Moving from Quality Improvement to Quality Management

Supporting better quality health and social care for everyone in Scotland

January 2022

www.healthcareimprovementscotland.org

Summary

Moving from Quality Improvement to Quality Management

Reliable delivery of high quality care requires an organisational approach that goes beyond quality improvement to one which is inclusive of all the key components of quality management.

Key Messages
- The reliable delivery of high quality care requires organisations to have a consistent and coordinated approach to managing quality that is applied from team through to board level. This is known as a Quality Management System.   - A systematic approach to quality improvement is a necessary part of an effective quality management system, however it is not on its own sufficient.   - Any effective approach to Quality Management in health and care must recognise the vital role of interactions between people including the impact of leadership behaviours and organisational cultures. It must also allow for ongoing learning and adaptation of changes by those delivering services.   - The process of co-designing a framework for quality management with key stakeholders enables meaningful exploration of different perspectives on what enables high quality care.

Introduction

Much has been written on the benefits of health and care organisations taking a systematic approach to quality improvement [1] [2] [3] and NHSScotland has been at the forefront of taking a national approach to this challenge. [4] [5] [6]

In part because of the 10 year history of working to embed quality improvement capacity and capability, we found ourselves increasingly aware that this wasn't sufficient. Organisations which focus just on improving what they currently do, risk spending too much time getting better at doing the wrong thing. They also risk failing to sustain improvements over the longer term.

In 2018 Healthcare Improvement Scotland, in partnership with the Scottish Government and with support from the Institute for Healthcare Improvement, embarked on a process of exploration. Our goal was to identify what else, in additional to quality improvement knowledge and skills, needed to be embedded into the day to day management of services to ensure the reliable delivery of high quality care.

The aim was to develop a high level framework that could then be applied at any level of the health and care system, from national through to Board through to clinical and care delivery teams.

A 90 day innovation process[7] was used to develop the Scottish Quality Management System (QMS) Framework[8]. This included a review of the literature on quality management [9] [10], 22 expert interviews [11], and input from a wide range of stakeholders across Scotland through a mixture of focus groups and individual meetings.

What is Quality Management?

The literature review highlighted that a number of different terms are used interchangeably to describe quality management including Continuous Quality Improvement, Strategic Quality Management and Total Quality Management (TQM). All of them are contested concepts with for instance, 73 different definitions of TQM identified in one review of the literature.[12]

Box 1 – What contributes to effective management of quality?

Though there is no agreed definition of quality management and a multitude of frameworks in existence, there are a number of concepts that consistently appeared within different models. These were the importance of:

- customer focus;
- leadership;
- continuous improvement;
- strategic quality planning;
- design quality;
- speed and prevention;
- people participation and partnership; and
- fact-based management. [13]

We also noted the importance of distinguishing between approaches to quality management suitable for product delivery and those suitable for service delivery. The majority of health and care delivery involves at least some service elements. [14]

An approach to quality management that was already gaining traction across the Scottish health system was the Juran Trilogy which highlights the importance of quality planning, quality improvement and quality control (see definitions in text below).[15] However this approach was developed in a manufacturing context in the 20th century and, in our view, required adaptation for a public sector service industry working within an increasingly volatile, uncertain, complex and ambiguous world.

The Scottish QMS Framework (Figure 1) attempts to do this and is now being tested and adapted in real time as we continue to learn from our own and other's experiences of implementing quality management across health and care systems.

Figure 1: The Scottish Quality Management System Framework – Working Draft v 3
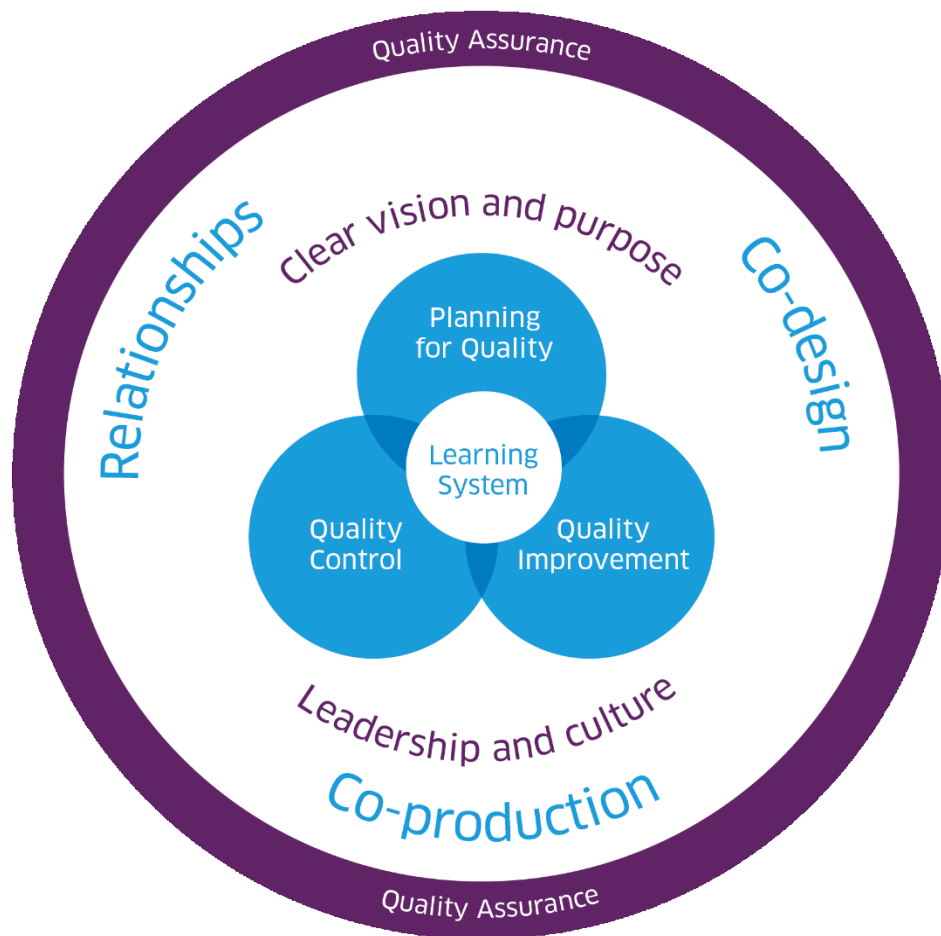
In sharing this model and our evolving thinking we recognise that it is not possible to accurately condense complex change processes down to one simple model. Indeed, as highlighted by Box (1979) *'all models are wrong but some are useful.'* [16] To date we have found this framework useful in guiding our thinking and actions.

Quality Planning

We've defined quality planning as the mechanisms by which a team, service, organisation or system chooses its priorities for improvement and then designs appropriate interventions to deliver those improvements. A critical, and often overlooked, part of this process is understanding the customer's needs and assets and re/designing processes and services to meet those needs whilst making best use of their existing assets.

We've identified the three main sources of issues which should feed quality planning processes as:

1) Quality control and/or quality assurance mechanisms.
2) Work to understand the population/customers' needs and assets.
3) Government strategies and targets.

The Scottish Framework now uses the term "planning for quality" following an insight from practical testing that "quality planning" could be misunderstood to mean the quality of the organisations planning processes.

Quality Control

This covers the processes that are in place to monitor performance in real time and then take action when results do not match the agreed performance standards.[18] Ideally quality control processes are owned by those directly providing the service.[19] This means care delivery teams understand what good looks like, have real-time data (quantitative and qualitative) to know if they are meeting those performance standards, have the skills and permission to address the quality/performance problems within their control, and know who else to involve in addressing the ones beyond their control.

We found that the use of the word "control" divided opinion, as it can be seen as a term which unhelpfully re-enforces beliefs associated with the traditional management discourse that views organisations as machines which need to be "controlled" and "fixed" when broken. The alternative paradigm that is growing in acceptance is a recognition that, whilst some aspects of heath and care delivery are predictable, much of health and care operates as a complex system where it is impossible to predict with certainty the outcome of any particular action. [20] [21] [22] In this context, a better name for this domain might be "maintaining quality" as it communicates the essence of the domain without using language that signals a belief that we can always predict and control outcomes.

> **Box 3 – The over-centralisation of quality control**
>
> Our work to test implementation of quality management approaches has highlighted consistent issues with quality control mechanisms in the NHS; they are often too centralised with a lack of meaningful performance data being reported and/or used at a team level.
>
> This highlights the interconnectedness of the different quality management components, as changing it will require shifts in leadership beliefs and behaviours, a strengthening of the learning system including the development of more meaningful data for clinical and care delivery teams, and arguably a shift in both internal and external approaches to quality assurance.
>
> An approach currently being spread in Scotland is the Value Management initiative[23], which is testing quality management at a clinical/care delivery team level. This includes the provision of meaningful data on cost, workforce and performance (quality) in a format that teams are then using to:
>
> - identify whether they are reliably delivering high quality care,
> - choose areas for focused improvement work, and
> - then assess the impact of the changes made

Quality Improvement

In our experience in Scotland, "Quality Improvement" is a term that is highly contested [24] with definitions varying from the application of the Model for Improvement, through to any systematised approach to improving the quality of a system. [25]

We've also noted that calling the implementation domain of quality management "Quality Improvement" can create confusion as "Quality Improvement" methods such as Lean, Experience Based Co-design and Model for Improvement also include aspects of quality planning and quality control.

Quality Improvement was defined by Juran as "*the discipline that concerns itself with improving the level of performance of a process*" (p402). [26] Complexity thinking highlights that processes are not just about what we do (technical processes), they are also about the interactions between the people involved (social processes). [27] [28] However, critical to both technical and social process improvement is a focus on cycles of experimentation which are informed by ongoing reflection using both quantitative and qualitative data. This focus on practical iterative tests of change is at the heart of this domain and, for all the reasons provided above, using the term quality improvement can obscure this. However, we have yet to settle on an alternative descriptor and this is an issue we are particularly interested to get other perspectives on.

Vision and Purpose

During our 90 day process, individuals consistently reiterated that the reliable delivery of high quality care requires clarity on both what good looks like (vision) and the role that different teams play in delivering it (purpose). This enables and motivates stakeholders with diverse perspectives and experiences to align their improvement efforts under a common aim. [29] [30] When people share a common vision of what high quality care looks like they are more likely to work together to deliver it. [31]

Learning systems at the heart of Quality Management

Health and Social Care is a complex system where even small differences between the demographics of individual's accessing services and/or the context that services operate in can impact on the effectiveness of the interventions delivered.[32] That's why we need health and care systems which enable staff at every level to continually review how well their service is doing (quality control), identify their priorities for improvement and design appropriate interventions (quality planning), and then test ideas to make care better (quality improvement).

Doing this well in a context of complexity requires individuals, teams, organisations and systems to develop the cultures and infrastructures for continuous learning [33] (box 4). Hence we've placed learning systems at the centre of our approach, recognising that without them learning won't flow effectively and improvement will be stunted or eventually stagnate.

Box 4 - Learning Systems

In our work in Scotland we've identified the following as critical components of an effective learning system:

- a measurement system that enables learning about what is and isn't working,
- access to relevant evidence to inform decision making,
- systems for identifying where improvement is happening and assessing the generalizable learning for spread,
- approaches to enabling those working on similar problems to connect with each other and exchange insights (eg communities of practices, events to exchange learning etc),
- a culture where reflective and reflexive practice is valued and enabled, and
- psychological safety.

The importance of reflective practice is well articulated within the quality improvement literature, though the challenges of doing this well within a healthcare context which preferences "doing" over "reflecting" are significant.[34] Further, working with social processes takes us beyond reflective practice which focuses on analysing what happened after the event, to highlighting the importance of reflexive practice which is the ability to reflect in the moment on the interactions we are having with others and make adjustments in real time on the basis of that reflection.

The role of social processes

Any effective approach to Quality Management in health and care must recognise the vital role that interactions between people (social processes) play including the impact of **leadership behaviours**[35] and **organisational cultures**. [36] [37] Indeed, Mosadeghrad's (2013) review of the obstacles to implementing quality management in healthcare systems identified that issues around leadership behaviours and organisational culture are common causes of implementation failure. *[38]*

A key piece of feedback from the focus groups we used to test our initial model was that it underplayed the importance of these relational aspects, placing too much emphasis on the objective realities of process/system design and not enough on the subjective world of social processes. High quality care requires attention to both in recognition that *'in real life the outcome is defined by a complex interplay between system/process design and people/relational issues.' (pg 2)* [39]

A natural consequence of increasing the focus on relational approaches to managing quality is that it raises the importance of **co-designing** improvements to services with the individuals who use them and the staff who deliver them. And because so much of health and care is a service not a product, we also need to recognise that the outcome is often **co-produced** with the beliefs and actions of the individuals and communities who interact with our services playing a vital role.

Quality Assurance

In our work to date, the area of greatest ongoing confusion has been the distinction between quality control and quality assurance mechanisms. This confusion is understandable as:

'Quality control and quality assurance have much in common. Each evaluates performance. Each compares performance to goals. Each acts on difference. However they also differ from each other. Quality control has its primary purpose to maintain control. Performance is evaluated during operations, and performance is compared to goals during operations. The resulting information is received and used by the operating forces. Quality assurance's main purpose is to verify that control is maintained. Performance is evaluated after operations' (p4.3) [40]

A failure to distinguish appropriately between the role of quality control and quality assurance can lead to organisations overly centralising quality control. Rather than assuring the mechanisms are in place to enable those delivering care to understand whether they are meeting the standards required and take appropriate action when they don't; senior managers instead seek to directly monitor quality and act centrally when it slips. This leads to a loss of quality as in practice the complexity of health and care delivery means that centralisation of control is impossible and hence senior managers end up with the 'illusion of control' [41] whilst at the same time disempowering those delivering care who are much better positioned to monitor quality and take action when it slips.

Box 5 – How does quality assurance relate to quality management?

Our original framework had quality assurance sitting alongside quality control, but practical testing of the framework quickly highlighted we'd got this wrong. Effective assurance mechanisms don't just focus on the effectiveness of the approaches to quality control. Instead, they look more broadly at whether a team, organisation and/or system has effective approaches to managing the quality of care in the round. This means being equally interested in a systems ability to effectively plan for high quality care and prioritise and deliver a programme of improvement, its approaches to co-design and co-production, and whether it has a leadership culture which enables the reliable delivery of high quality care. Hence we've now placed quality assurance around the outside, to illustrate that its role is to assure the effective functioning of a team/organisation/systems approach to managing quality.

Conclusion

In the Scottish NHS we've invested a lot of time and energy in training and supporting clinical teams to use quality improvement methods to deliver higher quality care. We've come to the conclusion that whilst this is necessary, it is not sufficient to enable reliable delivery of high quality care. This is why we are now promoting the importance of moving from an approach focused on Quality Improvement to one focused more broadly on Quality Management.

We've worked with our stakeholders to develop a Scottish Quality Management Framework which recognises the inherent interdependencies of all the different components. However we don't for a moment think we've developed the perfect model. Indeed we would advise other systems thinking about adopting a quality management approach to be cautious about using "off the shelf" models due to the benefits we experienced from the process of co-designing it with our stakeholders.

In our context this framework is proving useful in opening up important discussions about what enables the reliable delivery of high quality care including the vital role of quality assurance, the fallacy of over centralising quality control, and the costs of failing to invest sufficient attention up front to planning for high quality care. We believe that through describing and supporting teams, organisations and systems to put in place the full range of functions that are needed to enable high quality care, we will enable a more mature approach to the delivery of improvement that ultimately leads to even better health and wellbeing outcomes across our population.

References

[1] Jones B, Horton T, Warburton W. The Improvement Journey. The Health Foundation; 2019.

[2] Alderwick H, Charles A, Jones B, Warburton W. Making the case for quality improvement, lessons for NHS boards and leaders. The Kings Fund; 2017.

[3] Fulop NJ, Ramsay AIG. How organisations contribute to improving the quality of healthcare. BMJ 2019; 365 :l1773

[4] Dayan M, Edwards N. Learning from Scotland's NHS. Research Report. Nuffield Trust; 2017.

[5] Berwick D. Quality Improvement in the NHS. Available from https://www.kingsfund.org.uk/audio-video/don-berwick-quality-improvement

[6] Scottish Government and Institute for Healthcare Improvement. The Scottish Improvement Journey: A Nationwide Approach to Improvement. Edinburgh; April 2018

[7] Park S, Takahasi S. 90 day cycle handbook. Carnegie Foundation; 2013

[8] Healthcare Improvement Scotland. Quality Management System: A 90-day innovation cycle. Final Report. May 2018

[9] Healthcare Improvement Scotland. Quality Management System: A 90-day innovation cycle. First literature review. May 2018

[10] Healthcare Improvement Scotland. Quality Management System: A 90-day innovation cycle. Second literature review. May 2018

[11] Healthcare Improvement Scotland. Quality Management System: A 90-day innovation cycle. Expert interview themes. May 2018

[12] Mosadeghrad AM. Obstacles to TQM success in health care systems. International journal of health care quality assurance. 2013;26(2):147-73.

[13] Healthcare Improvement Scotland. Quality Management System: A 90-day innovation cycle. First literature review. May 2018

[14] Batalden P. Getting more health from healthcare: quality improvement must acknowledge patient coproduction—an essay by Paul Batalden BMJ 2018; 362 :k3617

[15] Juran JM, Godfrey AB (eds). Juran's Quality Handbook. 5th ed. New York: McGraw Hill; 1998

[16] Box GEP. Robustness in the strategy of scientific model building, in Launer, R. L.; Wilkinson, G. N. (eds.), Robustness in Statistics, 1979 Academic Press, pp. 201–236, doi:10.1016/B978-0-12-438150-6.50018-2.

[17] Scottish Government Digital Directorate. Scottish Approach to Service Design. Further information available from https://www.gov.scot/publications/the-scottish-approach-to-service-design/

[18] Juran JM. Managerial Breakthrough: the classic book on improving management performance. 2nd Edition. McGraw-Hill: 1995.

[19] Juran JM, Godfrey AB (eds). Juran's Quality Handbook. 5th ed. New York: McGraw Hill; 1998

[20] Braithwaite J. Changing how we think about healthcare improvement BMJ 2018; 361 :k2014

[21] Kurtz C F, Snowden D J. The New Dynamics of Strategy: sense-making in a complex-complicated world. Cynefin Centre for Organisational Complexity, IBM Systems Journal Fall 2003

[22] Greenhalgh, T., Papoutsi, C. Studying complexity in health services research: desperately seeking an overdue paradigm shift. *BMC Med* **16,** 95 (2018) doi:10.1186/s12916-018-1089-4

[23] Healthcare Improvement Scotland's ihub. Value Management Collaborative. Further information available from https://ihub.scot/improvement-programmes/value-management/

[24] Rowe A, Chapman C. Perspectives on Improvement and Effectiveness: Key Definitions and Concepts. What Works Scotland; 2015

[25] Healthcare Improvement Scotland: ihub. Our approach to supporting improvement: working draft v7. September 2016. Available from https://ihub.scot/media/1870/improvement-hub-our-approach-to-supporting-improvement-v6-27092016.pdf

[26] Juran JM, Godfrey AB (eds). Juran's Quality Handbook. 5th ed. New York: McGraw Hill; 1998

[27] Stacey, R. Tools and Techniques of Leadership and Management: Meeting the challenge of complexity. Routledge 2012

[28] Shaw, P. Changing Conversations In Organizations: A complexity approach to change. Routledge, 2002

[29] Edmondson AC, Harvey JF. Extreme Teaming: Lessons in complex, cross-sector leadership, Emerald; 2017

[30] Pronovost, PJ, Mathews, SC, Chute, CG, Rosen, A. Creating a purpose-driven learning and improving health system: The Johns Hopkins Medicine quality and safety experience. *Learn Health Sys*. 2017; 1:e10018. doi: 10.1002/lrh2.10018

[31] Edmondson C, Harvey F. Extreme Teaming: Lessons in complex, cross-sector leadership, Emerald 2017

[32] Braithwaite J. Changing how we think about healthcare improvement BMJ 2018; 361 :k2014

[33] National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Health Care Services; Board on Global Health; Committee on Improving the Quality of Health Care Globally. Crossing the Global Quality Chasm: Improving Health Care Worldwide. Chapter 8. Washington (DC): National Academies Press (US); 2018 Aug. Available from The National Academies Collection: Reports funded by National Institutes of Health.

[34] Reed JE, Card AJ. The problem with Plan-Do-Study-Act cycles. *BMJ Qual Saf*. 2016;25(3):147–152. doi:10.1136/bmjqs-2015-005076

[35] Fulop NJ, Ramsay AIG. How organisations contribute to improving the quality of healthcare. BMJ 2019; 365 :l1773

[36] Mannion R, Davies H. Understanding organisational culture for healthcare quality improvement. BMJ 2018; 363 :k490

[37] Wiggins L, Smallwood J, Marshall B. Hope Behind the Headlines: Shifting Culture in Health and Social Care. Libri Publishing, 2018

[38] Mosadeghrad AM. Obstacles to TQM success in health care systems. International journal of health care quality assurance. 2013;26(2):147-73.

[39] Healthcare Improvement Scotland: ihub. Our approach to supporting improvement: working draft v7. September 2016. Available from https://ihub.scot/media/1870/improvement-hub-our-approach-to-supporting-improvement-v6-27092016.pdf

[40] Juran JM, Godfrey AB (eds). Juran's Quality Handbook. 5th ed. New York: McGraw Hill; 1998

[41] Stacey R. Tools and Techniques of Leadership and Management: Meeting the challenge of complexity. Routledge; 2012

January 2022

You can read and download this document from our website.
We are happy to consider requests for other languages or formats.
Please contact our Equality and Diversity Advisor on 0141 225 6999
or email his.contactpublicinvolvement@nhs.scot