

Quality improvement made simple

What everyone should know about
healthcare quality improvement

Quick guide

ABOUT THE HEALTH FOUNDATION

The Health Foundation is an independent charity working to improve the quality of healthcare in the UK.

We want the UK to have a healthcare system of the highest possible quality – safe, effective, person-centred, timely, efficient and equitable. We believe that in order to achieve this, health services need to continually improve the way they work.

We are here to inspire and create the space for people to make lasting improvements to health services.

We conduct research and evaluation, put ideas into practice through a range of improvement programmes, support and develop leaders and share evidence to drive wider change.

CONTENTS

1	Introduction	2
2	What are 'quality' and 'quality improvement'?	6
3	The roots of quality improvement	15
4	Quality improvement approaches	20
5	Underlying principles	26
6	Frequently asked questions	34
7	Where can I find out more?	42

INTRODUCTION

1

Improving quality is about making healthcare safe, effective, patient-centred, timely, efficient and equitable. In the history of the NHS, there has never been such a focus on improving the quality of health services.

This guide focuses on one important element of the quality agenda: quality improvement. It looks in particular at what are known as organisational or industrial approaches to quality improvement. These aim to bring about a measurable improvement by applying specific methods within a healthcare setting.

This is not a 'how to' guide. Instead, it offers a clear explanation of some common approaches used to improve quality, including where they have come from, their underlying principles and their efficacy and applicability within the healthcare arena.

WHO IS THIS GUIDE FOR?

This guide provides an overview of organisational or industrial approaches to quality improvement.

It is written for a general healthcare audience and will be most useful for those new to the field of quality improvement, or those wanting to be reminded of the key points.

WHY FOCUS ON QUALITY IMPROVEMENT?

The Health Foundation believes that there is a compelling case for applying organisational or industrial quality improvement approaches to healthcare.¹ We think that all staff have a role to play in ensuring that healthcare services continue to improve.

At present, the evidence is clear that healthcare is not always safe and can lead to poor patient experience and outcomes.² At the same time, the economic downturn means an end to year-on-year financial increases. Healthcare services are being challenged to respond to this not through indiscriminate cuts, but by improving efficiency, driving up quality and reducing levels of harm.

Improving the quality of services is also a key requirement within the NHS, supported by initiatives such as quality accounts and the Commissioning for Quality and Innovation (CQUIN) payment framework.

¹ Øvretveit J. *Does improving quality save money? A review of the evidence of which improvements to quality reduce costs to health service providers*. London: Health Foundation, 2009.

² See, for example: the Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry, 2013.
See also: www.health.org.uk/publications/levels-of-harm/;
www.health.org.uk/publications/levels-of-harm-in-primary-care/

WHAT ARE 'QUALITY' AND 'QUALITY IMPROVEMENT'?

2

The terms ‘quality’ and ‘quality improvement’ mean different things to different people in different circumstances. This can be confusing. This section looks at common definitions of both terms, and summarises how they are broadly understood.

WHAT IS QUALITY?

Within healthcare, there is no universally accepted definition of ‘quality’. However, the following definition, from the US Institute of Medicine, is often used:

[quality is] the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.³

The Institute of Medicine has identified six dimensions of healthcare quality.⁴ These state that healthcare must be:

- safe
- effective
- patient-centred
- timely
- efficient
- equitable.

³ Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century*. Washington DC: National Academy Press, 1990, p244.

⁴ *Ibid.*

The Health Foundation regards quality as the degree of excellence in healthcare. This excellence is multi-dimensional. For example, it is widely accepted that healthcare should be safe, effective, person-centred, timely, efficient and equitable.

Therefore, leaders need to actively consider these six dimensions when setting their priorities for improvement. Often the dimensions are complementary and work together. However, there can sometimes be tensions between them that will need to be balanced. It is also important to take into account different stakeholders' views about what they feel matters and what the priority areas of focus should be within an organisation.

The dimensions of quality

Safe

Avoiding harm to patients from care that is intended to help them.

Timely

Reducing waits and sometimes harmful delays.

Effective

Providing services based on evidence and which produce a clear benefit.

Efficient

Avoiding waste.

Person-centred

Establishing a partnership between practitioners and patients to ensure care respects patients' needs and preferences.

Equitable

Providing care that does not vary in quality because of a person's characteristics.

WHAT IS QUALITY IMPROVEMENT?

There is no single definition of quality improvement. However, a number of definitions describe it as a systematic approach that uses specific techniques to improve quality. One important ingredient in successful and sustained improvement is the way in which the change is introduced and implemented. Taking a consistent approach is key.

This guide draws its definition of quality improvement from that provided by Dr John Øvretveit, a leading expert on quality in healthcare, in his report *Does improving quality save money?*, which states:

The conception of improvement finally reached as a result of the review was to define improvement as better patient experience and outcomes achieved through changing provider behaviour and organisation through using a systematic change method and strategies.⁵

The key elements in this definition are the combination of a 'change' (improvement) and a 'method' (an approach with appropriate tools), while paying attention to the context, in order to achieve better outcomes.

⁵ Øvretveit J. *Does improving quality save money? A review of the evidence of which improvements to quality reduce costs to health service providers*. London: Health Foundation, 2009, p8.

HOW CAN WE IMPROVE QUALITY?

The Health Foundation believes that a combination of approaches is needed to ensure sustained improvements in healthcare quality.

There are a number of external influences that need to be considered and used, where possible, to drive improvements in quality. These include professional requirements, centralised government initiatives and economic drivers, such as the Commissioning Quality and Innovation (CQUIN) payment framework.

There are also a range of models and methods that individual organisations can put in place themselves. These were originally developed within an organisational or industrial context. Organisations develop and set their own goals, with full staff engagement, and employ a systematic approach to implementing change and monitoring progress.

The focus of this guide is on these organisational or industrial approaches to quality improvement. We believe they have an important part to play in transforming services and driving up quality.

What would improve quality?

Quality improvement draws on a wide variety of methodologies, approaches and tools. However, many of these share some simple underlying principles, including a focus on:

- understanding the problem, with a particular emphasis on what the data tell you
- understanding the processes and systems within the organisation – particularly the patient pathway – and whether these can be simplified
- analysing the demand, capacity and flow of the service
- choosing the tools to bring about change, including leadership and clinical engagement, skills development, and staff and patient participation
- evaluating and measuring the impact of a change.

Regardless of the approach used, how the change is implemented – including factors such as leadership, clinical involvement and resources – is vital. The NHS Change Model⁶ highlights the following key areas for consideration:

- leadership for change
- spread of innovation
- improvement methodology
- rigorous delivery
- transparent measurement
- system drivers
- engagement to mobilise.

⁶ Available at: www.changemodel.nhs.uk

How the implementation is managed will depend very much on the context of the particular organisation making the change, and requires careful consideration. For more information about the underlying principles of quality improvement, see Section 5.

Quality improvement approaches and sustainable change

Only around two-thirds of healthcare improvements go on to result in sustainable change that achieves the planned objective. Therefore, leaders need to think carefully about how they can embed positive change and make it sustainable.

There is evidence that sustainable change is more likely to result from a model that involves patients and staff in developing, designing and implementing changes than from a 'command and control'/top down model.

Quality improvement in commissioning

There is growing awareness among healthcare providers of how industrial quality improvement approaches can benefit healthcare providers. But it is also important that commissioners have an understanding of these methods. Commissioners have a specific role to play in contracting for quality and ensuring that quality improvement approaches are being used to redesign and improve services.

The commissioners' role includes:

- building measures of quality and safety into commissioning specifications and, where appropriate, incentives and penalties
- putting in place monitoring and management regimes that assess quality and patient safety processes
- putting the emphasis on assuring quality and safety in evaluating current and potential providers
- looking at governance and leadership on these issues, rather than merely policies and procedures
- assessing for themselves how care is provided on the ground, and how the culture and values of the organisation are expressed in behaviour
- using the CQUIN payment framework as a route to reward providers for quality improvement.

At the heart of every commissioner–provider interaction should be discussions about what is being done to improve quality.

By developing a better understanding of quality improvement approaches, commissioners will be better placed to ask the right questions about providers' focus on improvement and the progress they are making. This will help commissioners ensure that quality is the driving factor in their relationships with providers.

THE ROOTS OF QUALITY IMPROVEMENT

3

Most of today's quality improvement methods were developed in industry and have been adapted for use in other sectors, such as health. These industrial approaches have been used within healthcare for the past 30 years, but their use has not yet been embedded throughout healthcare organisations. Perhaps because of this, the evidence base for their effectiveness is relatively limited, although it is expanding with the increasing interest in improvement science.⁷

The roots of many quality improvement approaches can be traced back to the thinking about production quality control that emerged in the early 1920s. During the 1940s and 1950s, quality improvement techniques were further developed in Japan, pioneered there by the US experts W Edwards Deming, Joseph Juran and Armand Feigenbaum and the Japanese expert Kaoru Ishikawa. Don Berwick later became known for his work in the United States, leading the pioneering work of the Institute for Healthcare Improvement.⁸

These leaders in quality improvement have built a body of knowledge about implementing and sustaining change across a range of industries, including healthcare. There are a number of quality improvement approaches that draw upon the work of these pioneers. See Section 4 for details of some of the most common approaches.

⁷ See: www.health.org.uk/areas-of-work/improvement-science

⁸ A useful website for an overview of the history of quality improvement is: www.businessballs.com/qualitymanagement.htm

Pioneers of quality improvement approaches

Joseph Juran published *The quality control handbook* in 1951.⁹ His philosophy focused on the role of management responsibility for quality. An important aspect of Juran's work was his focus on staff empowerment. Juran recognised that every individual in the workplace needed to take responsibility for quality improvement, and that if staff were not empowered to do so, results would be limited. In this respect, quality improvement is regarded as an ongoing process and part of everyday business and work.

Armand V Feigenbaum was chief of manufacturing for General Electric in the 1960s and the originator of 'total quality control', which he defined as:

an effective system for integrating quality development, quality maintenance and quality improvement efforts of the various groups within an organisation, so as to enable production and service at the most economical levels that allow full customer satisfaction.

Feigenbaum saw quality as a way of managing, rather than a series of projects, and viewed it as the responsibility of everyone in the organisation. He proposed three steps to quality: quality leadership, modern quality technology and organisational commitment.¹⁰

⁹ Juran, J. *Quality control handbook*. New York: McGraw-Hill, 1951.

¹⁰ Feigenbaum, AV. *Total quality control*. New York: McGraw-Hill, 1961.

Kaoru Ishikawa made many contributions to the field of quality improvement, including a range of tools and techniques. See, for example, his cause and effect ‘fishbone’ tool.¹¹ His emphasis was on the human side of quality. The concept of quality improvement as a fundamental responsibility of every member of staff became a key component of the Japanese approach to quality improvement. Ishikawa’s work focuses on the idea of *kaizen* (a Japanese word that can be roughly translated as ‘continuous management’). This concept, developed by Japanese industry in the 1950s and 1960s, is a core principle of quality management today, and holds that it is the responsibility of every staff member to seek to improve what they do.¹²

W Edwards Deming developed a 14-point approach to quality improvement and organisational change in the 1980s.¹³ Deming was also the creator of the Plan, Do, Check, Act cycle of continuous improvement, which later became Plan, Do, Study, Act (see p.23). This approach is used in many quality improvement approaches within the NHS today.¹⁴ His work has been underpinned by his system of profound knowledge, which offers insight into how to make changes that will result in improvements in a variety of settings. Crucially, he highlighted how different elements interacted with each other – for example, arguing that knowledge about psychology is incomplete without knowledge about variation. Organisations can harness this knowledge to drive forward improvements.

¹¹ The Institute for Healthcare Improvement has a number of useful tools, including Ishikawa’s cause and effect tool, available at: www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/Tools

¹² Ishikawa K. *What is total quality control? The Japanese way*. Englewood Cliffs: Prentice-Hall, 1985.
Ishikawa K. *Introduction to quality control*. London: Chapman & Hall, 1990.

Don Berwick is President Emeritus and Senior Fellow at the US Institute for Healthcare Improvement (IHI), where he was President and Chief Executive Officer for nearly 20 years until 2010. The IHI, based in Boston, is a leading innovator in health and healthcare improvement worldwide and has had considerable influence on the application of quality improvement in the healthcare sector.¹⁵

The IHI has adapted the US Institute of Medicine's six dimensions of quality (see p.7) into a 'no needless' framework,¹⁶ which aspires to promote:

- no needless deaths
- no needless pain or suffering
- no helplessness in those served or serving
- no unwanted waiting
- no waste
- no one left out.

¹³ Deming WE. *Out of the crisis*. Cambridge, MA: Massachusetts Institute of Technology Center for Advanced Engineering Study, 1986.

¹⁴ Deming WE. *The new economics for industry, government, and education*. Cambridge, MA: the MIT Press, 2000.

¹⁵ Berwick D, Godfrey AB, Roessner J. *Curing health care: new strategies for quality improvement*. Hoboken: Jossey-Bass, 1990. Berwick D. *Escape fire: designs for the future of health care*. Hoboken: Jossey-Bass, 1990.

¹⁶ www.ihi.org/ihi/about

QUALITY IMPROVEMENT APPROACHES

4

So far this guide has looked at what is meant by quality and quality improvement, and where quality improvement has come from. This section looks at the theory in practice, identifying some of the best-known approaches to quality improvement. No one approach is better than the others, and some may be used simultaneously.¹⁷

Business process reengineering

This approach involves a fundamental rethinking of how an organisation's central processes are designed, with change driven from the top, by a visionary leader. Organisations are restructured around key processes (defined as activities, or sets of activities) rather than specialist functions. By moving away from traditional silos in this way, organisations can identify waste and become more streamlined.¹⁸

¹⁷ Other than where specified, this section draws on Boaden R, et al. *Quality improvement: theory and practice in healthcare*. Coventry: NHS Institute for Innovation and Improvement/University of Manchester Business School, 2008.

¹⁸ www.economist.com/node/13130298

Experience-based co-design

This is an approach to improving patients' experience of services, through patients and staff working in partnership to design services or pathways. Data are gathered through in-depth interviews, observations and group discussions and analysed to identify 'touch points' – aspects of the service that are emotionally significant. Staff are shown an edited film of patients' views about their experiences before staff and patients come together in small groups to develop service improvements.¹⁹

Lean

This is a quality management system that draws on the way some Japanese car manufacturers, including Toyota, manage their production processes. The approach focuses on five principles: customer value; managing the value stream; regulating flow of production (to avoid quiet patches and bottlenecks); reducing waste; and using 'pull' mechanisms to support flow. Using 'pull' means responding to actual demand, rather than allowing the organisational needs to determine production levels.

¹⁹ www.kingsfund.org.uk/ebcd

Model for improvement (including PDSA)

This is an approach to continuous improvement where changes are tested in small cycles that involves planning, doing, studying, acting (PDSA), before returning to planning, and so on. These cycles are linked with three key questions.

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

Each cycle starts with hunches, theories and ideas and helps them evolve into knowledge that can inform action and, ultimately, produce positive outcomes.

Six Sigma

This is a systematic approach to improving products or processes. It focuses first on understanding how an organisation’s customers would define ‘defects’ within its products or services. It then works to reduce factors that customers would define as being critical to quality, drawing on statistical methods to develop standards for variation in quality. Developed within the electronics industry, the approach is now widely used in service industries.

Statistical process control

This approach examines the difference between natural variation (known as ‘common cause variation’) and variation that can be controlled (‘special cause variation’). The approach uses control charts that display boundaries for acceptable variation in a process. Data are collected over time to show whether a process is within control limits in order to detect poor or deteriorating performance and target where improvements are needed.

Theory of constraints

The theory of constraints came from a simple concept similar to the idea that a chain is only as strong as its weakest link. It recognises that movement along a process, or chain of tasks, will only flow at the rate of the task that has the least capacity. The approach involves:

- identifying the constraint (or bottleneck) in the process and getting the most out of that constraint (since this rate-limiting step determines the system’s throughput, the entire value of the system is represented by what flows through this bottleneck)
- recognising the impact of mismatches between the variations in demand and variations in capacity at the process constraint.

Total quality management (TQM)

Total quality management, also known as continuous quality improvement, is a management approach that focuses on quality and the role of the people within an organisation to develop changes in culture, processes and practice. Rather than a process, it is a philosophy that is applied to the whole organisation, encompassing factors such as leadership, customer focus, evidence-based decision making and a systematic approach to management and change.²⁰

²⁰ www.thecqi.org/knowledge-hub/resources/factsheets/total-quality-management

UNDERLYING PRINCIPLES OF QUALITY IMPROVEMENT

5

In the previous section we looked at some of the most common quality improvement approaches. Despite their different names and apparent differences in methods, most quality improvement approaches share some simple underlying principles.

Data and measurement for improvement

Measurement and gathering data are vital elements of any attempt to improve performance or quality, and are also needed to assess its impact. However, measuring for improvement differs from the two better-known types of measurement: measuring for research, which tests whether an intervention works, and measuring for judgement, which helps managers gauge performance.

In contrast, when measuring for improvement, the learning develops through the process. As a result, the hypothesis will change throughout the project and the data will be ‘good enough’ rather than perfect. Instead of asking whether an intervention works, it involves asking how the intervention can be made to work in a given situation and what will constitute ‘success’.

It is also important to measure change over time, using methods that make it possible to separate out improvement, or deterioration, from the expected level of performance variation.

Understanding the process

Access to data is vital when assessing whether there is a problem. However, it will not in itself explain why the problem exists. This is where understanding the process becomes important.

Process mapping is a tool used to chart each step of a process. It is commonly used to map the pathway or journey through part or all of a patient's healthcare journey, and supporting processes. Process mapping is extremely useful as a tool to engage staff in understanding how the different steps fit together, which steps add value to the process, and where there may be waste or delays.

Mapping patient journeys involving multiple providers is also invaluable to identify any quality problems at the interfaces between teams and organisations.

Improving reliability

Once a process is understood, a key focus of quality improvement is to improve the reliability of the system and clinical processes. Ensuring reliability mitigates against waste and defects in the system, and reduces error and harm.

Systematic quality improvement approaches such as Lean (see p.22) seek to redesign system and clinical pathways, create more standardised working and develop error-free processes that deliver high-quality, consistent care and use resources efficiently.²¹

²¹ See, for example: www.health.org.uk/publications/evidence-in-brief-how-safe-are-clinical-systems/

Demand, capacity and flow

When there are backlogs, waiting lists and delays in a service, a common response to these problems is to say that there is a capacity problem – in other words, that there are insufficient staff, machines or equipment to deal with the volume of patients. However, unless there has been measurement of the demand (the number of patients requiring access to the service) and the flow (when the service is needed), it is impossible to say whether there is a capacity shortfall. It may simply be that the capacity is in the wrong place, or is provided at the wrong time.

For a process improvement to be made, there needs to be a detailed understanding of the variation and relationship between demand, capacity and flow. For example, demand is often relatively stable and flow can be predicted in terms of peaks and troughs. In this case, it may be the variation in the capacity available that causes the problem (for example, staff sickness or unplanned leave).²²

²² See, for example: www.health.org.uk/publications/improving-patient-flow/

Enthusiating, involving and engaging staff

Evidence about successful quality improvement indicates that it is not necessarily the method or approach used that predicts success, but rather it is the way in which the change is introduced. Factors that contribute to this include leadership, staff engagement (particularly of clinicians) and patient participation, as well as training and education.

It is important not to underestimate the importance of involving all relevant staff, including non-clinical staff, who are often the first point of contact for patients. Breaking down traditional hierarchies for this multidisciplinary approach is essential to ensure that all perspectives and ideas are considered.

Engaging frontline clinical staff is crucial for any quality improvement programme, but it can be challenging. Many clinicians will be keen to improve the quality of the service they offer, and will already have done so through methods such as clinical audit, peer review and adoption of best practice. However, they may be unfamiliar with quality improvement approaches.

For this reason, capability building and facilitated support are key elements of building clinical commitment to improvement. Other important aspects include:

- involving the clinical team early on when setting aspirations and goals
- ensuring senior clinical involvement and peer influence
- obtaining credible endorsement – for example, from the royal colleges
- involving clinical networks across organisational boundaries
- providing evidence that the change has been successful elsewhere
- embedding an understanding of quality improvement into training and education of healthcare professionals.²³

Clinicians are more likely to engage with the process if the main emphasis appears to be on improving quality rather than cost-cutting measures.

²³ For more information, see:
www.health.org.uk/publications/quality-improvement-training-for-healthcare-professionals/

Involving patients and co-design

Patients, carers and the wider public have a significant role to play – not only in designing improvements, but also in monitoring whether they have the desired impact. This is particularly important because they are the only people who really experience the patient pathway from start to finish.

Staff must constantly ask the question ‘How do we know what constitutes good care?’ If patients and carers are engaged in quality improvement, they can help provide the answer.

Patients may define quality differently from clinicians and managers. What they view as the ‘problem’ or value within a system may be surprising. So leaders need to question how patient involvement is being embedded in their organisations’ quality improvement programmes.

FREQUENTLY ASKED QUESTIONS

6



Are there examples of industrial models of quality improvement being applied successfully in healthcare?



There are relatively few examples (in the UK or elsewhere) of the wholesale application of industrial models of quality improvement in healthcare. In the UK, the Royal Bolton Hospital NHS Foundation Trust was one of the first to take a whole-organisation approach to introducing Lean thinking across a hospital, in an approach called the Bolton Improving Care System. In the United States, some hospitals, and groups of hospitals, have taken a whole-organisation approach to quality improvement. For example, Cincinnati Children's Hospital prides itself on measuring improvement across the organisation in terms of safety, efficiency and patient-centredness.

Because quality improvement is a long-term strategy, it requires the measurement of impact over a considerable length of time. Most health organisations that have used quality improvement approaches report some benefits – particularly at the start of the initiative, when staff engagement and motivation is high. Healthcare organisations are highly complex, and improvement interventions will vary in their application from place to place and context to context. This makes overall evaluation of their efficacy challenging – whether this is defined as improved efficiency, cost reduction, patient experience or safety.



Can quality improvement save money?

A

The Health Foundation believes that quality improvement should be a key part of an organisation's mission because it can improve patient experience and outcomes – and can bring financial and productivity benefits for the organisation. A 2009 review found that quality improvement can make an important, if limited, contribution to the cost-efficiency of healthcare.²⁴

For example, continuing with poor or sub-optimal care results in unnecessary costs. Longer stays for patients due to healthcare-acquired problems, such as infections or pressure ulcers, add to hospital costs. Improving care and hygiene standards will reduce costs per case, and can boost productivity such as throughput of patients per bed.

Issues that can be addressed to produce cost savings in healthcare include:

- delays, such as patients waiting for tests
- reworking – in other words, performing the same task more than once
- overproduction, such as unnecessary tests
- unnecessary movement of materials or people
- ‘defects’, such as medication errors
- waste of spirit and skill, through the problems staff face on a daily basis not being addressed.

²⁴ Øvretveit J. *Does improving quality save money? A review of the evidence of which improvements to quality reduce costs to health service providers*. London: Health Foundation, 2009.



How can quality improvement approaches help productivity?



A key challenge for NHS organisations over the coming years will be to ensure that they achieve the best possible value for money – with quality of care embedded within that concept.

For providers, reducing variation, streamlining processes, cutting out waste and reducing errors can contribute to more a productive system and workforce. From a commissioner's perspective, evidence shows that there can be variation in the value for money achieved by different commissioning bodies. This suggests that there is scope either for improving quality outcomes without increasing spending, or for retaining current outcomes while spending less.

Incentives within contracting also contribute to the drive to improve quality. For example, the CQUIN payment framework is the mechanism through which commissioners are able to contract for quality improvement, and the way providers are able to secure resources additional to those specified in the contract for services.



Why is there such a focus on variation in quality improvement?



There are two broad types of variation in healthcare: variation in the organisation of services or processes and variation in clinical practice. Quality improvement approaches are focused on improving processes, systems and, sometimes, clinical practice.

Variation in the systems and processes adopted in healthcare leads to inefficiency, waste and increased waiting times. In clinical processes, variation from an established evidence-based best practice can result in error and harm, as well as poor outcomes for the patient. Addressing this can be described as increasing the reliability of care – a key component of which is standardisation.

However, a certain amount of variation is considered normal, so it is important to understand how variation works. Many quality improvement approaches assess whether a system, process or clinical practice is within control limits. They then use this as a key measurement tool, to help understand the level of variation in the system and to measure it over time.



Can quality improvement have unintended consequences?



At times, change in one area can cause pressure in another. This is known as ‘unintended consequences of quality improvement’. For example, improved early discharge may lead to increased readmission. In these circumstances, leaders need to anticipate and monitor for these potential consequences using a set of balancing measures, and may need to make decisions about scheduling or sequencing of initiatives. Quality improvement is likely to be more effective if it is addressed at a whole-system level rather than a number of disconnected projects, and must be approached as a long-term, sustained change effort.



Do we need a team of experts to lead quality improvement in our organisation?



Quality improvement approaches are underpinned by a philosophy and a set of competencies. For this reason, research indicates that quality improvement initiatives are more successful if frontline staff are supported by facilitators who have capability in quality improvement methods, approaches, tools and techniques. However, building the organisation's capability for quality improvement is also important, and this should be part of the organisation's overall quality improvement strategy.²⁵



What is the link between quality improvement and patient safety?



In recent years it has been widely recognised that unnecessary harm happens in the process of providing healthcare. Quality improvement approaches are increasingly being used to address these system failings. The reliability of the application of evidence has been used as a key approach in several national initiatives²⁶ to encourage healthcare organisations to measure and aim to reduce harm.

²⁵ See: www.health.org.uk/publications/quality-improvement-training-for-healthcare-professionals/

²⁶ For example, see: www.patientsafetyfirst.nhs.uk and: www.scottishpatientsafetyprogramme.scot.nhs.uk

Q

What are the barriers to successful quality improvement?

A

In a study of 14 quality improvement programme evaluations,²⁷ 10 key challenges were consistently identified from the programmes. These were:

- 1 convincing people that there is a problem
- 2 convincing people that the solution chosen is the right one
- 3 getting data collection and monitoring systems right
- 4 excess ambitions and 'projectness'
- 5 the organisational context, culture and capacities
- 6 tribalism and lack of staff engagement
- 7 leadership
- 8 balancing carrots and sticks – harnessing commitment through incentives and potential sanctions
- 9 securing sustainability
- 10 considering the side effects of change.

However, the evaluations also showed that if you take the time to get an intervention's theory of change, measurement and stakeholder engagement right, this will deliver the enthusiasm, momentum and profound results that characterise improvement at its best.

²⁷ Dixon-Woods M, McNicol S, Martin G. *Overcoming challenges to improvement*. London: Health Foundation, 2012. www.health.org.uk/overcoming-challenges

**WHERE CAN
I FIND OUT
MORE?**

7

The following organisations provide information and case studies on improvement approaches.

1000 Lives Plus

The Welsh national improvement programme, supporting organisations and individuals to deliver the highest quality and safest healthcare for the people of Wales.

www.1000livesplus.wales.nhs.uk

Advisory Board Company

A leading US healthcare consultancy that provides comprehensive performance improvement services to the healthcare and education sectors, including operational best practices and insights.

www.advisoryboardcompany.com

Health Foundation

An independent charity working to improve the quality of healthcare in the UK. The Health Foundation conducts research and evaluation, puts ideas into practice through a range of improvement programmes, supports and develops leaders and shares evidence to drive wider change.

www.health.org.uk

Institute for Healthcare Improvement

A US-based independent not-for-profit organisation that seeks to improve healthcare worldwide through building the will for change, cultivating promising concepts for improving care, and helping healthcare systems to put them into action.

www.ihl.org

The King's Fund

A UK charity that seeks to understand how the health system can be improved, and works with individuals and organisations to shape policy, transform services, and bring about behavioural change.

www.kingsfund.org.uk

National Institute for Health and Care Excellence (NICE) Evidence Services

A suite of services that provide online access to authoritative evidence and best practice. The services cover health, social care and public health evidence.

www.evidence.nhs.uk

NHS Improving Quality (NHS IQ)

Part of NHS England, NHS Improving Quality (NHS IQ) brings together quality improvement knowledge, expertise and experience from across the NHS.

www.england.nhs.uk/ourwork/qual-clin-lead/nhsiq

Quality Improvement Scotland

A health body that aims to support healthcare providers in Scotland to deliver high quality, evidence-based, safe, effective and person-centred care; and to scrutinise those services to provide public assurance about the quality and safety of that care.

www.nhshealthquality.org

Social Care Institute for Excellence

An independent charity that aims to identify and spread knowledge about good practice to the large and diverse social care workforce and support the delivery of transformed, personalised social care services.

www.scie.org.uk

The Health Foundation is an independent charity working to improve the quality of healthcare in the UK.

We want the UK to have a healthcare system of the highest possible quality – safe, effective, person-centred, timely, efficient and equitable. We believe that in order to achieve this, health services need to continually improve the way they work.

We are here to inspire and create the space for people to make lasting improvements to health services.

We conduct research and evaluation, put ideas into practice through a range of improvement programmes, support and develop leaders and share evidence to drive wider change.

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