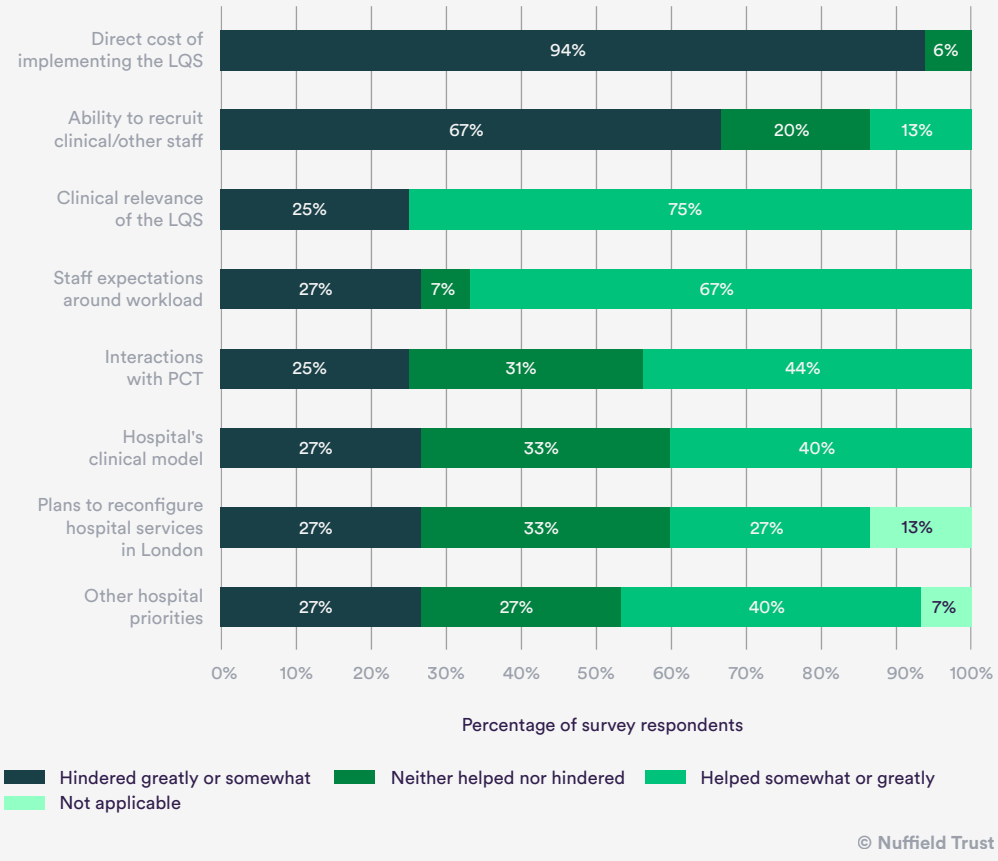


Figure 14: Barriers to the implementation of LQS at hospitals



While the interviews confirmed the major enablers in the survey results, interviewees also highlighted different barriers from the themes in the survey. Particular emphasis was given to commissioning and reconfiguration.

Major enablers tended to rest at the micro and meso levels, being functions of the frontline clinical team or of the hospital organisation. Major barriers tended to occur at the meso and macro levels, resulting from factors relating to the hospital or the external health care landscape. This may be partially a reflection of the fact that most survey respondents and many interviewees had departmental or divisional responsibilities, giving them a degree of control over internal factors. However, even in hospitals where the LQS were implemented with success, the external environment was felt to significantly impede change. The main barriers and enablers are outlined in Figure 15.

Figure 15: Main barriers to and enablers of the implementation of the LQS

Enablers

Receptivity to change and buy-in

Hospitals overwhelmingly saw **clinical and managerial receptivity to change** as one of the key enablers of the implementation of the LQS. This was seen as almost universally central to driving implementation.

> "… a lot depends upon the enthusiasm of the clinical and medical directors for them because if they were driving it, if they'd picked it up and were really driving it, then it tended to happen."
> LQS programme team member

Receptivity was critical at multiple levels at hospitals – at higher organisational level, departmental or unit level and individual level. The degree of alignment between the different levels appears to be predictive of how easily the LQS were implemented. This was especially apparent from discussions at different case study sites. The survey also pointed to the importance of interactions of medical teams with multidisciplinary staff and non-clinical services. Existing healthy and open relationships between individuals within clinical units and between departments made negotiating the LQS a smoother process, while team dysfunction and 'silo working' heavily impeded or even derailed particular standards.

Unsurprisingly, then, receptivity was predominantly seen as a function of hospital organisation and culture. Hospitals with existing patient safety and/or innovation programmes appeared more open to change.

Receptivity to change was also tied to the degree of **buy-in** to the LQS as a whole. Those who actively implemented the LQS believed strongly in their usefulness. There was a general perception that LHP's engagement programme contributed widely to clinical and managerial buy-in.

There were consistent distinctions made throughout our study between the senior non-clinical managers in an organisation and those with departmental or divisional responsibilities. It was receptivity and the enthusiasm of these lower level managers that was considered to be more important, as they held the keys to unlocking resources or facilitating difficult conversations around the reorganisation of services. This was consistent with the view that where the LQS were successfully implemented, it was predominantly led from the bottom up, rather than the top down.

> "The chief exec can think what he wants, but it depends how much contact he's got with the people at the bottom."
> Frontline clinician

However, senior managers remained important, with the degree of internal organisational engagement, connectedness and communication between the senior management and the frontline clinicians being a critical factor in enabling implementation.

Clinical leadership

As with receptivity to change, clinical leadership was critical at multiple levels. At the highest level, the strong clinical leadership exhibited by the LHP team and the clinical expert panels was seen as a critical factor in establishing the credibility of the LQS. Without this, it is likely that the standards would have solely been viewed as a mechanism for driving through major regional service reconfiguration and hospital closures.

Many pointed to the role of trusts' medical directors. Hospitals where the medical directors showed a personal interest or took a hands-on role in implementation tended to progress more quickly than those where responsibility was devolved downwards or where little interest was taken.

Overwhelmingly, however, clinical leadership at departmental level emerged as a critical factor, particularly when coupled with high levels of belief in the need to improve services. Striking narratives emerged of clinical leads initiating change, even before the LQS were adopted at hospital level.

Managerial and board leadership

The LHP team had theorised that board and/or senior managerial leadership would be the most critical factor in implementing the LQS. As has already been demonstrated, this was considered to be less important than factors at departmental level. Notably, many interviewees reported that senior management had had little or nothing to do with implementation until after 2013, when commissioning was introduced and it became apparent that major service reconfiguration was likely to be contingent on performance against the LQS. It appears, however, that the LQS were more easily implemented in hospitals with pre-existing commitments to patient safety and/or innovation, itself effectively a product of leadership at whole hospital level (Bate and others, 2008).

Barriers

While the results of the survey and what emerged from the interviews were very tightly aligned with regard to enablers, this was not the case with the barriers. Although the interviews confirmed the importance of the costs of implementation and the associated workforce issues, a very different series of barriers emerged in the interviews. These included:

- existing service pressures
- size and type of organisation
- commissioning
- organisational culture.

Cost of implementation

The most salient barrier by a large margin was the **direct financial cost** of implementing the LQS (see Figure 14 on page 60). Many simply viewed the LQS as being entirely unaffordable as a whole, while others pointed to the significant financial resource required by specific standards, such as time to consultant review and the availability of key diagnostic and interventional services. Interviewees recognised that hospitals would have to **recruit more staff** (e.g. consultants) and that the cost would often be difficult to support. Commissioners also underlined the challenge in identifying whether this cost was covered within tariff or, if not, where the funding would come from.

> "… discussed with other medical consultants the standards and what we would need to have in place to achieve them… and, really, from the outset, it was almost as if, financially, we would never be able to afford that."
> Frontline clinician

The lack of investment in the necessary equipment, such as CT scanners, also emerged as a factor. Of note, hospital size was not a key factor with regard to spending. Rather, hospitals with major trauma and/or stroke services or who otherwise delivered highly specialised services tended to have invested more heavily in infrastructure than hospitals of equivalent size that functioned more as district general hospitals.

The LQS had not been packaged to include an analysis of costs, this being considered the function of the regional PCT clusters. While a small number of interviewees agreed that financial considerations should be secondary to improving patient safety, the **absence of costing considerations** undermined, in some eyes, the credibility of the LHP and NHS London team. This view hardened when the implied potential savings from safer services did not materialise.

> "… I don't think NHS London quite understood, if you were going to do it properly, how much resource it would take…"
> Frontline clinician

The **lack of attached funding** to the LQS programme, unlike the stroke and major trauma reconfigurations, was a source of some bitterness. This was compounded by the fact that there were no London-wide mechanisms to assess and support the costs of initial change and the inevitable longer-term increases in expenditure. The response of local commissioners varied markedly. While some incorporated the LQS into local CQUINs,[7] or were more open to business cases presented by hospitals, others did not provide any additional resources despite strenuous protestations to the contrary.

In some cases, the financial aspects of the LQS led to explicit decisions being made not to implement certain standards. One clinician reported that a proposal for recruiting additional consultant staff was rejected when it became clear that the hospital was likely to be downgraded by its trust, making it pointless to invest heavily in meeting the standards.

The availability of financial resources dictated the pace of change in other organisations. Those standards which carried little or no additional costs tended to be implemented first. More costly change tended to be carried out in a step-wise fashion over longer periods of time, as resources became available. This failure to fully implement the LQS in a relatively short space of time was

7 The Commissioning for Quality and Innovation (CQUIN) scheme aims to deliver clinical quality improvements and drive transformational change to reduce inequalities in access to services, the experiences of using them and the outcomes achieved. The scheme sets out indicators in several areas which are included in contracts between CCGs and providers as financial incentives (NHS England, 2016).

thought to markedly compromise the system's ability to transform and realise potential savings.

While the cost implications of the complete implementation of the LQS were very real, some interviewees viewed the failure of hospitals to grapple with the LQS as an excuse either not to engage fully with the safety agenda or for not addressing more difficult underlying cultural and organisational issues.

> "It's priority. There is plenty of money here to implement sensible things that have patients at the centre of their purpose."
> Focus group participant

While cost was found to be the largest barrier to change in the survey, it should be noted that it was not considered to be an important enabler. In part, this may stem from the fact that unscheduled care services are almost universally loss-making, with clinicians and managers alike being less driven by financial considerations than, for example, surgical services. Others recognised that while money might be a necessary condition to implement change, it was not a sufficient one.

> "… if someone just threw money at it I don't think it would happen, you needed clinical engagement and vice versa."
> Focus group participant

Workforce

> "… everybody wants to maintain the fiction that we can do clinical transformation here with the workforce and we can keep the system in balance."
> Workshop participant

The **ability to recruit** clinical or other professional staff was a key barrier highlighted throughout our research. The main workforce challenges were perceived to be twofold. The first was the **availability of trained staff**, given the national shortages of consultants in acute specialties such as acute medicine, emergency medicine and geriatrics, and skilled radiographers. This was viewed as being a particular problem in smaller hospitals. Not only were these organisations already relying heavily on locum staff to provide

existing services, but they were struggling to compete with larger, more attractive organisations in what was effectively a buyers' market for jobs. It was suggested that NHS London or LHP could potentially have collaborated with the Royal College of Physicians to address the workforce issues.

Issues around workforce were also intimately associated with cost. In addition to the direct costs of additional staff (discussed above), the entwinement of **indirect costs** with matters of workforce was highly problematic. Some hospitals, for example, were able to convince their consultant workforce to increase the level of out-of-hours service in order to meet certain standards. However, the trade-off was that consultants were either allocated additional time in lieu or dropped sessions for other services, effectively making the service more costly to the hospital despite being delivered with budgetary constraints. Other hospitals reported that compliance with the standards could only be achieved through the use of locum staff, increasing costs beyond what had been originally allocated.

> "We just don't have the right people to even provide the five-day service, let alone the seven-day service."
> Frontline clinician

Cost also became an issue with regard to other workforce matters. A number of hospitals reported that they had been attempting to innovate around workforce with the development of advanced nurse practitioner (ANP) programmes for acute areas. This led to the ANP programmes competing with plans and funds to expand the consultant workforce.

Internal issues relating to other aspects of workforce also emerged as problematic. A number of organisations reported difficult negotiations with consultant staff around service reconfiguration. In some cases, it was seen as unfair to ask already thinly stretched services to deliver more, given that provision already depended upon 'a huge amount of discretionary effort'. Some places simply side-stepped arguments by agreeing to employ more consultants.

> "It is easier to put more consultants in place than to re-roster your existing consultants."
> LQS programme team member

Others reported that the introduction of service reconfiguration directly resulted in established hospital consultants retreating from the front door in the face of roster redesign. The accompanying staff instability was seen as highly problematic, as managerial responsibility ended up resting on fewer and often less experienced shoulders.

> "Some of the best and brightest doctors would step away from it… there's numerous trusts where whole cohorts of clinicians have come and gone."
> Focus group participant

Despite the widespread reports of often quite complex workforce problems, some were sceptical of trusts' complaints about workforce shortages. Again, it was considered that workforce was used as an excuse to mask managerial and cultural problems. It was considered that LHP could have averted this problem by publishing a detailed analysis of the workforce implications and potential rota solutions alongside the LQS.

> "… it's a matter of appropriate job planning and rigour of job planning."
> LQS programme team member

Existing service pressures

The relentless **increase in clinical workload** – fuelled by demographic change, among other things – coupled with chronic staff shortages was cited as a major barrier in many hospitals. Most hospital staff mentioned feeling overwhelmed and **overburdened**. Many reported feeling so exhausted by the constant battle to deliver basic services that major change was simply beyond their physical and cognitive capacity.

> "Our basic systems of care… are not working because our staff are completely overwhelmed, completely exhausted, completely demoralised, cannot provide the care that we all aspire to provide to anybody."
> Focus group participant

Our research seems to point to some association between staff burnout and hospitals in financial crisis or hospitals that were failing to meet targets. In such places, consultants reported spending almost all of their time on either

clinical work or pressing governance matters. Auras of 'learned helplessness' were palpable in organisations where frontline staff felt that they had little or no control over their services.

> "There is absolutely no time to do the important strategic work because we are literally dealing with the daily aftermath."
> Focus group participant

> "You have to look at capacity and time… it's always related to money, lack of money then you have lack of capacity, and lack of money you have fewer people doing more work and so you lack time."
> Focus group participant

Size of the organisation

Hospital size was postulated by members of the LHP team as being a potential barrier to LQS implementation, with complete implementation being only possible in large teaching hospitals. The relationship between size and financial constraints was considered to be a critical factor – smaller hospitals with smaller budgets would simply find full implementation beyond their financial capacity. It was also theorised that implementation of the LQS required a minimum volume of hospital work. In larger organisations, there would be sufficient elective work for consultants to do when not engaged in the increased out-of-hours work, which would not be the case in smaller organisations.

> "If… you've got a multi-site base and a huge skill set of staff and you're a big teaching hospital, it's probably quite easy. If you're a smaller, mid-general hospital… it can be a bit more tricky."
> Patient panel member

While smaller hospitals did appear to struggle more with LQS implementation, the ***type*** of organisation emerged as being a more important factor. Hospitals with highly specialised services, particularly trauma or hyper-acute stroke, and/or reputations as centres of academic excellence were more likely to implement the LQS than hospitals of the same size that provided district general services. Major trauma services, for example, had little or no difficulty in achieving the standards for diagnostic services, while hospitals of a similar

size without CT scanners in their emergency departments struggled with this. When hyper-acute hospitals were matched with district general type hospitals for a number of emergency department presentations, hyper-acute hospitals had more consultants delivering acute and emergency services than their counterparts. Unsurprisingly, reconfiguration of consultant services in hyper-acute hospitals was reported as being markedly easier in many cases.

Working in well-resourced hospitals with a **larger consultant body** also mitigated burnout and fatigue. While consultants at all hospitals nominally worked around the same number of hours, fewer consultants at specialised hospitals were working beyond their allocated hours. In contrast, we found that consultants at smaller, under-staffed hospitals were working regularly in excess of their job plans. This, in turn, made any additional recruitment much more difficult, as they were considered to be much less attractive places to work.

Commissioning

One of the main lines of inquiry in this study was the investigation of the impact of commissioning by CCGs on the implementation of the LQS. The shift from the LQS being led by NHS London, via the PCTs, to being driven by CCGs over the course of LHP can be considered as a case study in which we can explore the proposition that mandatory minimum service standards lead to better patient outcomes. It had been theorised by the LHP team that incorporating the standards rapidly into the commissioning process would strengthen the process by providing explicit mechanisms of positive and negative incentives.

The survey results seem to suggest that the introduction of commissioning had very little impact on the urgency with which most hospitals viewed the LQS or the ways in which they approached their implementation. However, the interviews were more revealing. In the first instance, there was a remarkable disconnectedness between commissioners and frontline clinicians, as well as many managerial staff. While the commissioners we spoke with assumed that clinicians would be highly aware of the processes around commissioning, this was not the case. Clinicians, particularly, tended not to register commissioning at all, or to see it as a real threat to their service and jobs.

> "I think I should know what is the service the commissioners have bought off my employers. They don't tell me… most clinical leads and clinical directors don't actually see the contracts."
> Frontline clinician

Moreover, they tended to view commissioning as being transactionally orientated, with discourses dominated by financial concerns.

Where interactions with the CCGs were described by clinicians and hospital managers, three clear patterns emerged:

- In areas where there was no intention of reconfiguring hospital services and there were co-operative CCGs, clinicians and managers felt positively about the LQS being commissioned. They described being presented with additional opportunities to gain access to financial and other types of support.

  > "Once we got into the commissioning phase, the support from our commissioners was pretty important."
  > Senior manager

- In some London regions, CCGs embarked on acute reconfiguration programmes, with the aim of centralising emergency specialist services into a smaller number of better performing hospitals. The LQS were purposefully co-opted by the CCGs as the standards by which acute hospital services would be measured. Hospitals that did not meet these standards were at risk of having services decommissioned and possible closure. In some organisations, the potential threat of closure was recognised early on, with substantial investment in the LQS as a way of 'getting ahead of the pack'. However, progress almost universally slowed when it became clear that performance against the LQS would not be a critical deciding factor in reorganisation.

- Other organisations did not recognise the threat of reconfiguration until after 2012. Interviewees tended to report senior hospital managers becoming more interested in the LQS after this point, although this rarely equated to an increased rate of implementation. Interactions with CCGs under these circumstances often emerged as highly fraught and conflicted.

Unsurprisingly, clinicians and managers alike found the latter two sets of circumstances highly stressful, even in larger hospitals that were unlikely to be closed. Organisations directly under threat of closure universally reported that commissioning markedly hindered the implementation of the LQS.

> "Right at the beginning there was I suppose a bit of a fear factor, that if people didn't meet these standards their acute medicine service would be decommissioned."
> Focus group participant

> "We were told, rightly or wrongly, that what you achieved on the standards was one of the benchmarks for who was going to stay open and who's not."
> Frontline clinician

The fact that commissioners were threatening to inflict severe penalties on trusts that were not complying with the standards, yet refusing to provide hospitals with the necessary resources, was found to be particularly galling.

> "So our commissioners made it clear that there was an expectation that we'd meet them, but haven't funded them, so that still leaves it quite uncomfortable."
> Senior manager

Further, both the commissioners and the LHP team had theorised that the LQS would only be fully deliverable with the centralisation of acute services and the closure and/or downgrading of poorly performing sites, and that the benefits of this would be obvious to service providers. That local clinicians and managers heavily resisted the closure of their organisation seemed to come as a surprise to many.

When hospital closures did not materialise, leaders at hospitals that viewed themselves as having been under threat from CCGs realised that the LQS were relatively powerless as a 'stick', and their implementation was dropped as being a priority. A small number of hospitals gave the impression that the failure of CCGs to penalise hospitals that did not fully introduce the LQS provided a legitimate rationale for hospitals to put their energies

into developing alternative models of acute care that aligned with their internal priorities and were deliverable with existing resources.

> "The standards are written down, but there is absolutely no process around them to enforce them so everyone is just going to ignore them… they have never been critical to the way things have been set up."
> Focus group participant

> "… what does it mean if we don't meet them? Nothing. Okay. Don't worry about it then."
> Frontline clinician

One hospital not directly under threat of closure described how commissioning hindered the implementation of the LQS through prolonged negotiations with senior management staff.

> "There was a little bit of holding back from our management team of the time… because there was to and fro from the commissioners about 'what are you really going to do with this information, if we don't meet them, then what?'. There was a little bit of a delay."
> Focus group participant

In interviews, clinicians rarely commented on the initial role of the PCTs and instead expressed strong views about the processes they had been through with CCGs. Many felt that commissioners attempting to reconfigure acute services was entirely inappropriate in the first instance, with CCGs lacking a nuanced understanding of acute secondary services.

> "… the latest initiative in [X] is to take us back to where we were before the last initiative that failed and thus recreating the problems of the previous one, which also failed. You know, I think it's incredibly difficult to take capacity out of acute care."
> Commissioner

> "I feel that seven-day working has been used as an excuse to cut the number of hospitals to fit the number of staff we've got whereas, actually, what we needed to do was increase the number of staff we have to fit the number of hospitals we have."
> Frontline clinician

The attempts to reconfigure services also created other instabilities in the system, which negatively impacted on acute hospitals.

> "In reconfiguration anybody who's any good takes the opportunity to move on up the hierarchy, anyone who's not stays put and will get a sort of job that they're probably not competent to do."
> Frontline clinician

The lack of visible financial and workforce analyses was a recurrent theme during the interviews. Although the local CCGs undertook these analyses, there was no awareness amongst interviewees that these had happened.

Despite the fact that members of the LHP team had tacitly supported the need for the reconfiguration of acute services, team members were frequently critical of the way in which commissioners used the standards. Notably, it was seen as indirectly undermining the primary aims of the LQS, which were to reduce variability in care across London.

> "We have a toxic commissioning environment which is unhelpful in terms of consistent practices across health care systems."
> LQS programme team member

> "Just putting something in a contract and telling someone to do something or telling an organisation to do something doesn't really work in itself."
> LQS programme team member

Several people involved in commissioning acknowledged that change had been driven far more by the process of clinical engagement, with commissioning making very little difference.

> "The really key thing that I found was that, regardless of whether they had been formally commissioned and were in the contracts, a lot of trusts felt compelled to implement them anyway because of the evidence base."
> Frontline clinician

Hospitals' competing priorities

Several interviewees emphasised that trusts are under pressure to perform against **different sets of standards and targets**. The pressure from competing demands was thought to prevent real improvement efforts.

> "… everything that's on a trust's agenda at the moment in relation to meeting constitutional standards, of cancer waits, A&E, 18 weeks and all of the financial pressure that they're under, frankly I suspect that no one's got time to think about improving anything. All they're interested in is just doing the bare necessity of what they have to do now…"
> LQS programme team member

> "… there's only so much leadership and management capacity within the system and if we're doing that, this tends to fall by the wayside."
> Commissioner

Trusts' management capacity was seen as being stretched by the amount of similar guidance from different sources that they were asked to comply with. One workshop participant highlighted that the LQS were not an isolated piece of work, but were just one of a multiplicity of standards for patient care and recommendations for service improvement from NICE, NCEPOD and the royal colleges, and the inspection regimes initiated by the CQC, Monitor and the Trust Development Authority. Interviewees spoke with some passion about the exhaustion brought about by 'projectitis' and the demoralisation and demotivation that accompanied the near-constant threat of failure.

> "… you've got lots of information that's roughly the same – but not quite – and asking for slightly different things… NHS London might ask 'what percentage of patients are seen by a consultant in 12 hours?', whereas the commissioners might ask 'what percentage were seen in six hours?', and somebody else might ask '… in eight hours?'."
> LQS programme team member

Competing priorities were thought to be a distracter not only for trusts, but also for commissioners.

> "There's probably a general consensus, if you go into any hospital now, they're over-inspected, over-analysed, over-visited and nobody comes up with anything remotely helpful or useful to them."
> Patient panel member

Organisational culture

Some interviewees suggested organisational culture might have been the biggest barrier to implementation. Cultural issues were particularly evident in the resistance to change in some organisations. One interviewee suggested that 'the ones who were most resistant were the teaching hospitals [who said] "we've always done it this way and there are lots of us and we're all specialists".'

One clinician who was involved in implementing the LQS pointed out that 'a hospital that has a progressive culture for change allows the standards to be implemented'.

One interviewee thought the cultural barriers were mostly associated with standards that referred to 'interface issues between the emergency department and the admitting acute specialties'. The cultural barriers were also seen to be linked to the quality of medical leadership in the organisation.

Changes in the wider landscape

After the LQS were introduced, there were wider system changes that several interviewees felt influenced their implementation. Interviewees thought that the abolition of the SHAs and the loss of their strategic role and influence negatively affected the degree of 'traction' that the LQS had.

The dissolution of PCTs and creation of CCGs in 2013 were perceived to have created fragmentation, instability and a leadership void 'for 12 months or so while new people build new relationships and new trust'. There was a sense that the attention the LQS received 'withered away' during this transition.

There was a perception that before this restructuring there had been a 'momentum for change'. This was reflected in a growing stability in the system, with the development of strong relationships between NHS London and hospitals.

> "At the time it was like things were hitting their stride and people had worked out how to make things happen."
> LQS programme team member

One workshop participant thought that this transition led to a loss of centralised focus on the LQS, and that their implementation was 'reliant on individual organisations taking it forward'.

> "… to some extent the Lansley reforms and setting up the CCGs pushed [the LQS] away from being an old NHS London strategy which they would have, in the old days, had a more coherent approach to looking at it, whereas it then devolved to CCGs and the CCGs are so up to there with everything that they quite often will take different approaches to the standards…"
> Audit team member

Hospital mergers that were taking place while the LQS were being implemented were also thought to be a 'distracter' from the standards. However, there was one clinician who thought that the merger of their hospital with a larger trust and the closure of the A&E department at that hospital had been a positive thing, because it had fostered more collaborative work.

Other enablers of, and barriers to, implementing the LQS

Aspects that we had expected to have a big impact on the implementation of the LQS – such as interactions with the regulators (e.g. Monitor, CQC), comparative reporting of London hospitals' performance against the LQS, and existing network arrangements with other hospitals – were not actually seen by respondents as very relevant to their hospital.

Interestingly, trust board priority to achieve foundation trust status was found to enable the implementation of the LQS at four trusts. Conversely, one hospital thought this had greatly hindered the implementation of the LQS.

Other aspects that **enabled** the implementation of the LQS at hospitals included:

- involvement in discussions about the LQS prior to their publication
- trusts' capacity to do strategic planning at a local level
- tools developed by NHS London/LHP.

Other aspects that **hindered** the implementation of the LQS at hospitals included:

- staff expectations around changes to workload or work patterns.

Overall, the implementation of the LQS seems to have been facilitated mostly by internal aspects such as receptivity to change, leadership and buy-in of the LQS at hospitals, rather than by external drivers from the policy context. On the contrary, it is mainly the external aspects that seem to have hindered the implementation of the LQS, such as the availability of financial and human resources.

7 The impact of the LQS

Quantitative assessment

We have analysed the results of hospitals' performance against the 21 standards in acute medicine from two audits, undertaken at two different points in time (2012/13 and 2013/14). By comparing the results from the first and the second audits we can:

- obtain a picture of the degree to which performance against the LQS improved across London
- identify which specific standards were more widely implemented and which ones hospitals did not take on board.

A more detailed description of the methods used in this analysis and a full description of the LQS for acute medicine can be found in Appendix 1 and Appendix 2.

Degree to which different standards were met across London

While compliance against most standards improved from the first to the second audit, there were a number of standards that were consistently met by hospitals over time. There were also some standards that hospitals had marked difficulty in implementing.

Standards that were consistently met over time

A number of standards were consistently met by most hospitals throughout both audits:

- 27 out of 29 hospitals had in place onsite **access to levels 2 and 3 critical care** and provided their AMUs with access to a monitored and nursed facility (standard 26)
- 26 hospitals delivered **training** in a supportive environment with appropriate, graded consultant supervision (standard 27)
- 22 hospitals were able to nurse and **manage patients admitted for unscheduled care** in an AMU or critical care environment (standard 11)
- 21 hospitals provided **ambulatory emergency care** in their AMUs (standard 22).

These standards are, for the most part, descriptors of the basic services supplied by virtually all acute hospitals. It is, therefore, not surprising that most hospitals met these standards.

Standards that were never met over time

There were four standards that a large proportion of hospitals never met:

- 13 out of 29 hospitals were never able to implement **review of patients on AMUs** (including all acutely ill patients directly transferred or others who deteriorate) by a consultant during twice-daily ward rounds (standard 6)
- although most hospitals used the National Early Warning Score (NEWS) to assess all patients admitted acutely (standard 3a), 12 hospitals did not have **consultant involvement** for patients considered 'high risk' within one hour (standard 3b)[8]

8 The fact that standard 3 is compounded makes it more difficult to assess hospitals' degree of implementation. We distinguish between the different components within the standard (a and b) wherever relevant.

- 12 hospitals did not have a **unitary document** in place, issued at the point of entry, used by all health care professionals and all specialties throughout the emergency pathway (standard 10)

- 11 hospitals did not have a **single call access for mental health referrals** available 24 hours a day, seven days a week with a maximum in-person response time of 30 minutes (standard 24). Hospitals might have had more difficulty putting this in place, since acute medical services have little control over mental health services.

While some of these standards are clearly more difficult to implement than others – due to the level of resource required, for example – our research also revealed that hospitals' degree of buy-in and belief in the standards was an important determinant of implementation.

Implementing twice-daily consultant ward rounds, for example, did not necessarily require a high level of resource and was more of an organisational issue. However, several interviewees refuted the need to review all patients twice-daily ('some patients you should see four or five times a day and some you should just see once a day'). So the fact that this particular standard was never implemented at a number of hospitals may be associated with some prioritisation (see 'Negotiating and prioritising the standards' on page 41). Similarly, having a unitary document in place (standard 10) should not have required any additional resource, but few hospitals appeared to attempt the task.

Standards that improved over time

Most of the standards saw some improvement over time, although the degree of improvement varies greatly for different standards.

Five standards particularly saw an improvement from the first to the second audit, with a high number of hospitals meeting them in 2013/14:

- 15 out of 29 hospitals were able to improve capturing, recording and routinely analysing **patient experience data** and acting on it, in addition to maintaining data review as a permanent item on the board agenda and disseminating the findings (standard 21)

- 14 hospitals were able to implement extended **senior decision-making and leadership** day cover on the AMU seven days a week (standard 5)

- 13 hospitals improved the **involvement of consultants** in the assessment of patients considered 'high risk' within one hour (standard 3b)

- 12 hospitals improved **consultant-led communication and information to patients** (including the provision of patient information leaflets) (standard 20)

- 12 hospitals were able to have all **referrals to intensive care made with referring consultant involvement** and accepted (or refused) by intensive care consultants (standard 18).

The standards that saw the greatest improvement over time present different degrees of difficulty to hospitals. While capturing and analysing patient experience data and improving communication and information to patients seem to be fairly straightforward to implement, implementing extended senior working in the AMU is very likely to require investment in additional staffing. Improving the involvement of consultants in the assessment of high-risk patients within one hour can be equally resource demanding, especially out of hours.

While many hospitals were able to meet the LQS seven days a week in 2013/14, some hospitals only improved their performance during weekdays. This is especially evident when looking at different areas of the standards.

Among the standards for consultant-delivered care (Figure 16), three standards improved the most over time:

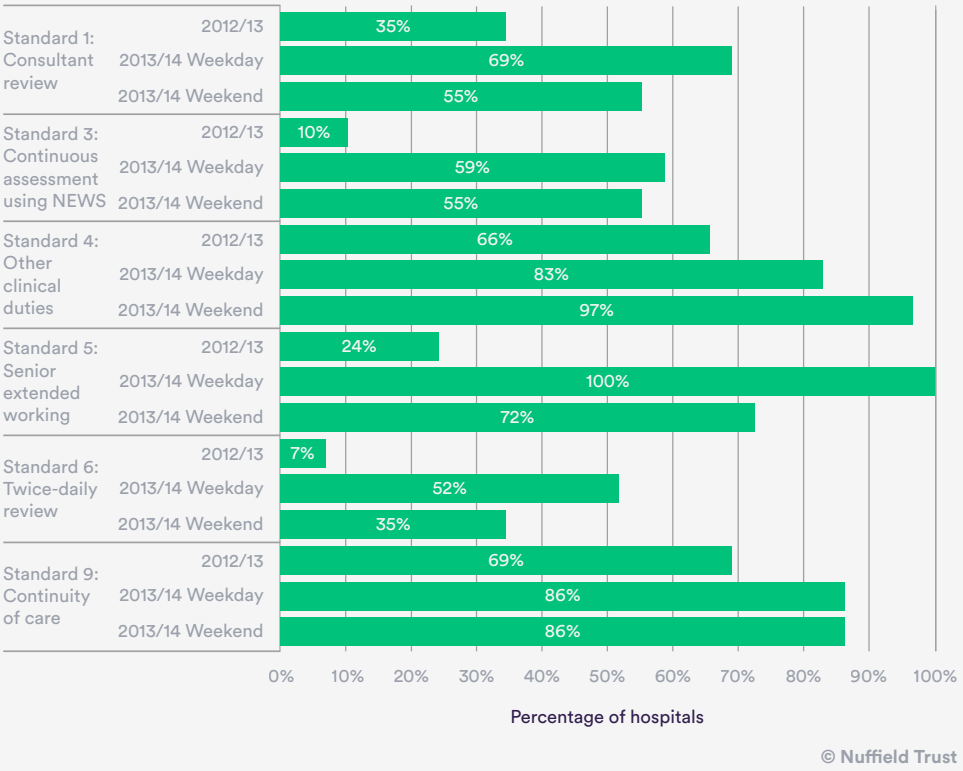
- use of the NEWS escalation trigger protocol for all patients (3a) and consultant involvement within one hour for patients considered 'high risk' (3b)

- senior decision-making extended day working, seven days a week on the AMU (standard 5)

- review of all patients on AMUs by a consultant during twice-daily ward rounds (standard 6).

However, there are differences worth noting between weekday and weekend performance, particularly for consultant working (standards 5 and 6).

Figure 16: Percentage of hospitals that met the standards for consultant-delivered care at the time of the first and the second audits (weekdays and weekends)



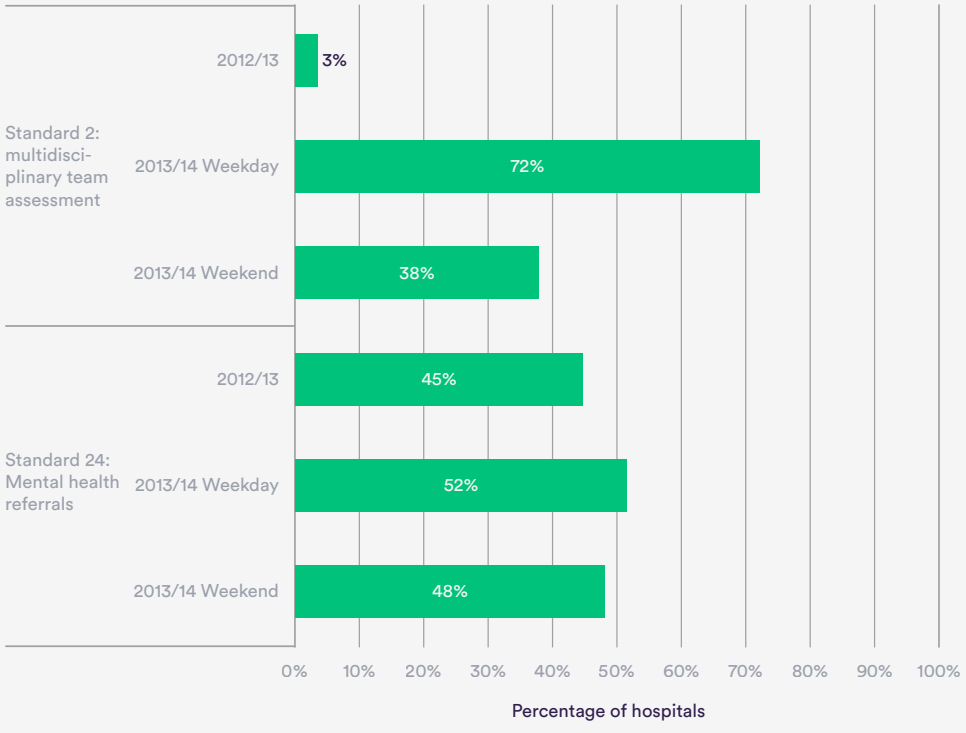
Interestingly, the major improvement in extended working (standard 5) did not significantly influence consultant review of patients within 12/14 hours (standard 1), which it should, in theory, support.

There does not seem to have been a significant change in the construction of rotas to maximise continuity of care (standard 9) or in consultants being free from other clinical duties while on-take (standard 4).

Although these results are not directly comparable with the results of the 2011 survey of service arrangements (London Health Programmes,

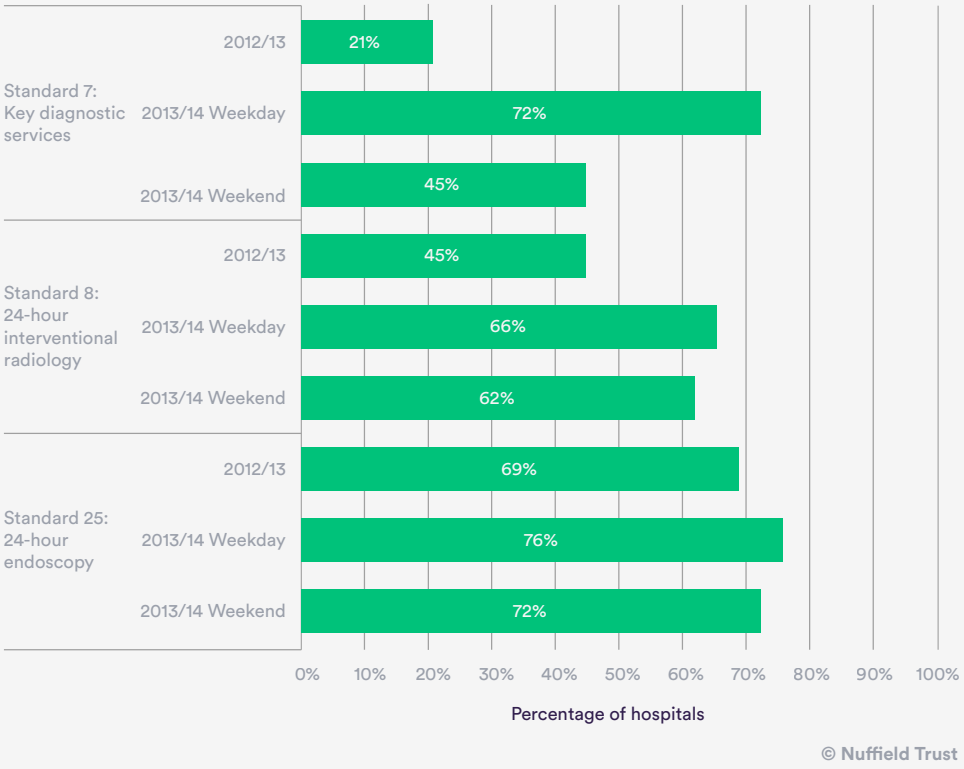
2011b), it is possible to draw high-level comparisons over time. Hospitals' performance for timely consultant review, for example, seems to fluctuate over time. While in 2011, 77 per cent of hospitals always reviewed acute medical admissions within 12 hours from Monday to Friday and 52 per cent during weekends, in 2012/13, only 34 per cent of hospitals saw and assessed emergency admissions by a relevant consultant within 12 hours of the decision to admit. However, there seemed to have been an improvement in consultants being free from other clinical duties when on-take, with 66 per cent of hospitals in 2012/13, against only 48 per cent in 2011.

Figure 17: Percentage of hospitals that met the standards for multidisciplinary team assessment at the time of the first and the second audits (weekdays and weekends)



There was also some improvement in hospitals' performance for multidisciplinary team assessment (Figure 17). More specifically, screening of complex needs inpatients by a multi-professional team (including assessment within 14 hours and treatment/management plan within 24 hours) saw major improvement over time (standard 2).

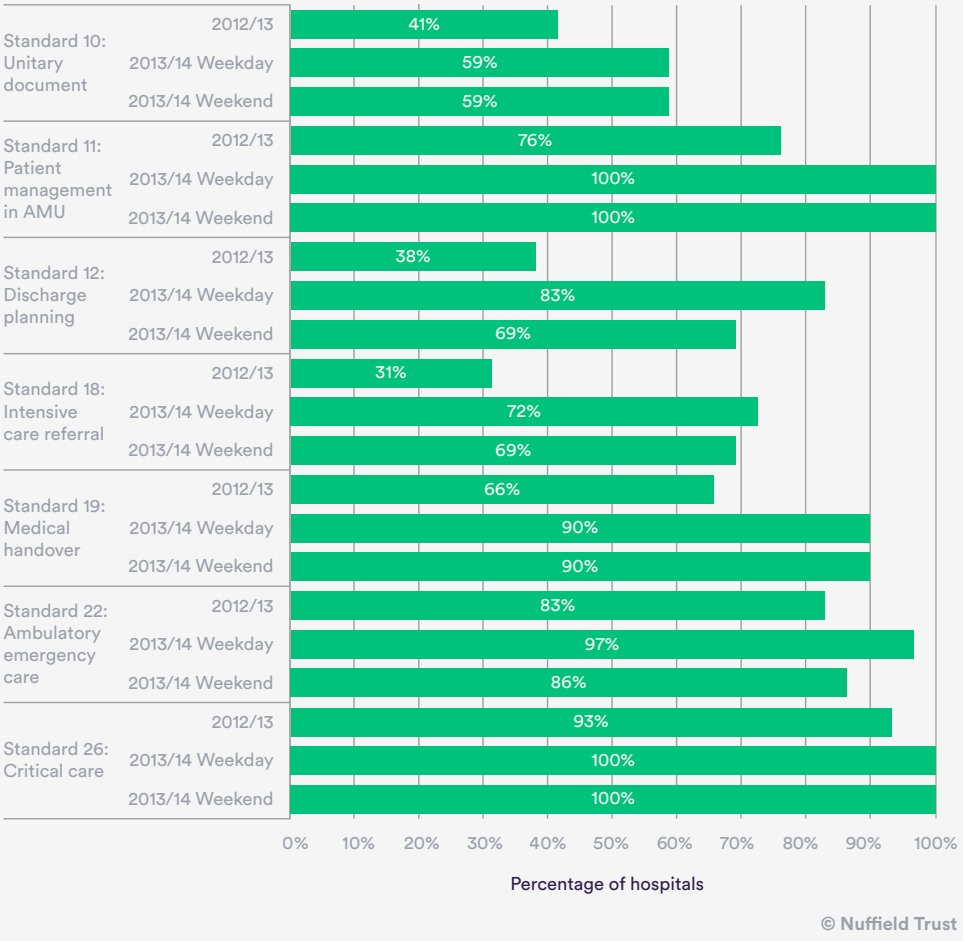
Figure 18: Percentage of hospitals that met the standards for diagnostics at the time of the first and the second audits (weekdays and weekends)



In diagnostics (Figure 18), hospitals saw the biggest improvement in access to key diagnostic services in a timely manner 24 hours a day, seven days a week to support clinical decision-making (standard 7).

Areas such as 24-hour access to interventional radiology (standard 8) and endoscopy services (standard 25) also improved over time. At the time the first survey of service arrangements was conducted, in 2011, only about 32 per cent and 29 per cent of hospitals met these two standards, respectively.

Figure 19: Percentage of hospitals that met other standards in acute medicine at the time of the first and the second audits (weekdays and weekends)



Other areas where hospitals improved most over time (Figure 19) include **discharge planning** for all admitted patients as part of their management plan (standard 12); and having patient **referrals to intensive care** made with consultant involvement and accepted by intensive care consultants (standard 18).

There is some fluctuation in hospitals' performance since 2011 for areas such as having a unitary document in place (65 per cent of hospitals in 2011 against only 41 per cent in 2012/13) and twice-daily medical handover (90 per cent of hospitals in 2011, which dropped to 66 per cent in 2012/13).

Standards that declined over time

Interestingly, a very small number of standards saw a decline in performance at some hospitals over time, i.e. standards that were being met at the time of the first audit were no longer met by the time the second audit took place. These included:

- three hospitals saw a decline in performance for 24-hour availability of a single call access for mental health referrals (standard 24)
- by the time of the second audit, one hospital no longer had emergency admissions reviewed by a consultant within 12 hours (standard 1)
- one hospital did not have in place patient review by a consultant during twice-daily ward rounds in AMUs (standard 6).

It should be noted that these are mostly standards related to consultant working and diagnostics, whose implementation requires a high level of resource. It is then perhaps not surprising that a number of hospitals never managed to implement these standards, or that performance declined over time.

Summary of differences in implementation of the standards

Comparison of the standards which were the most implemented with those which were rarely implemented is instructive. In both cases, the majority of the standards were either 'low cost' or at least did not require substantial capital investment – the exceptions being extended consultant working and access to mental health. This confirms the intelligence from the interviews, which described hospitals actively assessing each of the standards on the grounds of evidence, cost and utility. Very few interviewees were convinced of the value of twice-daily ward rounds and so these were rarely implemented. Although the NEWS was not discussed in the interviews, previous work has found that hospitals have a strong preference for locally devised early warning scoring systems (Rowan, 2008).

The marked dip in performance on some standards between 2011 and the first audit in 2012/13 may be due to two factors. First, the service evaluation of 2011 was entirely self-reported, with no verification undertaken by LHP. This may mean that hospitals were over-generous with their service descriptions.

Second, a number of interviewees reported that existing service improvement programmes were abandoned after the shift to commissioning. This may have led to a genuine decline in performance prior to subsequent improvement.

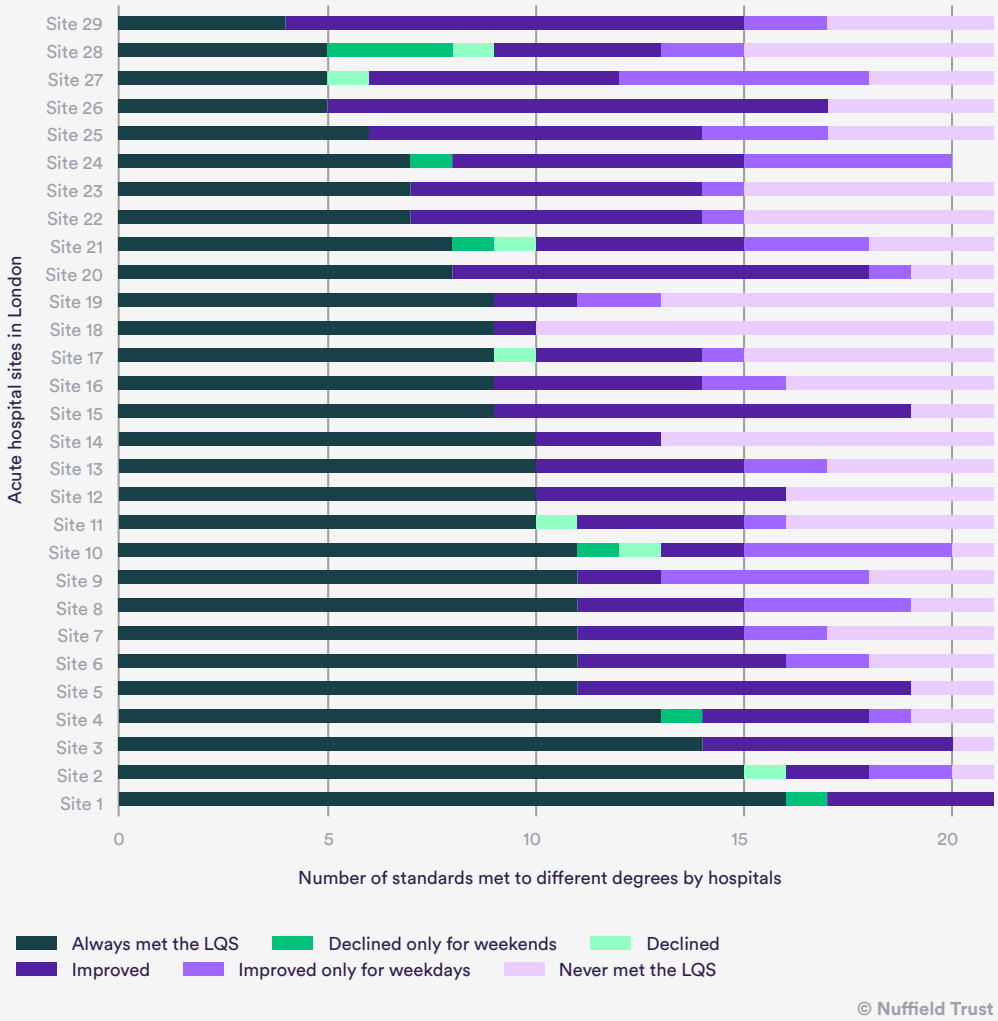
Interviewees reported clear processes of prioritisation and negotiation when deciding which standards to implement, primarily on the grounds of cost, perceived ease of introduction and belief in their potential effectiveness. The quantitative analysis would appear to confirm this. The one high-cost intervention almost universally implemented was the extended day consultant working; the other four were low cost and relatively easy to implement.

Hospital compliance with the standards according to the audits

The 29 London hospitals present a varied picture in terms of compliance against the LQS (Figure 20). While some hospitals seem to have met the LQS from the beginning, others showed varying degrees of improvement from the first to the second audit. A small number of hospitals, however, saw little improvement over time. We have grouped hospitals into five groups according to their performance:

1 **Consistently high performing** throughout both audits, i.e. met more than half of the standards in acute medicine (≥13/21 standards). Not only did these hospitals meet most of the standards from early on, they were also able to improve overall performance between audits. Of note, this group consisted of two large, central teaching hospitals, one smaller teaching hospital and one medium-sized district general hospital.

Figure 20: Number of standards met by acute hospitals across London – results from two audits



2 Improvement from first to second audit – these can be split into two separate groups:

   i. **High-performing hospitals with improvement**, i.e. hospitals that met 10–12/21 standards over time, but that showed an improvement in some standards. Among these there are some hospitals whose performance improved for weekdays, but not for weekends. This group included four large, central teaching hospitals, with the others spread across smaller, medium and large district general hospitals.

ii. **Low-performing hospitals with improvement**, i.e. hospitals that met <10/21 standards over time, but that showed an improvement on a high number of standards from the first to the second audit. There were no major teaching hospitals in this group.

3 **Mixed performance**, i.e. hospitals that met different standards to different degrees over time. This group presents a mixed picture in terms of performance against the LQS, with some hospitals meeting almost half of the standards from the start, but not being able to demonstrate significant improvements over time; and hospitals that present a complete split between the standards they met from the start, those where they improved over time and those that they were never able to implement. This group included two large, central teaching hospitals, and a spread of smaller, medium and large district general hospitals.

4 **Low performing**, i.e. were never able to meet ≥8/21 standards. This group included two smaller and one medium-sized district general hospitals.

Figure 21 (on page 94) illustrates the change in performance against the LQS over time across these five groups of hospitals.

The trend that emerged from the analysis of performance distribution was that hospitals with higher levels of resource found it easier to implement the standards. Six of the eight large teaching hospitals in London either had consistently high levels of performance or were performing at a higher level with evidence of improvement.

While it could be expected that the two hospitals where the pilot audit visits were conducted would be in the highest performing group, only one of these was. The other hospital had a high performance against the LQS, but with some clear areas for improvement, especially at weekends.

Of the two large teaching hospitals in the mixed performance group, we received direct intelligence of the LQS being considered not to be a high priority in one. Two of the three consistently poorly performing hospitals were smaller, with otherwise good reputations for care; the third was a medium-sized hospital with a record of financial and organisational difficulties.

Commissioning and reconfiguration also appear to have played a role. Ten of the 13 hospitals with mixed or low but improving performance were identified as being in trusts that merged during the course of the LQS, or were under threat from reconfiguration from commissioners.

Patient outcomes over time

We conducted a brief analysis of selected health outcome measures, with a focus on those measures commonly applied in the acute care setting, and explored how these changed following the introduction of the LQS. The analysis covered the period from 2009/10 (before the LQS were introduced) through to 2013/14 (after the LQS had been introduced). We analysed the results for London and, to put these into context, compared these against the results for the rest of England.

It is important to note that we have used crude, unadjusted figures, which means it has not been possible to draw reliable conclusions about the impact of the LQS on outcomes which are highly dependent on case mix, such as mortality and length of stay. Analyses to explore whether the degree of implementation impacted on outcomes at hospital level were not attempted; the power calculations suggest that the numbers would be insufficient to detect any significant differences between organisations over the relatively short time periods involved. A more detailed analysis is planned for later in 2017.

A more detailed description of the methods is included in Appendix 2.

Changes in admission volumes

Across London hospitals, the total emergency admissions increased over the period 2009/10 to 2013/14 by 4.9 per cent from 328,836 in 2009/10 to 344,849 in 2013/14, which is slower than the 8.8 per cent increase observed across the rest of country (2,113,213 in 2009/10 to 2,299,280 in 2013/14). The volume of patients presenting at the weekends grew at more than twice the rate of weekday admissions (8.6 per cent versus 3.8 per cent for London; 13.1 per cent versus 7.5 per cent for the rest of England).

Changes in discharge rates by day of the week (excluding patients who died)

In 2013/14, 15.2 per cent of medical inpatients were discharged at weekends, which is an increase from 13.5 per cent in 2009/10. This compares with a

similar increase outside of London from 14.5 per cent to 16.0 per cent. Overall, the rate of discharge over the whole week increased by 6.0 per cent in London and by 10.0 per cent in the rest of England.

Changes in average length of stay

For medical patients admitted at weekends, the average length of stay (LoS) was longer than for those admitted during the week (7.84 days in 2009/10 versus 7.46 days in 2013/14). Roughly similar patterns are observed outside London (7.16 days in 2009/10 versus 6.94 days in 2013/14). The decline in average LoS between 2009/10 and 2013/14 was nearly identical for all groups, with the average LoS for all patients (weekend and weekday) declining by 8.7 per cent in London and 8.8 per cent in the rest of England.

However, once patients admitted for less than a day and those who died in hospital are removed from the sample, the difference between weekends and weekdays is less marked, with a decline in the average LoS in London of 7.3 per cent (9.3 days to 8.62 days) against a 6.7 per cent decline for the rest of England (8.86 days to 8.26 days).

In-hospital mortality by day of admission

Crude in-hospital mortality for all medically unwell patients declined by 15.95 per cent over the four years. Mortality amongst patients admitted at weekends was higher than for those admitted during the week for all areas (5.82 per cent versus 5.05 per cent in London in 2013/14; 6.29 per cent versus 5.52 per cent in the rest of England in 2013/14). The decline in mortality was 15.5 per cent for all areas for patients admitted on weekdays. The decline in mortality for patients admitted on a weekend was greater in London than in the rest of England (18.8 per cent decrease versus 16.3 per cent).

Interpretation

Of note is the striking increase in the number of admissions outside of London, particularly on the weekend (13.1 per cent). In all areas, discharge rates improved ahead of the increase in admissions, driving down lengths of stay. The rates of increase of the volumes of patients discharged at weekends have been similar within London and across the rest of the country.

Mortality rates in London are marginally better than the rest of England and improved at a faster rate than the rest of England for weekends only.

However, the impact on the marked rise in admissions on outcomes was not explored. This analysis does not dissect whether there was regional variability in case-mix or how unwell patients were at presentation; an increase in the number of relatively well patients with very short lengths of stay may have had a dilutional effect on all mortality rates.

At face value, these results may suggest that the LQS had little impact on outcomes beyond initiatives to improve care undertaken across the rest of England. However, drawing comparisons between London hospitals as a block with the whole range of services across England is problematic. This fails to take into account the marked variability in performance of acute hospitals both within London and elsewhere, regional challenges and the scope for change.

It could be postulated that the engagement programme of LHP had an impact far beyond London, driving a focus on gaps in care, particularly on weekends, across the entire country. However, it is not possible from this brief analysis to establish a robust association between the introduction of the LQS and any overall improvements in health outcomes in London.

Qualitative assessment

The LQS were conceived first and foremost as 'a tool to achieve behavioural change'. The ultimate goal was for hospital staff, particularly consultants, to change the way they work to achieve better outcomes for patients. Beyond this, the aim was to focus attention on patient safety through the introduction of minimum standards of care, thereby reducing the existing marked variability and inequalities in care across London.

Overall, our findings strongly suggest that the overall programme was worthwhile and that the standards were successful in bringing a quality and safety agenda to the forefront of acute services, and were a catalyst for change.

> "If we look at where London was when they were first introduced and how many of the standards most trusts are now meeting, there's definitely progression."
> Commissioner

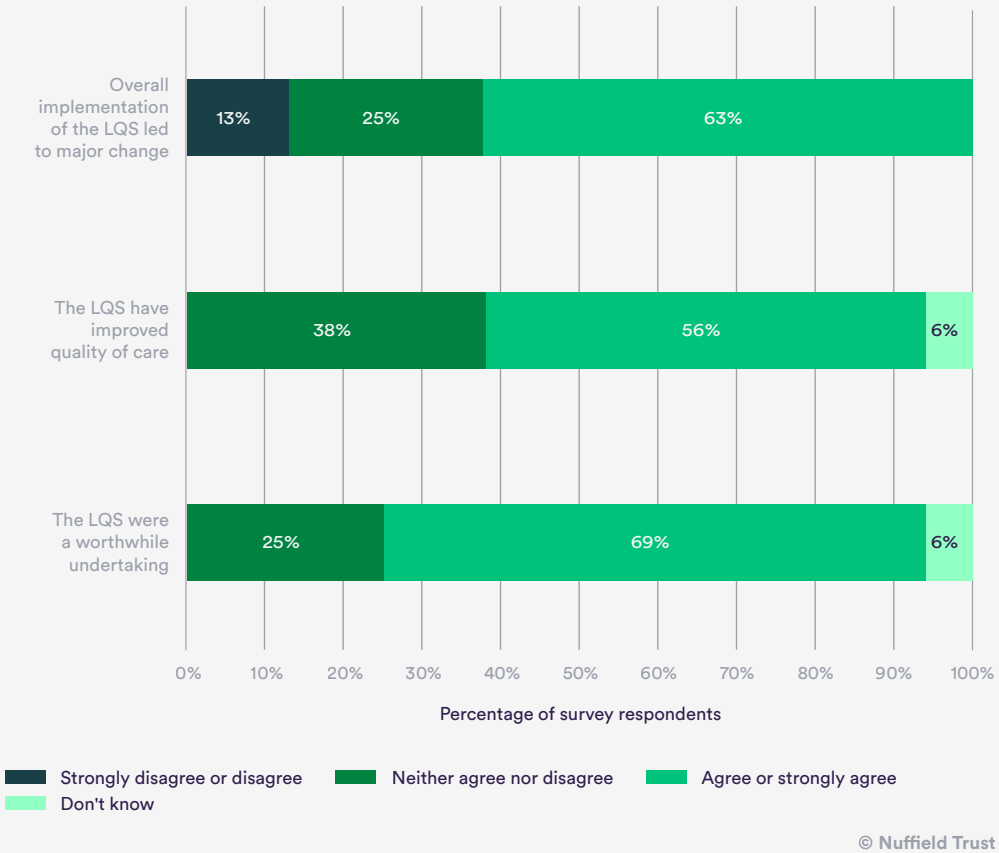
> "On the whole, attempting to meet the standards was a positive thing. It made people focus on how they dealt better with emergency care and made them actually strive to provide that better quality care. It put a bit of emphasis on and a sense of urgency on things."
> Senior manager

Still, there were areas where the standards did not have the impact that had been expected or where they have led to unintended consequences.

Overall impact of the LQS

The great majority of the clinicians and senior trust managers who responded to our survey (n=16) agreed that the LQS were a worthwhile undertaking at their hospital (Figure 21).

Figure 21: Perceptions about the impact of implementing the LQS at hospitals



Nearly 63 per cent thought that the implementation of the LQS at their hospital led to major change. There was no detectable association between the degree of compliance found during the audit process and the reported impact of the LQS in any individual organisation. However, organisations that did not report major change as a result of the LQS were either highly performing teaching hospitals or organisations that had been directly under major threat of reconfiguration.

The degree of enthusiasm for other aspects of the programme also tended to be associated with the ability of frontline teams to co-opt resources to support implementation. Hospitals where teams had been able to successfully negotiate with either the board or the CCGs were markedly more positive. A gloomier picture was painted where teams had been unable to access additional resources.

Those that did not see a big change were either hospitals that had already implemented some of the standards before the LQS were introduced, or were hospitals that were comparatively 'behind' in implementing these.

The impact of the LQS on aspects of hospital care

The standards and new models of care

Fifty per cent of survey respondents reported that a new model of care had been implemented as a result of the LQS (Figure 22).

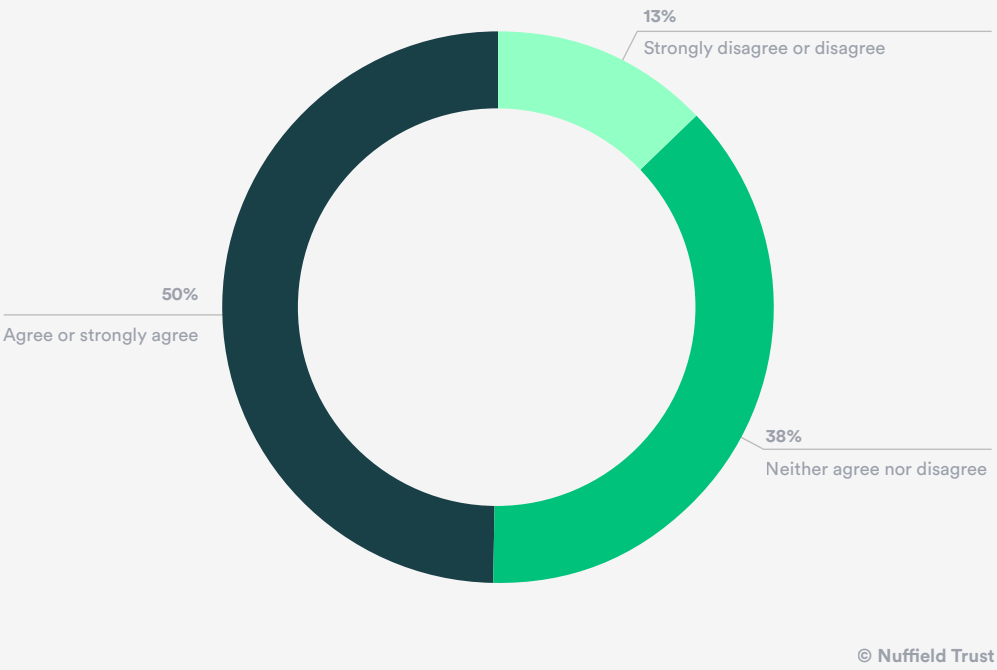
In many cases, implementing these involved redesigning rotas, reviewing job plans and recruiting additional consultants. Changes respondents outlined included:

- reconfiguration of ambulatory care ward with seven-day on-site consultant presence in the AMU

- freeing consultants in the acute rota from other specialist work, which required reorganising wards, clinics and job plans, and appointing more physicians

- implementation of different service models, with most hospitals moving away from the traditional 'consultant of the take' model
- ongoing review of the medical model to improve flows, which include review of the LQS.

Figure 22: Perceptions about whether new models of care were implemented as a result of implementing the LQS



There does not seem to be an association between hospitals' introduction of a new model of care and their performance, according to the results of the audits (see page 79).

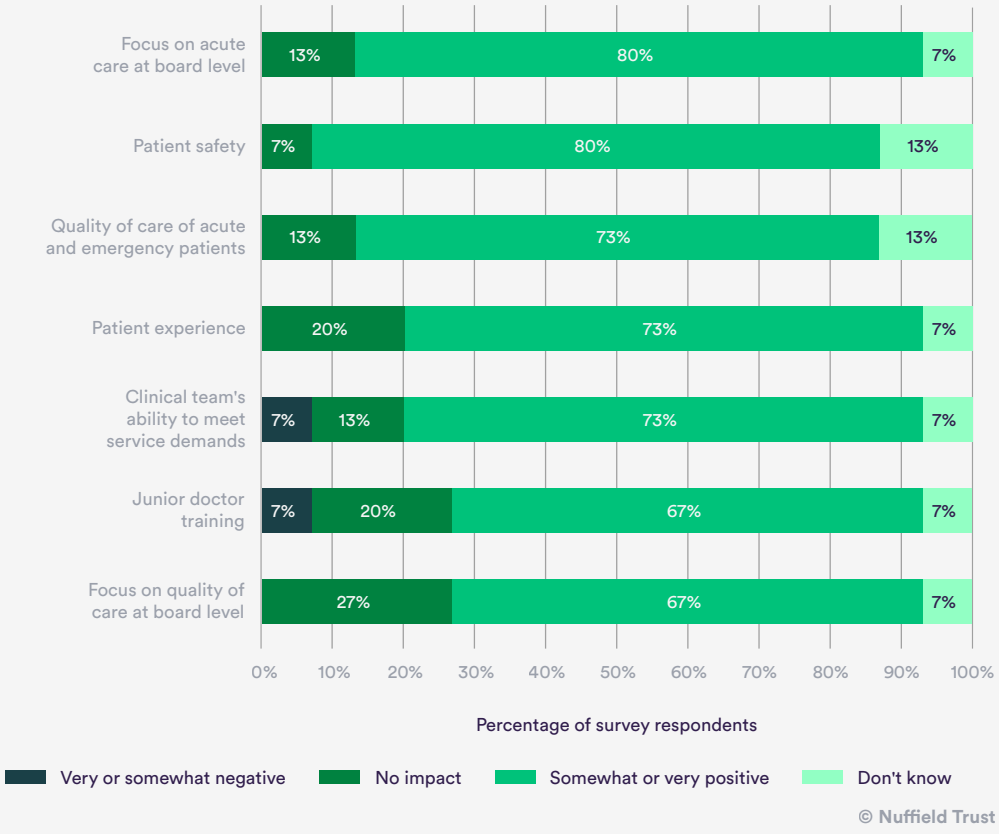
Other aspects of service reconfiguration that were directly attributed to the LQS included:

- extended working hours for and more support from senior clinical decision-makers
- shorter time to review by a consultant
- early implementation of definitive management plans for patients
- a greater focus on multidisciplinary planning for all patients on the AMU recruitment of staff that might otherwise not have been possible.

Impact on other areas of service organisation

The survey results revealed that the LQS had a positive impact on multiple areas of hospital functioning. In line with other aspects of the study, it was considered that the LQS had the greatest positive impact on driving a focus on **patient safety** and **quality improvement at board and frontline** levels (Figure 23a).

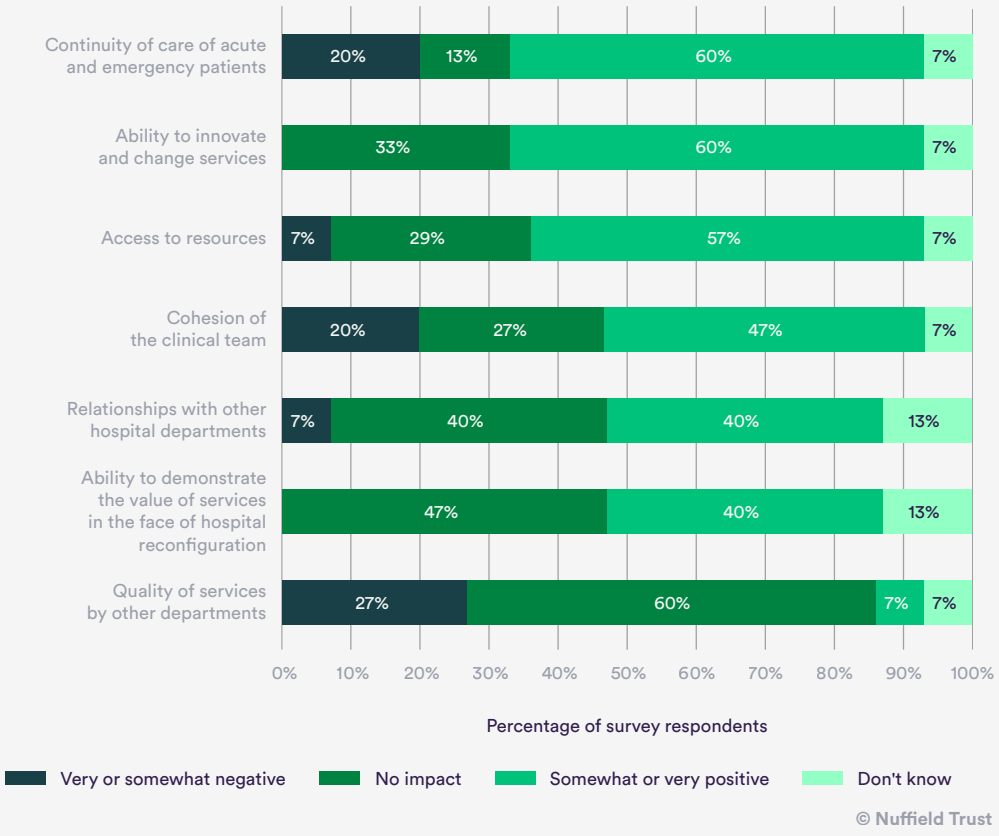
Figure 23a: Perceived impact of implementing the LQS at hospitals



These findings were mostly reinforced in the interviews. However, interviewees almost universally considered that there had been a negative impact on the **training of junior staff**. Moreover, as many juniors were now deferring any decisions until the point of consultant review, it was considered that the **delivery of care was delayed** for some patients.

> "... risk taking that we all need to do in an intelligent fashion is actually delayed and the skill that is required to be able to do sensible risk taking isn't acquired until later on."
> Focus group participant

Figure 23b: Perceived impact of implementing the LQS at hospitals



The survey also highlighted other areas where the impact of the LQS had been less positive (Figure 23b). Implementing the LQS was mostly considered to have had no impact on the **quality of other services at hospitals** (besides acute medicine), and nearly 27 per cent of respondents thought that the LQS had actually had a negative impact on the quality of other services. This was thought to be a result of the LQS focusing attention on the front door, at the expense of a broad overview of problems at hospital level or ward-based services.

Although the threat of reconfiguration emerged as a major driver, just under half of survey respondents did not perceive that implementing the LQS had influenced their **hospital's ability to demonstrate the value of their services**. Some participants felt that although hospitals had risen to the challenge of the LQS, these results were ignored because of a higher central strategic plan.

Several voiced the opinion that the fact that the LQS were essentially input standards had hindered **innovation in service redesign**. Having consultants work shift patterns was seen as the easiest way of implementing aspects of the LQS in most hospitals, which was not seen as an improvement in many cases. Concerns were expressed that shift-working made continuity of care for patients more fragmented and that the expansion of teams to meet the new rosters led to less team cohesion and to feelings of de-professionalisation.

> "It focused so much on one type of resource, you could make a strong case of saying it stifled innovation."
> Focus group participant

> "It does feel quite nerve-wracking to me that we've driven something that's inflated cost, has knocked away other models of care… may not necessarily drive the outcomes that you anticipate."
> Focus group participant

> "I've got someone who will deliver X, but actually I haven't got a unified team who really cares about the patient."
> Focus group participant

Unintended consequences of implementing the LQS

The changes hospitals put in place to implement the LQS also led to a number of unintended consequences.

Positive unintended consequences included:

- improved engagement of some traditionally 'insular' hospital departments with the acute pathway
- greater focus on job planning, particularly at consultant level. Due to service requirements (e.g. commitments to ward rounds), there was greater strictness about staff 'being where they should be'
- parallel service reconfiguration, such as the introduction of ambulatory services
- new clinical pathways, facilitated by markedly better access to diagnostic services.

Negative unintended consequences included:

- **Stifling of innovation**, particularly around service redesign and workforce solutions.
- **Delays in decision-making**. The over-reliance of junior doctors on senior consultants to make the decisions means decisions are increasingly held off until a consultant is present.
- **Increases in staff turnover**, with flight from front-door services.
- **Increased fragmentation of the team structure**. The move to shift-working for consultants has resulted in less team cohesion. This has been further exacerbated with some organisations increasingly relying on locum staff, who have little long-term investment in individual organisations.

- **Loss of consultants from the acute medicine rota** as a direct result of new ways of working. This then had an impact on agency spend, since the hospital had to use locum staff to quickly cover the gaps in the service. We also heard examples of consultants who retired early due to changes in services following reconfiguration or mergers at their hospital.

- **Changes in patterns of presentation to hospitals**. The threat of reconfiguration in specific regions led to increasing demand in neighbouring organisations, increasing pressures on service and workforce.

8 The perceived strengths and weaknesses of the LQS

Strengths of the LQS programme

When asked about what they thought had worked well in the process of developing the LQS, our interviewees underscored some key aspects:

- **Building an iron-clad case for change**. The construction of the case for change underpinned the whole LQS programme. The juxtaposition of the academic research with clear evidence of variability in service provision and poorer outcomes for patients at the local level made the case for change incontrovertible.

- **Experience-based co-design**. The use of experience-based co-design to formulate the standards was crucial in building consensus, managing criticism and fostering personal investment in the standards.

- **Stakeholder engagement**. The breadth and inclusivity of stakeholder engagement not only increased awareness of, and receptivity to, the standards, but it allowed for a degree of alignment between players in a complex political landscape at multiple levels.

- **LQS programme infrastructure**. Interviewees emphasised that the presence of a competent and capable infrastructure was essential to delivering the LQS programme. The 'backstage work' that the LHP project team did around planning the process, producing materials, communicating with stakeholders and harnessing opinions was thought to be a cornerstone of the LQS. This was particularly important when it came to the audit visits. That site-specific reports were a 'completely

authentic description' of services was critical in mitigating pushback from hospitals and driving further implementation.

- **Involvement of public and patient representatives, and independent clinicians**. The active involvement of public and patient representatives throughout the whole process, and the inclusion of clinicians from outside London in the audit teams, was a highly visible marker of credibility and inclusivity.

- **Previous work led by NHS London**. The fact that NHS London had successfully undertaken other service reconfiguration programmes previously was perceived to lend authority to the LQS programme and generate trust in the LHP team.

- **Clinical leadership at London level**. The commitment and championing of those leading the LQS was essential to their gaining widespread buy-in. This was probably the single most important factor in reassuring clinicians that the primary intention of the programme was to improve patient care, rather being solely a mechanism for reconfiguration.

- **Highlighting the importance of weekday against weekend outcomes**. These are increasingly being considered as key performance indicators of high-quality care at national and international levels.

Other aspects of the programme that were considered to have been well-executed included:

- the identification of key clinical priorities
- explanations of why changes to services were important and what the evidence was for that, through the case for change
- clear advice and feedback
- availability and openness of NHS London and the LHP team
- the structured assessment process.

Weaknesses of the LQS programme

There were some aspects pertaining to the design of the LQS or to the way they were introduced which could have been done differently.

- **Use of input standards**. The LQS focus on processes, rather than outcomes, and were hence considered as 'input' standards. This was seen as inflating costs and stifling innovation. It also, to a certain extent, undermined the credibility of the programme, as there was a relative paucity of evidence linking the suggested inputs with improvements in patient outcomes.

- **Absence of outcome measures**. The lack of measurement of meaningful patient outcomes was seen as a major flaw in the programme. It undermined the status of the LQS as a quality improvement programme and led to perceptions of aspects of it being a 'tick box exercise'.

- **The number and compound nature of the standards**. The overall opinion was that there were too many standards across too many domains. This made implementation highly complex and led to hospitals 'cherry-picking' standards according to internal priorities and available resources. The compound nature of many standards led to confusion around implementation and assessment.

- **Unclear status of the LQS**. The issue of whether the standards were aspirational or mandatory was a key theme throughout our study. There was also a constant tension between the perception of the LQS as being a comprehensive quality and safety programme, and the notion of a set of standards that demanded 'slavish adherence'. This led to confusion and resistance amongst managerial and clinical staff alike.

- **Lack of visibility of economic analysis**. The direct financial costs were a major barrier to the implementation of the LQS. It was considered that the sharing of a detailed economic analysis, with clear demonstration of potential cost savings, would have lent credibility to the programme and forestalled trusts from refusing to implement aspects of the programme on financial grounds.

- **Lack of visibility of workforce analysis**. The absence of a clear and shared understanding of the workforce implications of the standards and examples of how service reconfiguration might be achieved was considered highly problematic. The lack of clear guidance was used as an excuse for inflating service need and the introduction of shift-working patterns, which led to other negative service consequences.

- **Lack of provision of accompanying resource**. That the LQS were accompanied by little in the way of supporting resources was seen as a stumbling block. It invited unfavourable comparisons with previous change programmes and led to the view by many organisations that the LQS were entirely unrealistic, particularly in those organisations that were already struggling financially. It was perceived that support for change management would have driven forward implementation in organisations with deep cultural and organisations problems.

- **Focus on front-end care**. By considering only a portion of the patient pathway, it was considered that the standards inadvertently led to the fragmentation of care and the diversion of resources from other areas of the hospital. Further, it gave hospitals an excuse to side-step more complex organisational and cultural problems that underpinned variability in care and poor performance.

- **Poor visibility of the pilot programme**. While the LQS audits had been piloted in two London hospitals, these were never intended as demonstration sites. However, there were complaints about the lack of dissemination of the results from a robust pilot, underlining the substantial information hunger that existed around the nuts and bolts of implementation.

- **Lack of engagement with frontline staff.** While the engagement process was viewed favourably overall, it did not fully penetrate to the level of frontline clinical staff, who were instrumental in local implementation.

- **The need for wider representation in the patient panel.** The involvement of patient and lay representatives was seen as well constructed, but opinions were expressed that it could have been more representative of the population demographic across London.

- **The need for more continuous engagement**. Similarly, it was considered that the engagement programme tapered away quickly once the standards had been launched. More continuous engagement could have improved penetration and better concentrated attention on the standards over the longer term.

- **The absence of 'carrots' and the threat of reconfiguration as a 'stick'** . There was no London-wide mechanism for rewarding high performance against the standards, while the threat of hospital closure became a material threat once the LQS started being commissioned. The early lack of clear incentives was problematic in a number of organisations, while the threat of reconfiguration later emerged as a major hindrance.

Other aspects of the programme that could have been improved included:

- more robust monitoring of implementation, either through more regular (but less onerous) audits or the introduction of key performance indicators
- flexibility around assessing compliance
- a move to 'tiering' of the standards, with an indication of which standards were most likely to bring about patient benefits
- better education of the public about service utilisation.

Improving implementation in hospitals

When asked to reflect on how they might have gone about implementing the LQS in a different or better way, frontline clinicians and managers were much less reflective than their more senior counterparts. However, a number of key themes emerged and gaps in implementation were visible in other aspects of the study. These included:

- lack of strategic thinking at multiple levels
- failure to place patient safety at the heart of service provision
- lack of knowledge about change management processes
- failure to consistently use change management and/or quality improvement tools
- heavy reliance on the skills of single individuals to implement change
- failure to address underlying cultural and organisational issues
- poor communication between senior managerial and frontline staff
- exclusion of frontline staff from decision-making around service reconfiguration
- lack of protected time for service improvement
- failure to make capital investment in diagnostic services
- failure to make long-term investments in staffing
- managerial 'churn' with frequent changes in staff and a lack of consistent leadership over time.

9 The future of the LQS

The current use of the LQS

We explored the extent to which the LQS are used currently and whether they feature as a key item on trusts' agendas. Nearly 67 per cent of survey respondents reported that their hospital continued to audit or assess its performance against the LQS in some way. Three patterns of how the LQS are currently used have emerged: active monitoring; use of the LQS as a template for further service improvement; abandonment of the LQS in favour of other service improvements.

Hospitals that were actively monitoring their ongoing performance against the LQS were almost universally requested to do so by their local CCG. While some organisations saw this as a useful spur to continuous service improvement, others saw this as a pointless exercise, especially given that there were no consequences attached to non-compliance.

Other hospitals saw the LQS as a template for further service improvement. This was associated with either a strong belief in the central tenets of the programme or alignment of the standards with existing quality/innovation programmes. In some places, the aspiration was to exactly meet the standards as written, while in others they were seen as a guide for the right direction of travel.

The LQS have been quietly dropped in a few organisations. This tended to happen in organisations that had been under severe threat of closure. When it had been demonstrated that there would be no consequences attached to non-compliance, hospitals placed increased emphasis on internal plans for service change.

Where next for the LQS?

While there were currently no concrete intentions to downgrade or remove the LQS at the time of the interviews, it was acknowledged that the long-term future of the standards was contingent on the future of commissioning and on plans to fully implement the Seven Day Services Clinical Standards.

The consensus view was that the Seven Day Services Clinical Standards were very likely to entirely supplant the LQS in the longer term, and this can already be seen in some of the organisations that participated in this research. As one of the primary aims of the LQS had been to reduce the weekday versus weekend variability in care, and the Seven Day Services Clinical Standards were explicitly derived from the LQS, the two sets of standards were not seen to be in conflict. However, as they diverge on a number of points, several interviewees considered that that existence of two sets of nearly, but not quite, identical standards would prove confusing for hospitals to implement and monitor.

Others pointed to the natural life cycle of the implementation of standards. The expectation is that most change is achieved relatively quickly, after which the changes become established practice, thereby removing the need for ongoing monitoring. At this point, new standards that reflect emerging evidence should be introduced, thereby driving continuous improvement. Given that it has been five years since the inception of the LQS, it was considered natural by some that the LQS should be replaced by the national Seven Day Services Clinical Standards.

It was acknowledged that the Seven Day Services Clinical Standards, especially if there was an insistence on moving to full 24/7 consultant working, would place major financial strain on hospitals under the current economic circumstances. Some therefore thought that perhaps the LQS should be stepped back from where they exceeded national commissioning standards.

As the interviews were all conducted before the introduction of the Sustainability and Transformation Plans, views on the future of the LQS were also tied to commissioning. While the differences between regional commissioning bodies were seen to have an impact on how trusts responded to the LQS, it was hoped almost universally by interviewees that moves to national commissioning standards will ameliorate this problem. Notably, the LQS were seen as a potential continuing focus for urgent and emergency care services in London, following on from the National Emergency Care Review. It was expected that the LQS would be incorporated into specifications for the urgent and emergency care facilities. One interviewee thought that this review had led to a renewed focus on and drive to implement the LQS.

10 Conclusions

The London Quality Standards programme was distinctive in its scope of ambition, aiming to improve the care of the 350,000 medically unwell patients admitted each year to London hospitals. While we were unable to find strong evidence of the programme directly improving patient outcomes at the highest level, there is little doubt that it focused attention on gaps in the delivery of acute care and drove varying degrees of service redesign within individual hospitals.

As a whole, the LQS programme was well constructed and its constituent components ably executed. Its particular strengths were strong clinical leadership and highly active professional and public engagement, including the use of experience-based co-design to formulate the standards. These led to a striking degree of buy-in and a genuine sense that the LQS were owned by London clinicians and hospitals in a very real way. However, the programme was limited by the changes in the political landscape, which prevented it from directly intervening in hospital service redesign and delivery. Moreover, these changes led to other tensions and instabilities that further impeded change. As a result, no single organisation fully implemented all the standards and a number were unable to effect any substantial change.

Other weaknesses that limited change were:

- The focus on driving compliance through the use of input standards, rather than outcomes. While these had strong professional support, there was little direct evidence to suggest that they would necessarily improve outcomes.

- The lack of any supporting resources for trusts reduced their capacity to strategically plan and execute change, and to address major service deficits, particularly staffing.

- The programme had no explicit shared methodology for change and it did not mandate specific approaches to implementation within hospitals. In many respects, it stopped at the front door of trusts. Thus, where trusts were lacking the internal capacity to change, either financially or due to a skills shortage, the likelihood of success was reduced.

- The yawning gulf between managers and frontline managers was not fully appreciated at any level. While senior managers were the key targets of the engagement programme, the level of frontline clinical engagement was perhaps the most critical factor in the LQS being implemented in any given organisation.

- While many stakeholders felt that the reinforcement of the standards through commissioning and contracts was a crucial incentive to trusts, there was little evidence that commissioning per se improved the process of implementation. Where commissioners sought to use the standards as a means to drive through the reconfiguration of services, it tended to become a punitive exercise.

The key external criticism of the LQS has been that the standards are realistic only in the setting of central London teaching hospitals. This study found that size was not a critical factor. Rather, it was pre-existing levels of resource, such as consultant staff and access to key diagnostic services, and commitment to patient safety and/or innovation which were more strongly associated with ease of implementation.

These findings suggest that the imposition of standards alone is insufficient to drive change. Indeed, the LQS provides something of a salutary lesson with regard to using professional standards for complex services, as opposed to drawing on high-quality evidence around specific interventions. Health care professionals repeatedly drew the distinction between the evidence for the *need* for change and how best to reconfigure services in order to deliver improvements. While plaudits were given to LHP for drawing attention to the importance of weekend versus weekday variability, there was a failure to universally convince clinicians of the interventions recommended. Indeed, the resistance of clinicians to certain interventions may be justified in view of the emerging evidence of the multiplicity of factors that mediate variability in care outcomes (Aldridge and others, 2016; Black, 2016) and the weight

of evidence for alternative interventions, such as ensuring that acute areas of the hospital have sufficient numbers of adequately trained nursing staff (Aiken and others, 2011; Griffiths and others, 2016). Our findings support the contention that standards which mandate specific interventions should be supported by high-quality evidence beyond the level of expert consensus opinion (Appleby and others, 2011).

It may be that complex service change where there is little direct evidence to support change may be better served by the quality improvement mechanisms embedded in the LQS and other work done by LHP (i.e. awareness raising, clinician engagement, access to support teams, identification of areas for improvement), rather than the forced imposition of rigid standards. It is notable that a similar approach, albeit with a more forensic attitude towards the data, was recently deployed with great success by the national review of orthopaedic services in England (Briggs, 2015). Standards, if they are insisted upon by commissioners, should also be accompanied by appropriate resources and the creation of capacity for change within organisations.

These reflections provide important learning for national policy-making bodies. These are our recommendations:

- **Have a solid case for change**. Having robust evidence pointing to the need for change is essential when introducing a quality improvement initiative such as the LQS. There was strong evidence underpinning the LQS case for change, and this was one of the determining factors of broad clinical buy-in.

- **Be clear about the aims and the expected outcomes of standards**. Those who are asked to meet certain standards or similar sets of service specifications must be clear about what it is that these standards are really trying to achieve. One of the aspects that was criticised was the exclusive focus of the LQS on processes, rather than outputs or outcomes. It also has to be clear whether the standards are ways of delivering care that hospital services should aspire to, or mandatory requirements incontrovertibly essential to the quality and safety of service provision.

- **Have strong, hands-on clinical leadership supported by a stable, credible team.** The personal commitment to the standards demonstrated by the senior LHP team and consistent management of the programme fostered faith in its underlying tenets and was critical to gathering support.

- **Engage with and involve staff on the ground**. Those who are setting standards should go *straight to the point of care* and discuss these with staff, who will have a greater knowledge of the 'shop floor'. As we have seen, using co-design to develop the LQS built early awareness, garnered support, mitigated criticism and resulted in strong feelings of ownership. Additionally, clinical 'buy-in' was considered as the most important enabler of the LQS.

- **Clearly and consistently articulate coherent theories of change**. Failure of senior teams to be consistent about the aims and objectives of change leads to confusion and impedes the change process at the front line.

- **Provide greater support on 'how to do it'**. Hospitals are frequently unsure as to how to select and consistently use approaches to change. Many also struggle with strategic thinking around service redesign. Providing tools and work-through examples to support change is helpful.

- **Be transparent about the level of resource that is required**. Many hospitals struggled to make the necessary changes to be able to meet the LQS due to the financial resources required. It would have been helpful if the financial impact of implementing the LQS had been freely advertised. Similarly, there should have been greater clarity as to how commissioners should have supported providers to deliver these standards.

- **Take into account the multidisciplinary nature of the workforce** in the planning of future standards for health professionals. There has been a focus on the quality of care provided by consultants, but actually care is delivered by a team with multiple doctors, nurses and other health care professionals. This also means that outcomes should measure the quality of care delivered by the team, rather than by one consultant.

- **Communicate better with the public about why changes in services take place**. Patients need to understand why the services they use are undergoing changes that can have an impact on their care or service availability.

- **Meticulously construct standards with unambiguous language**. Clinicians and managers spent substantial time parsing the 'meanings' of the standards. Additional clarity should be provided by attaching relevant key performance indicators.

- **Be more explicit about secondary agendas and the threats they may represent**. Hospitals and clinicians alike were highly sensitive to the threat of reconfiguration being aligned with what was ostensibly a quality improvement programme. Together with a lack of consistency in commissioning mechanisms and incentives across London, this impeded rather than drove progress.

- **Carefully consider the role and potential impact of incentives and penalties.** The threat of severe penalties for non-compliance resulted in perverse behaviours, rather than an improvement in performance. The subsequent failure of commissioners to impose penalties on hospitals that did not fully implement the LQS was interpreted as a sign that hospitals could overlook the LQS with relative impunity. Similarly, there were no consistent positive incentives for successfully meeting the LQS, which became problematic and a source of resentment.

- **Ensure there is a consistent policy agenda for the introduction of the standards**. The fact that there are multiple ongoing initiatives with often conflicting agendas makes it more difficult for trusts and hospitals to successfully implement change.

Recommendations for trusts and hospitals

- **Actively seek to bridge gaps between managerial and frontline clinical staff**. Poor communication and failure to engage frontline clinicians in the change process was one of the main barriers to implementation.

- **Invest in capacity for quality improvement/change management at the front line**. This skill set should not be confined to managerial staff, but rather used to empower frontline clinicians to improve their own services.

- **Make time for strategic thinking**. The planning and execution of service redesign is time consuming and difficult to achieve without protected time.

- **Ensure that transformation teams and external consultancies are used effectively**. We found that there were few advantages that transpired from hospitals using either transformation teams or external consultancies. If they are used, they should actively engage frontline clinical staff.

- **Focus on underlying cultural and organisational issues**. Superficial changes to services are unlikely to improve patient care if underlying cultural and organisational issues are not addressed.

- **Invest in key services**. Pathology, radiology and other critical diagnostics require substantial capital investment for effective functioning.

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List of abbreviations

A&E – accident and emergency

AMU – acute medical unit

ANP – advanced nurse practitioner

CCG – clinical commissioning group

CFIR – Consolidated Framework for Implementation Research

CQC – Care Quality Commission

CQUIN – Commissioning for Quality and Innovation

HSMR – Hospital Standardised Mortality Ratio

LCG – London Commissioning Group

LHP – London Health Programmes

LoS – length of stay

LQS – London Quality Standards

MDT – multidisciplinary team

NCEPOD – National Confidential Enquiry into Patient Outcome and Death

NEWS – National Early Warning Score

NICE – National Institute for Health and Care Excellence

PCT – primary care trust

QI – quality improvement

SHA – strategic health authority

Glossary

This table provides a definition of the designations that were used throughout the report to categorise the different individuals who participated in this research.

Audit team member	Someone who participated in the teams that conducted the LQS audit visits to hospitals.
Clinical expert panel member	Someone who participated in one of the clinical expert panels that supported the development of the LQS.
Clinical manager	A clinical lead at a hospital, such as a departmental lead.
Commissioner	Someone who participated in this research due to their commissioner's role at the time the LQS were developed and implemented.
Focus group participant	Someone who participated in one of the four focus groups that we conducted in hospitals.
Frontline clinician	A medical consultant who works in acute services at the hospital.
Frontline manager	A manager at service or department level who works with clinical teams to deliver acute services.
LQS programme team member	Someone who led, managed or more directly participated in the development and/or delivery of the LQS.
Patient panel member	Someone who participated in the patient and lay representatives panel that supported the development of the LQS.
Senior manager	Someone equivalent to a trust medical director or above.
Workshop participant	Someone who participated in the workshop with audit team members held in June 2016.

Appendix 1: LQS for acute medicine and emergency general surgery

These were the first set of standards that the London Health Programmes developed and published, in 2011 (London Health Programmes, 2011b).

Consultant-delivered care: core standards

No.	Standard	Medicine, Surgery, Both
1	All emergency admissions to be seen and assessed by a relevant consultant within 12 hours of the decision to admit or within 14 hours of the time of arrival at the hospital.	Both
2	A clear multidisciplinary assessment to be undertaken within 12 hours and a treatment or management plan to be in place within 24 hours (for complex needs patients, see 23 and 24).	Both
3	All patients admitted acutely to be continually assessed using a standardised early warning system (EWS). Consultant involvement is required for patients who reach trigger criteria. Consultant involvement for patients considered 'high risk' to be within one hour.	Both
4	When on-take, a consultant and their team are to be completely freed from any other clinical duties or elective commitments.	Both

No.	Standard	Medicine, Surgery, Both
5	In order to meet the demands for consultant-delivered care, senior decision-making and leadership on the acute medical/surgical unit to cover extended day working, seven days a week.	Both
6	All patients on acute medical and surgical units to be seen and reviewed by a consultant during twice-daily ward rounds, including all acutely ill patients directly transferred, or others who deteriorate.	Both
7	All hospitals admitting medical and surgical emergencies to have access to all key diagnostic services in a timely manner 24 hours a day, seven days a week to support clinical decision-making: • Critical – imaging and reporting within one hour • Urgent – imaging and reporting within 12 hours • All non-urgent – within 24 hours	Both
8	All hospitals admitting medical and surgical emergencies to have access to interventional radiology 24 hours a day, seven days a week: • Critical patients – one hour • Non-critical patients – 12 hours	Both

Consultant-delivered care: admissions, ward rounds and theatre

No.	Standard	Medicine, Surgery, Both
9	Rotas to be constructed to maximise continuity of care for all patients in an acute medical and surgical environment. A single consultant is to retain responsibility for a single patient on the acute medical/surgical unit. Subsequent transfer or discharge must be based on clinical need.	Both
10	A unitary document to be in place, issued at the point of entry, which is used by all health care professionals and all specialties throughout the emergency pathway.	Both

No.	Standard	Medicine, Surgery, Both
11	Patients admitted for unscheduled care to be nursed and managed in an acute medical/surgical unit, or critical care environment.	Both
12	All admitted patients to have discharge planning and an estimated discharge date as part of their management plan as soon as possible and no later than 24 hours post-admission. A policy is to be in place to access social services seven days a week. Patients to be discharged to their named GP.	Both
13	All hospitals admitting emergency general surgery patients to have access to a fully staffed emergency theatre immediately available and a consultant on site within 30 minutes at any time of the day or night.	Surgery
14	All patients admitted as emergencies are discussed with the responsible consultant if immediate surgery is being considered. For each surgical patient, a consultant takes an active decision in delegating responsibility for an emergency surgical procedure to appropriately trained junior or speciality surgeons. This decision is recorded in the notes and available for audit.	Surgery
15	All patients considered as 'high risk' to have their operation carried out under the direct supervision of a consultant surgeon and consultant anaesthetist; early referral for anaesthetic assessment is made to optimise peri-operative care. High risk is defined as where the risk of mortality is greater than 10 per cent.	Surgery
16	All patients undergoing emergency surgery to be discussed with a consultant anaesthetist. Where the severity assessment score is ASA3 and above, anaesthesia is to be provided by a consultant anaesthetist.	Surgery
17	The majority of emergency general surgery to be done on planned emergency lists on the day that the surgery was originally planned. The date, time and decision-maker should be documented clearly in the patient's notes and any delays to emergency surgery and the reasons why recorded. Any operations that are carried out at night are to meet NCEPOD classifications and be under the direct supervision of a consultant surgeon.	Surgery

No.	Standard	Medicine, Surgery, Both
18	All referrals to intensive care to be made from a consultant to a consultant.	Both
19	A structured process to be in place for the medical handover of patients twice a day. These arrangements to also be in place for the handover of patients at each change of responsible consultant/medical team. Changes in treatment plans are to be communicated to nursing and therapy staff as soon as possible if they are not involved in the handover discussions.	Both

Patient experience

No.	Standard	Medicine, Surgery, Both
20	Consultant-led communication and information to be provided to patients and to include the provision of patient information leaflets.	Both
21	Patient experience data to be captured, recorded and routinely analysed and acted on. Review of data is a permanent item on board agenda and findings are disseminated.	Both

Key services

No.	Standard	Medicine, Surgery, Both
22	All acute medical and surgical units to have provision for ambulatory emergency care.	Both
23	Prompt screening of all complex needs inpatients to take place by a multi-professional team which has access to pharmacy and therapy services, including physiotherapy and occupational therapy, seven days a week with an overnight rota for respiratory physiotherapy.	Both
24	Single call access for mental health referrals to be available 24 hours a day, seven days a week with a maximum response time of 30 minutes.	Both
25	Hospitals admitting emergency patients to have access to comprehensive 24 hour endoscopy services that have a formal consultant rota 24 hours a day, seven days a week.	Both
26	All hospitals dealing with complex acute medicine to have onsite access to levels 2 and 3 critical care (i.e. intensive care units with full ventilatory support). All AMUs to have access to a monitored and nursed facility.	Medicine

Training

No.	Standard	Medicine, Surgery, Both
27	Training to be delivered in a supportive environment with appropriate, graded consultant supervision.	Both

Appendix 2: Methodology

This research used a mixed methods methodology. We used the following methods:

Review of the literature and documentary review

We undertook a search and review of academic and grey literature, identified using a snowball approach. We focused on:

1 Evidence underpinning the LQS. This included a brief review of the literature focused on weekend mortality, variation in health care provision as measured by service organisation, patient outcomes, and quality indicators such as length of stay for acute care admissions.

2 Development and implementation of the LQS. This included a review of the relevant documents to inform our understanding of how the LQS were developed, presented and met by hospitals across London, and it informed the groundwork for the scoping interviews.

A note on our methodological framework

Due to their aims and the way they were developed, the LQS can be seen as a quality improvement (QI) intervention. We therefore used a QI framework to explore the approaches to their development and implementation.

We conducted a brief review of the literature on the implementation and assessment of health care interventions, and selected a framework developed by Damschroder and colleagues (2009). The Consolidated

Framework for Implementation Research (CFIR) provides a structure for approaching complex, interacting and multi-level interventions (Damschroder and others, 2009), so we considered that it suited the retrospective character of this piece of research.

The CFIR framed our approach to research inquiries and the analysis of results. The 37 constructs were scanned for their potential relevance and the ease of their investigation. The results were then tested with the expert panel convened for the scoping seminar. Constructs which were felt to be irrelevant and difficult to pursue in the context of this research were discarded. The remaining constructs were used to guide the formulation of the online survey and interview and focus group topic guides.

Interviews

We undertook 24 interviews with two groups of stakeholders:

1 Those who were involved in the development, introduction and audit of the LQS. Interviewees included: people involved in the strategic planning, engagement and development of the LQS (n=2); people involved in the operational planning and development of the LQS (n=3); people involved in the clinical development and validation of the LQS (n=3); a member of the audit teams who took part in site visits to the trusts (n=1); commissioners (n=2); and a lay partner involved in the development of the LQS and the hospital site visits (n=1).

2 Those who were involved in implementing the LQS in hospitals and trusts across London. This group of interviewees included trust board members (n=6); managers (n=1) and clinicians responsible for implementing the LQS at their trusts (n=5). This set of interviews were specifically conducted to ensure that we had insight into events at most trusts in London (and not just those that responded to the survey or that were case studies sites). This aimed to ensure a broad spread of views represented in this report. Out of the 18 acute care trusts in London, only two did not participate in any component of this study.

We selected our sample of interviewees according to their role at the time the LQS were being developed and implemented, and their involvement in these processes.

Interviews focused on the preparatory engagement undertaken by LHP; the design and the introduction of the LQS; the audit processes; the overall approaches to change across different hospitals; barriers and enablers encountered; and the impact of introducing the LQS on service change and improvement.

The interviews provided valuable insight into the process of developing and implementing the LQS, and they informed the development of our survey.

Seminars and stakeholder meetings

In September 2015 we facilitated a methodological seminar to discuss the research team's initial approaches to the work. This included a discussion about QI methods, and the implementation of guidelines and other tools for driving QI in acute medical settings. This was also an opportunity for the research team to do a first collective examination of the constructs of the selected framework of analysis (Damschroder and others, 2009).

In November 2015 we held a scoping seminar to explore key stakeholders' insights into the introduction and implementation of the LQS. Participants included a member of an acute care trust board; a consultant in acute medicine; a consultant in emergency care; a clinical lead of an emergency department; and a senior NHS manager. All of these participants had been involved in implementing the LQS at their respective organisations.

The scoping seminar focused on the approaches that had been used to implement the standards at different acute care trusts; barriers and enablers identified; and how the research team could best explore these. We also used this seminar as a forum to test the appropriateness of the constructs in the CFIR to this research. The final domains agreed by the expert group were used to guide the development of the online survey and the interview and focus group topics guides.

In June 2016 we organised a workshop with audit team members who were involved in the design, introduction and audits of the LQS. This workshop addressed the fact that our research had not specifically involved members of the LQS audit teams. Our aims were to:

- explore the perceptions and experiences of those who participated in the audit process and in the clinical expert panels, their motivations for participating and their learning from the experience

- understand the extent to which having participated in the development of the LQS through the clinical expert panels and the audit teams influenced the implementation of the LQS for these stakeholders

- learn about the positive and negative aspects of the LQS development process, which would inform the future setting and implementation of clinical standards.

This workshop included clinicians and lay representatives who had been involved in the development and audit of the LQS as part of the acute medicine and the emergency general surgery panels, but also the paediatrics, maternity, critical care and fractured neck of femur panels.

Electronic survey of senior clinicians and managers

The survey aimed to understand approaches to implementing the standards with a focus on barriers and enablers. Our target respondents were senior clinicians and managers in acute care services in London who had been involved in implementing the LQS at their trust.

The survey covered:

- the initial engagement of LHP/NHS London with clinicians and managers before the LQS audits
- the approaches to change that were taken at each hospital to implement the LQS

- hospitals' experience of the audits
- the impact of implementing the LQS at each hospital.

Survey development and validation

The survey was primarily informed by the CFIR, whose relevant constructs in the context of this research were validated in a methodological seminar with experts. The questions in the survey were developed based on a literature and documentary review, and the empirical information provided through the scoping interviews. The methodological and the scoping seminars were used as forums for reviewing aspects related to survey structure, question wording and content sense-checking.

The survey was developed on Survey Monkey®, which allows automatic data collection and aggregation. A link was generated and shared with survey respondents.

The survey was piloted over two weeks. The feedback received from pilot respondents allowed us to revise the survey before its implementation. It was sent to nominated respondents on 17 December 2015.

Sampling

We first contacted the medical directors of all acute care trusts in London[9] requesting their collaboration in identifying a person in a senior management position who was at the hospital at the time the LQS were introduced (from 2011/12 onwards).

While this was straightforward for trusts with a single hospital site, for trusts with more than one hospital we asked medical directors to appoint a person per hospital. Our sample included a total of 29 hospital sites (see Table 1).

9 All acute care trusts that had been visited by the LHP audit teams and for whom we have the audit results. We did not include in our sample trusts/hospitals with no adult acute and emergency services, or any that had not been audited.

Table 1 – Acute care trusts in London and hospital sites, with 29 sample sites highlighted

Acute care trusts in London	Hospital sites included in the sample
Royal Free London NHS Foundation Trust	• Barnet Hospital • Royal Free Hospital
Barts Health NHS Trust	• Newham University Hospital • The Royal London Hospital • Whipps Cross University Hospital
London North West Healthcare NHS Trust	• Central Middlesex Hospital • Ealing Hospital • Northwick Park Hospital
Imperial College Healthcare NHS Trust	• Charing Cross Hospital • Hammersmith Hospital • St Mary's Hospital
Chelsea and Westminster Hospital NHS Foundation Trust	• Chelsea and Westminster Hospital • West Middlesex University Hospital
Croydon Health Services NHS Trust	• Croydon University Hospital
Guy's and St Thomas' NHS Foundation Trust	• St Thomas' Hospital
The Hillingdon Hospitals NHS Foundation Trust	• Hillingdon Hospital
Homerton University Hospital NHS Foundation Trust	• Homerton University Hospital
Barking, Havering and Redbridge University Hospitals NHS Trust	• Queen's Hospital
King's College Hospital NHS Foundation Trust	• King's College Hospital • Princess Royal University Hospital
Kingston Hospital NHS Foundation Trust	• Kingston Hospital
Lewisham and Greenwich NHS Trust	• Lewisham Hospital • Queen Elizabeth Hospital

North Middlesex University Hospital NHS Trust	• North Middlesex University Hospital NHS Trust
University College London Hospitals NHS Foundation Trust (UCLH)	• University College Hospital
St George's University Hospitals NHS Foundation Trust	• St George's Hospital
Epsom and St Helier University Hospitals NHS Trust	• Epsom Hospital • St Helier Hospital
Whittington Health NHS Trust	• Whittington Hospital

Of the 18 medical directors contacted, 15 replied and nominated a person to respond to the survey. We sent an email with the survey link to the nominated people. This was followed up by weekly email or telephone reminders. While some participants completed the survey on behalf of a single hospital site, others completed it for an entire trust.

Case studies

In order to better understand how different London hospitals approached the implementation of the LQS, we selected four hospitals as case study sites. We aimed to further explore salient aspects linked to the implementation of the LQS, while also testing some of our assumptions about it. For instance, were the LQS equally applicable across all London hospitals, or were there differences between larger and smaller hospitals?

Rationale for case study selection

The selection of case studies aimed to ensure a good spread of hospitals across London. We built a matrix as a tool to support our decision of which hospitals to include as case studies, based on the following parameters:

- Geography – based on the distribution of acute care hospitals across London boroughs we categorised hospitals as either 'inner London' or 'outer London'.

- Hospital size – this was measured by the number of beds in each site. We accordingly categorised hospitals into small, medium and large.

- Level of activity – we used the total number of unscheduled medical admissions per hospital as a measure of how *busy* hospitals are. We then divided hospitals into quartiles according to the number of admissions registered.

- Performance against the LQS – we used the findings from our preliminary quantitative analysis of hospitals' performance against meeting the LQS. We categorised hospitals according to whether they showed consistently high results over time, consistently low results, or an improvement from the first audit to the second.

Even though we consider that other aspects such as the presence of major trauma centres in some of these hospitals potentially has some impact on their ability to meet the LQS, we did not include that as a selection criterion.

Focus groups

During our visits to each of the four case study hospitals, we had a guided walk-around of the emergency department and the AMU, and we conducted a focus group. The focus groups aimed to explore the implementation of the LQS and its challenges in greater depth at those trusts.

We held focus groups with a total of 17 participants, including consultant medical staff, nursing service leads and middle managers. We supplemented these focus groups with additional interviews with senior managers and clinicians who might also have been involved in implementing the LQS.

Quantitative analysis of the implementation of the LQS

We conducted a brief quantitative analysis to investigate the extent to which the LQS in acute medicine were implemented across London. We used the results from the two self-assessment audits of hospitals undertaken by LHP: the first in 2012/13 and the second in 2013/14. Having two different points in time allowed us to observe the evolution in hospitals' performance over time.

Audit results indicated which London hospitals had met or not met each standard. We did a simple count of the LQS in acute medicine that had been met and not met in each audit, for each hospital site. From this we obtained a measure of hospital performance (based on the number of standards met over time), a measure of change (based on the difference between the first and the second audits) and an overview of the most and least implemented standards.

Where possible we also compared the results from the two audits against the results of the survey of service arrangements conducted by LHP in 2011, prior to the introduction of the LQS. However, this was only possible for a few performance measures.

The second part of this quantitative analysis looked at changes in selected health outcome measures over time.

The analysis covered the period from 2009/10 (before the LQS were introduced) through to 2013/14 (after the LQS had been introduced). We analysed the results for London and, to put these into context, compared these against the results for the rest of England.

Our data inclusion criteria were:

- emergency admissions to acute London hospitals in 2009/10 and 2013/14
- coded as 'ordinary' admissions, i.e. excluding day-case admissions, patients classed as regular attenders, and mothers and babies using only delivery facilities

- age 16 or over on admission
- medical admissions, defined as main specialty and treatment specialty in the admission episode both coded between 300 and 499 inclusive.

It is important to caveat that the analysis of outcomes presents crude, unadjusted values. Changes in the results over time may reflect changes in the ways services are organised in different parts of the country, the underlying demography, among other things, and may not necessarily be tied to the introduction of the LQS. It is not possible, with this level of analysis, to link these changes to the implementation of standards. We will, therefore, conduct a more in-depth quantitative analysis as a separate piece of work.

A note on the analysis of performance against the LQS

In the second audit that took place in 2013/14, standards were assessed separately for weekends and weekdays, whereas this distinction was not made in the first audit in 2012/13. In cases where a hospital met a standard in 2013/14 only during weekdays or weekends, this can make it difficult to judge whether improvements have actually been made.

For the purposes of this analysis we have therefore defined as an 'improvement' a change from a standard being unmet in 2012/13 to being met on both weekdays and weekends in 2013/14. Similarly, where a standard was met in 2012/13 but unmet for both weekdays and weekends in 2013/14, this has been defined as a 'decline'.

Strengths and limitations of the study

During this project we identified some limitations of the research work. These included:

- **The retrospective nature of the research.** The fact that a significant part of this study involves some degree of retrospective analysis is a limitation, since we are relying on our informants' ability to think back to 2011/12 and to remember details about the development and implementation of the LQS.

- **High turnover of clinical and managerial staff** across London acute care trusts. This was true both at senior and intermediate levels in organisations. It posed some difficulties for the research, since we had to identify and track down many of the managers and clinicians who had been initially involved in implementing the LQS but had since moved to other organisations. Finding the necessary level of organisational memory was often a challenge.

- **Focus on the LQS for acute medicine**. In spite of the interdependencies between different acute care services, this research focused only on the LQS in acute medicine. This was the only area of the LQS (together with emergency general surgery) against which acute care trusts' performance was audited twice. This provided us with two points in time for analysing and comparing results. Although emergency general surgery services also went through two cycles of audit, it was considered that exploring multiple services in a single hospital would add to complexity without necessarily increasing insight. It was also felt that the thrust of the LQS programme was predominantly towards medical, rather than surgically unwell patients. However, we did include a broader perspective on the development of the LQS as a whole through our workshop with audit team members in June 2016.

It is also worth noting that the complex nature of the LQS programme meant that a number of individuals played multiple roles both for NHS London/ LHP and their own organisation. For example, a number of senior clinicians and managers were responsible for implementing the LQS in their hospitals,

while also participating in the development of the LQS and/or the audit site visits. Concomitantly, a number of individuals participated in more than one portion of the study. This, coupled with the iterative structure of the study, has led us to consider emerging findings as a whole, rather than demarcating rigidly between the different portions of the study. However, where individuals participated in more than one portion of the LQS, specific responses were grouped by the corresponding role, rather than by job title.

Challenges encountered during the research

As part of our work we had initially set out to characterise and map out the different models of acute and emergency care at different acute care trusts. This would be done through our surveys of AMUs and emergency departments, and through walk-arounds during our visits to case study sites.

During our research it became apparent that it is not possible to put together an accurate description of hospital systems and services within the scope of this work. In addition to service arrangements being highly complex and variable, widespread service constraints mean that there is a tension between 'what should ideally happen' and 'what is actually in place'.

Although a detailed description of these models of care was not possible, the results from our survey, interviews and focus groups allow us to make some informed inferences about the way service arrangements have influenced the implementation of the LQS and vice versa.

The challenges we encountered during the hospital service mapping exercise and our findings will be reported in a separate publication.

Appendix 3: Timeline of events for the LQS

The timeline below provides an overview of the key events that influenced, and were influenced by, the LQS, and their relevance to these.

Date	Event	Relevance to the LQS
2005	NCEPOD publishes *An Acute Problem?*	The report explored the management of emergency medical admissions and acutely unwell medical patients, and their link with hospitals' critical care facilities.
July 2007	Sir Ara Darzi published *A Framework for Action*, an independent study of health services in London	The report was commissioned by NHS London and it set out a ten-year vision for health care in London. It included recommendations for acute care organisation and provision, and it lay the foundations for the centralisation of stroke and major trauma services in London from 2009.
2007	NCEPOD published *Emergency Admissions: A journey in the right direction?*	The report reviewed organisational and clinical aspects of care of patients admitted as emergencies. It highlighted remediable factors in existing care pathways, such as the appropriateness, timeliness and frequency of investigations and reviews, the experience of staff, and the availability of results, protocols and procedures.
October 2007	The Royal College of Physicians published *Acute Medical Care: The right person, in the right setting – first time*	The report pointed to the need to reconfigure hospitals' acute medical services to provide acutely ill patients round-the-clock access to senior clinical decision-makers, and clinical assessment, documentation and illness management.

Date	Event	Relevance to the LQS
January-May 2009	Healthcare for London held *The Shape of Things to Come* consultation on plans to improve stroke and major trauma services in London	As a result of the consultation, a committee of PCTs decided to introduce four major trauma centres, eight hyper-acute stroke units and better local services across London.
February 2011	The Royal College of Surgeons published *Emergency Surgery: Standards for unscheduled surgical care*	This guidance for providers, commissioners and service planners set out the key elements of a high-quality emergency surgical service.
March 2011	London Health Programmes undertook a survey of service arrangements across all London trusts	The survey aimed to examine whether there was a compelling local case for change for acute medicine and emergency general surgery services.
September 2011	London Health Programmes published the case for change, *Adult Emergency Services: Acute medicine and emergency general surgery*	The case for change was based on a review to assess the provision of unplanned emergency services for patients admitted to NHS hospitals in London. It showed significant variations in outcomes such as mortality, length of stay and 30-day readmission rates for patients admitted as an emergency across London. It underpinned the LQS.
September 2011	London Health Programmes published the summary of findings from a survey of current arrangements for adult acute medicine and emergency general surgery	The report highlighted significant variation in service provision in London between hospitals and within individual hospitals, and between weekdays and weekends. The findings also pointed to sub-optimal outcomes for patients admitted out-of-hours and at weekends, where poor service provision was found to be associated with an increased risk of mortality.

Date	Event	Relevance to the LQS
November 2011	The commissioners in North West London established the 'Shaping a Healthier Future' programme	The programme was led by a joint committee of PCTs to determine the most appropriate configuration of health services in North West London. The committee recommended concentrating A&E resources by having major A&E departments at fewer hospital sites, while placing GP-led urgent care centres at each 'local' and 'major' hospital. This programme used the LQS to help build their case for change for reconfiguration in North West London.
January 2012	The Academy of Medical Royal Colleges published *The Benefits Of Consultant-Delivered Care*	This report was the result of a comprehensive review into the benefits to patients of consultant-delivered medical care and it produced a set of recommendations.
February 2012	NHS North West London collaboration of CCGs published *Shaping a Healthier Future: NHS North West London case for change*	The 'Shaping a Healthier Future' programme aimed to reshape hospital and out-of-hospital health and care services in North West London, under the premise that specialist care was too thinly spread over too many sites and some facilities were inadequate.
April 2012	The LQS for acute medicine and emergency general surgery were commissioned	
May 2012	The audit process of acute hospitals in London against compliance with the LQS for acute medicine and emergency general surgery began	The individual reports from the audits across London hospitals were published between May and September 2012.

Date	Event	Relevance to the LQS
June 2012	NCEPOD published *Cardiac Arrest Procedures: Time to intervene?*	The report looked at the process of care for patients who received in-hospital cardiopulmonary resuscitation, with a focus on clinical and organisational areas where patient care might have been improved. It was used as a source of evidence for reviewing some of the LQS in 2012, after they were initially challenged.
July 2012	The Royal College of Physicians published *National Early Warning Score (NEWS): Standardising the assessment of acute-illness severity in the NHS*	Some of the LQS – such as those focusing on consultant-delivered care and the continuous assessment of patients admitted with a fractured neck of femur – were initially challenged and then reviewed in light of the evidence provided by this report (as well as other sources).
July – October 2012	The North West London collaboration of CCGs launched a consultation to seek patient and public views about the plans outlined in 'Shaping a Healthier Future'	
December 2012	The Academy of Medical Royal Colleges published *Seven Day Consultant Present Care*	The report set out three service standards to deliver consistent inpatient care: review of hospital inpatients by an on-site consultant at least once every 24 hours, seven days a week; provision of consultant-supervised interventions and investigations seven days a week; availability of support services in hospitals and in primary care in the community seven days a week.
January 2013	End of the LQS audit process	

Date	Event	Relevance to the LQS
February 2013	London Health Programmes published the full cases for change for the LQS	Cases for change for LQS in critical care, emergency departments, fractured neck of femur pathways, paediatric emergency services and maternity services, in addition to acute medicine and emergency general surgery.
February 2013	London Health Programmes published the PCT cluster reports and pan-London findings report of the quality and safety audit of London's acute hospitals	
February 2013	NHS England established the 'NHS Services, Seven Days a Week Forum'	The forum was chaired by the National Medical Director, Sir Bruce Keogh, and it aimed to consider how NHS services could be improved to provide a more responsive and patient-centred service across the seven-day week. In a first stage the forum would focus on urgent and emergency care services and their supporting diagnostic services.
November 2013	Second self-assessment against the LQS for acute medicine and emergency general surgery	This self-assessment of each acute hospital against the acute emergency and maternity standards was undertaken to inform planning and commissioning of these standards from April 2014. The self-assessment also showed progress in the implementation of the LQS for acute medicine and emergency general surgery.
November 2013	The Academy of Medical Royal Colleges published *Seven Day Consultant Delivered Care: Implementation considerations*	This report was designed to help organisational and clinical leaders identify their starting point on the path to delivering seven-day consultant-present care for patients in hospital.

Date	Event	Relevance to the LQS
December 2013	NHS England published the planning guidance *Everyone Counts: Planning for patients 2013/14*	This report offered planning guidance for CCGs and it signalled that the NHS would move towards routine services being available seven days a week. This was considered essential to delivering a more patient-focused service and improving clinical outcomes.
December 2013	NHS England published *NHS Services, Seven Days a Week Forum: Summary of initial findings*	The report outlined the evidence gathered by the 'NHS Services, Seven Days a Week Forum'. The forum used a similar approach to reviewing the evidence base and developing clinical standards as had been used for the LQS. The evidence from the report also pointed to significant variation in outcomes (e.g. mortality rates, patient experience, length of stay, readmission rates) for patients admitted to hospitals at the weekend across the NHS in England. The report sets out ten national clinical standards for urgent and emergency care across all seven days of the week to address this.
April 2014	NHS England (London) published *London – A Call to Action*	The LQS were referenced in this report to highlight the quality challenges facing the NHS, in addition to the financial challenges that commissioners need to address.
September 2014	NHS England (London) held a shared learning event on the implementation of the LQS	This event gathered hospitals that had showed progress or sustainability in meeting the LQS, to share good practices, challenges and future direction.
October 2014	The London Health Commission published *Better Health for London*	The report set out recommendations for improving public health in London. The LQS are included in one of the recommendations and referred to as a key tool for taking forward the seven-day urgent and emergency care agenda, by promoting consistent quality of care across every day of the week.

Date	Event	Relevance to the LQS
January 2015	NHS England (London) published *Shared Learning Event: Meeting the London quality standards for adult acute medicine and general emergency surgery services*	The report summarised the outcomes of the shared learning event from 2014 and it was meant as a learning tool to further implement the LQS.
May 2015	The Healthy London Partnership published the *Urgent and Emergency Care Service Specifications*	The document described the characteristics of facilities providing urgent and emergency care services in London: urgent care centres, emergency centres and specialist emergency centres. In London, stakeholders have proposed that the LQS for urgent and acute emergency services should be integral to the service specification criteria.
July 2015	Monitor, the Trust Development Authority and NHS England sent a letter to the medical directors of all acute medical trusts and foundation trusts	The letter identified four standards as having the most impact on reducing weekend mortality: time to consultant review; access to diagnostics; access to consultant-directed interventions; and ongoing review. Trusts were asked to complete a self-assessment tool addressing these four standards, to establish a baseline of how seven-day standards are being met nationally.
November 2015	The Healthy London Partnership published *Coordinated, Consistent and Clear Urgent and Emergency Care: Implementing the urgent and emergency care vision in London*.	Drawing from Sir Bruce Keogh's national 'Urgent and Emergency Care Review', the report set out how London's urgent and emergency care services will become coordinated, consistent, clear and available seven days a week. The LQS were used as the foundation for establishing the facilities specifications for urgent care centres, emergency centres and emergency centres with specialist services.

Nuffield Trust is an independent health charity. We aim to improve the quality of health care in the UK by providing evidence-based research and policy analysis and informing and generating debate.

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Published by the Nuffield Trust.

ISBN: 978-1-910953-19-8

Design by Soapbox: soapbox.co.uk

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