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How to move beyond quality improvement projects

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What you need to know

- Quality improvement, by itself, does not represent a holistic approach to managing quality
- Quality improvement needs to be used alongside quality planning, quality assurance, and quality control to create a single, consistent management system
- Knowing when and how to use each of these four approaches, and creating an appropriate balance across all four, is the gold standard

In recent years we have seen a proliferation in the interest and use of quality improvement in health and healthcare. This represents a promising shift in our mental models about how to solve some of our most complex quality issues. Alongside the increasing use of the word "improvement" in our everyday language within healthcare, there are differences in understanding of what exactly we mean by the term "quality improvement." This article explores the difference between quality improvement and a quality management system, by defining quality improvement and describing how to best use quality improvement alongside control, assurance, and planning as part of a more holistic management system focused on quality.

Is quality improvement the same as improving quality?

Quality improvement should be seen as part of an overall system of quality management. Quality improvement is a systematic and applied approach to solving a complex issue, through testing and learning, measuring as you go, and deeply involving those closest to the issue in the improvement process.[1] Anyone who has undertaken quality improvement work will testify that it is not easy—you are generally tackling a problem to which we do not know the solution, and where part of the answer is about behaviours, and hearts and minds. Quality improvement can be used to reduce unwarranted variation, reliably implement interventions that have been shown to improve outcomes, or discover new solutions through a process of innovation. As we are looking to learn whether a particular service or issue has improved, the process also involves reviewing data to see whether something has changed over time.[2] A range of different methods can be used, from the Institute for Healthcare Improvement's Model for Improvement to the Toyota Production System and Six Sigma. The evidence suggests that there is no significant difference in efficacy among these different methods, the key seems to be fidelity to a given method for a long period of time to embed changes into the organisational culture.[3]

Just as all care is delivered in teams, quality improvement is best done as a team, of staff and patients working together on what matters most. We ought to reserve our limited capacity to undertake quality improvement for where it will have the greatest return—to solve complex adaptive problems. Factors related to the success of quality improvement efforts include aspects related to the quality improvement project team (diversity, involvement of key stakeholders, experience of quality improvement), the microsystem (leadership, culture, capability and motivation to change) and the wider environment (organisational culture, leadership, external motivators).[4]

What else is needed for quality management?

If we're using quality improvement to solve complex adaptive problems, then we need other approaches for different types of problem. Quality improvement works well as part of a quality management system that incorporates several approaches to ensure that we are meeting, and exceeding, the needs of those we serve.[5]

Planning or redesign

Planning or redesign involves understanding the needs of the population, customer, or service user, and looking at the evidence and best practice across the industry in order to ascertain what structures and processes we need to put in place to optimise outcomes.[6] This is something we might do once a year as part of our annual planning or commissioning process. The quality planning process helps us set goals, through understanding the needs and desires of the end user. We can then design what we need to put in place within our operational structures and processes to achieve this, using the available lived experience and knowledge, as well as the evidence base and innovation literature.[7]

Assurance

One of the main mechanisms used traditionally in healthcare to improve quality has been quality assurance. Assurance involves occasionally checking that we are meeting a particular standard or threshold. This is usually about achieving standards and obtaining a simple binary response—OK or not OK. Audit, accreditation, and inspection are common mechanisms of assurance in healthcare.[8] While assurance is helpful in ensuring we are meeting set standards and identifying gaps that need addressing, it isn't a mechanism to help us to achieve new levels of performance. Innovation and creativity are needed to discover new practice, and many issues require behavioural change. The occasional checking process

is not conducive to exploration, deeper insight, and ownership of change.

Quality control

Quality control is probably the least developed part of quality management in healthcare. This incorporates good operational management, monitoring performance in real time within the team, taking action when needed to bring the system back into control, and escalating rapidly when we can't solve a problem.[9] Quality control ought to be owned and managed by the team or service rather than be supported from outside the team (as assurance often is). Features of a robust quality control system include visual management that allows a transparent display of the key metrics for the service; regular huddles around the data to discuss and take action; and rapid escalation when problems can't be solved within the team.

How can these four approaches be combined within the service?

Together, improvement, assurance, planning and control form the quality management system (fig 1).

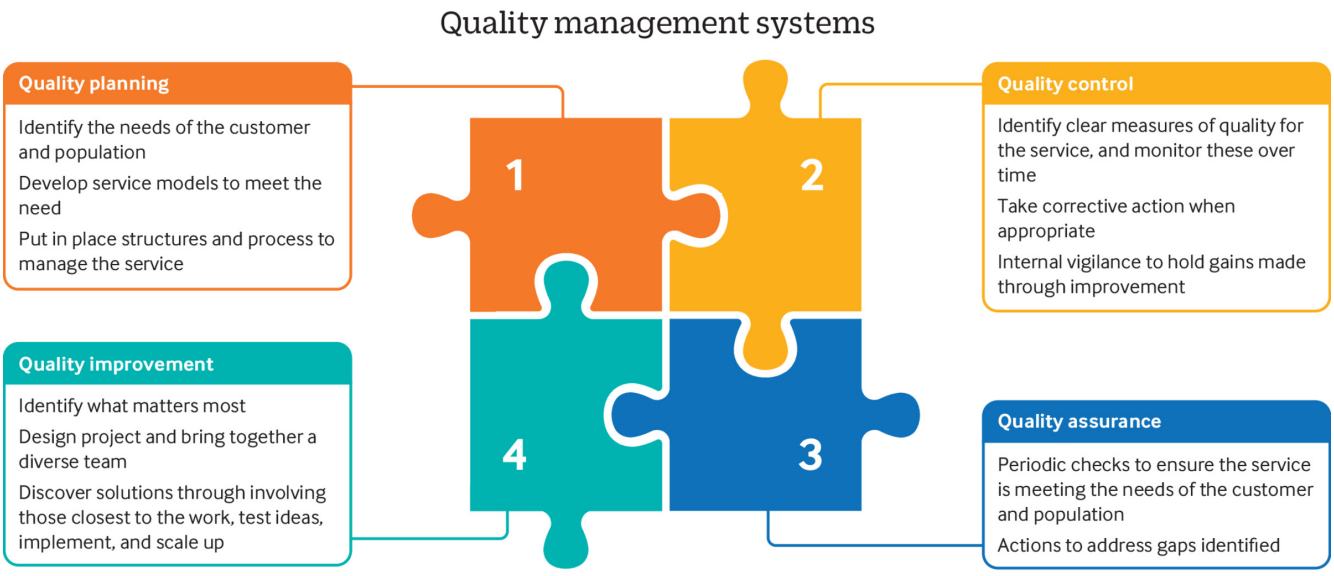

Fig 1 | The four aspects of a quality management system: planning, control, assurance, and improvement

This draws on the work of Joseph Juran, who developed the quality trilogy of planning, control and improvement.[4] While manufacturing has largely managed to eradicate assurance due to the high level of reliability and advanced quality control systems, in healthcare there is still a significant portion of activity devoted to assurance – both within organisations, and from outside organisations. A key challenge in healthcare is to balance energy and activity across these four domains: planning ought to be an annual activity; improvement should be used in short bursts to achieve new levels of performance; assurance ought to be used occasionally to check whether standards are maintained; and control should be the way daily work is managed in a team.

Different tools and approaches to use in the four aspects of quality management

Figure 2 shows some of the improvement tools that might be used within each type of quality function.

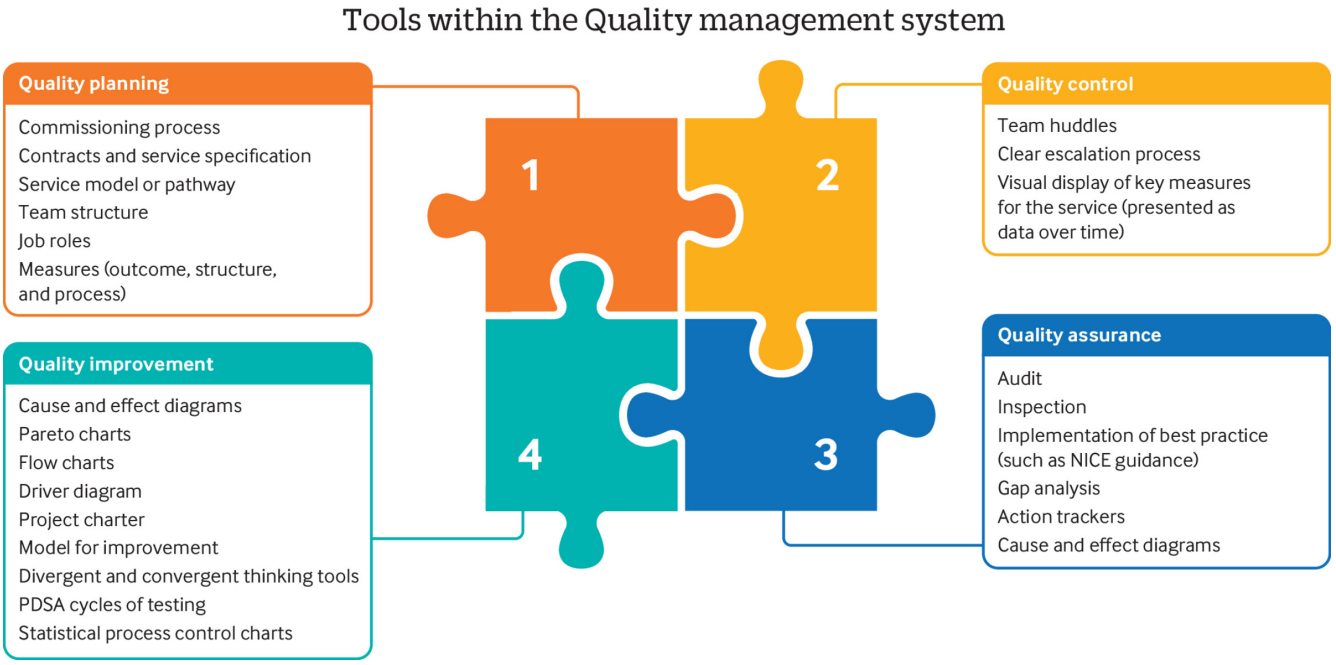

Fig 2 | Examples of tools that might be used within each of the four aspects of a quality management system

One of the main responsibilities leaders have within teams and organisations is to ensure the four different aspects of quality management are balanced and that the appropriate approach for a particular type of opportunity is deployed. In order to support our teams and people in managing quality, it will be important to understand how different members of the team can contribute to each of the four aspects of quality management. Everyone in the team, including patients, should play an active part in a robust quality management system (table 1).

Table 1 | Roles of different team members within each aspect of the quality management system?

	Quality planning	Quality control	Quality assurance	Quality improvement
Team leader	• Contribute to service planning and commissioning • Put in place the structures and processes for service delivery	• Be transparent about how the team is performing, and take corrective action when needed • Empower the team to share and solve small problems on a daily basis • Stay attuned to hard and soft intelligence to ensure gains are achieved and sustained	• Share assurance data with the team and help make sense of the different types of data • Proactively take action to address gaps against agreed standards	• Support regular time for team reflection and help the team and service users identify the priority area for improvement • Bring together a diverse project team and help it find the time to improve the service and to remove barriers • Support the team to share their learning
Team member	—	• Monitor how the team is performing • Listen to the feedback from service users, customers, and carers • Proactively raise and solve problems on a daily basis • Ensure that daily practice meets agreed standards, or justify when practice departs from these	• Participate in assurance activities such as audit, inspection, learning lessons	• Share views with the team about biggest opportunity for improvement • Contribute to change ideas to the area that the team is currently working on • Use the tools of QI to develop a strategy, test ideas and implement these into daily practice
Consultant or senior clinician	• Identify the best service model to meet the needs of the population, using clinical expertise and knowledge of the evidence	• Monitor how the team is performing • Listen to the feedback from service users, customers, and carers • Proactively raise and solve problems on a daily basis • Ensure that daily practice meets agreed standards, or justify when practice departs from these	• Help identify and set the standards against which the team is measured • Participate in assurance activities	• Contribute views about the team's biggest area of opportunity • Use clinical expertise and research knowledge to bring ideas to the team • Support the team to involve a diverse range of people in improvement work • Help the team find time to improve the service and remove barriers to this
Service user	• Be able to contribute to identifying the needs within the population and what types of service might best meet them	• Be able to feed back experiences of the service through a variety of ways	• Help set standards against which services are measured • Be involved in auditing or inspecting services	• Help the team determine the big issues that need improving • Be able to help inform how the service improves • Be able to contribute to the improvement work as much as desired • Be able to feed back whether changes have made a difference
Senior leader	• Contribute to developing the organisation's vision, mission and strategic plan • Communicate these to the teams • Help teams align their work to the organisation's mission and strategic plan • Work with external stakeholders and partners in developing goals and priorities across the system	• Monitor how the system is performing • Use data to inform decision-making • Empower and support teams to solve complex problems • Regularly listen to the experience of staff and service users	• Ensure systems are in place to check that high quality care is being provided • Ensure that assurance activities add value and are meaningful	• Play a sponsor role for improvement work • Help identify priority areas for improvement • Help teams see how their work fits to strategic priorities • Help teams find space and time to improve • Link regularly with projects to help unblock barriers and celebrate their work

Best practice use of quality management in a service

The activities in the management system should not be considered as isolated entities, but as being interconnected and sequential. Once a year, we go through a deep quality planning or redesign process, involving a range of stakeholders and data to understand the needs of the system and to develop structures and processes to achieve the desired outcomes. Once we have completed the planning or redesign phase, we move into quality control. This enables us to monitor ongoing performance and respond in real time to any changes outside the parameters that we would expect to see. A visual management board and regular huddles with clear escalation protocols form a robust quality control system. This allows us to build into our service occasional assurance activities in order to check that standards are maintained. These checks could be through tools such as audit or accreditation. Where a gap between actual performance and desired performance is identified, a small diverse team would be brought together to use quality improvement for a brief burst of rapid-cycle testing of new ideas designed to achieve a new level of performance. Once this is achieved and sustained, we move back into quality control to hold onto these gains. The system has, of course, undergone a number of changes through the quality improvement process, so these must be fed back into the next quality planning process. And so the cycle repeats.

The highest performing teams reduce assurance activity, create an intentional annual planning or redesign process, build a real-time quality control system (as this rarely exists in healthcare at the moment), and use quality improvement for the right type of problems in short bursts of rapid-cycle testing and learning.

In summary, in order to improve health and healthcare for those we serve, the quality management system represents a holistic approach to achieve this. All four types of activity will be needed, and the real challenge is to know which of the four management

approaches is appropriate for the opportunity, and to balance our energy appropriately across all four.

Education into practice

- Can you describe what you currently do in your service within each of the quality management functions: planning, control, assurance, and improvement?
- How are you currently balancing your energy and time across these four domains, and what do you think the current balance should be?
- Can you describe your role in the team's quality management system?

How patients were involved in the creation of this article

Service users are deeply involved in the quality management system at East London NHS Foundation Trust, including quality improvement projects, planning and redesign, and quality assurance programmes. Shared learning over many years has contributed to our understanding of how to manage quality, what a quality management system should incorporate, and how to best involve and partner with service users within each of the quality management functions.

Sources and selection criteria

This article is based on my experience of supporting our approach to quality at East London NHS Foundation Trust, which is seen as one of the world leaders in healthcare quality improvement. Our approach to quality, and my role as chief quality officer, encompasses planning, control, assurance, and improvement as discrete but linked functions. This article is based on our practical experience and learning of building quality management systems, at team, department, and organisational levels.

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