



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



# Leadership for continuous improvement in healthcare during the time of COVID-19



R.N.J. Graham<sup>a,\*</sup>, T. Woodhead<sup>b</sup>

<sup>a</sup> Department of Radiology, Royal United Hospitals Bath NHS Foundation Trust, Bath, UK

<sup>b</sup> Patient Safety West of England Academic Health Science Network and Visiting Research Fellow University of Bath School of Management, UK

## ARTICLE INFORMATION

### Article history:

Received 17 June 2020

Accepted 4 August 2020

Designing safe, effective, efficient, equitable, and person-centred services normally takes some time and a great deal of stakeholder engagement and shared understanding to gain traction. This year has seen a significant acceleration of these activities plus new organisational and clinical collaborations and rapid cycle learning systems as a result of the challenges associated with the COVID-19 pandemic response. Whether it is a WhatsApp group where clinician's share their real-time understanding of a new disease or a collaboration of manufacturing organisations and clinicians to develop new/more equipment, change and innovation are working at an accelerating pace. We have built upon the NHS leadership guide we used in the College's leadership development programme and 2019 webinars, *Developing People, Improving Care*. We explain how using the guide and new evidence in support of the approach along with the learning from 2020 could ensure that excellent innovations and ways of working remain while others are adapted as the crisis evolves to a new normal. Our intention is to provide a road map and personal and team strategies that will deliver ongoing and strong clinical leadership as well as improved quality of care.

© 2020 The Royal College of Radiologists. Published by Elsevier Ltd. All rights reserved.

## Introduction

Leadership in healthcare and quality improvement have been the subject of multiple reports, publications, and discussions over recent decades. During the period 2016–2019 the Royal College of Radiologists invested substantially in the subject by providing a series of leadership development courses, seminars, webinars and College publications for Fellows. This year, the year of the COVID-19 pandemic, is a time when leadership and a focus on quality have been brought into sharp relief.

Designing safe, effective, efficient, equitable, and person-centred services normally takes some time and a great deal of stakeholder engagement and shared understanding to gain traction. This year has seen a significant acceleration of these activities plus new organisational and clinical collaborations and rapid cycle learning systems. Whether it is a WhatsApp group where clinician's share their real-time understanding of a new disease or a collaboration of manufacturing organisations and clinicians to develop new/more equipment, change and innovation are working at an accelerating pace.

\* Guarantor and correspondent: R. Graham. Tel.: 01225 821528.  
E-mail address: [richard.graham1@nhs.net](mailto:richard.graham1@nhs.net) (R.N.J. Graham).

To build on our previous work with the College, we have taken the leadership guide we used in our development and webinar work. In this short thought paper, we seek to share how framing the learning from 2020 could ensure that excellent innovations and ways of working remain and we learn fast that some ideas need further adaptation to transform our services and our work as this crisis evolves into a new normal.

Leadership literature invariably gives frameworks and examples. Improvement methodologies create a commonly understood way to approach a complex problem. They both recognise that change is inevitable but what is not inevitable is that change leads to a sustainable and system-wide improvement. This is the signature of success. In our view, sustainable improvement should be the lasting legacy from the current and unprecedented challenges in our health and care services, both for those who work in them and the people they serve.

## Where to start?

The framework and narrative “Developing People—Improving Care”<sup>1</sup> was developed in response to many expert insights and reports.<sup>2–4</sup> Understanding how better to manage complex systems is a dynamic field. We have taken the NHS 2016 framework and provided a commentary on each section that will help the reader reflect and adopt or adapt their leadership approach to sustain the innovations that will matter in the years ahead. Innovation often happens at the edge of chaos. Progress is made by retaining the best innovations created and refining them further for a more stable world<sup>5</sup>

1. Leaders are equipped to develop high-quality local health and care in partnership
  - a) There is a clear shared purpose
  - b) Positive relationships are built
  - c) Governance structures for local and accountable decision-making are developed and are honest, transparent, and connecting.

Within the frameworks of the most commonly used improvement methodologies in healthcare the starting point is building a shared purpose. This sounds straightforward, but in our experience, requires attention to detail, timing, and often takes longer than the leading person or team would anticipate. That said, an observation from the COVID-gtn.mc19 emergency is that major changes can be achieved in short time frames when there is a significant existential threat. Shared common purpose is crucial. The skills of positive relationship building are very valuable before approaching the real problem that needs solving. Accepting and celebrating the differing views on the situation and what an improvement would look like, along with effective listening build trust and confidence that everyone is seeking the same destination.<sup>6</sup> As part of our training as doctors, we have the skills to give and take feedback with empathy, which is just as vital in managing change as it is in managing patient care.

During the COVID-19 emergency at the Royal United Hospital in Bath, it was identified that patient flows needed to be changed to separate out the patients with respiratory symptoms from those without, to reduce COVID-19 cross-infection. The Surgical Admission Unit (SAU) was determined to be in the best location (ground floor, ambulance access and distant from the Emergency Department). A new ward was identified for the SAU following which the surgical patients were moved there and SAU repurposed as an RAU. This took a week to complete; normally a major change like this would have taken months. The common sense of purpose and potential capacity crises that the emergency produced created a unique environment where change at pace was permitted and mistakes were acknowledged and learnt from rather than any hint of blame.

Appreciative enquiry is a specific technique that can guide the change journey in a logical way and gaining some familiarity with this approach can support effective and efficient first steps. The order is (a) defining the area of interest (without predetermining the solution), (b) discovering the perspectives of the situation from all, (c) visualising how it should be if it were improved, (d) designing this together, then (e) delivering after testing and refining the design.<sup>7</sup> This supports collaboration as well as a strengths-based approach that builds on what is working rather than focusing on what is not. There is a truly positive atmosphere for everyone when you visualise what could be, design what should be, and then deliver it together. The governance structure can be new or adapted, but with a clear step-wise process reporting, challenging, and seeking more data will provide the transparency that is needed to refine a good idea into a sustainable improvement.

2. Compassionate, inclusive and effective leadership at all levels
  - a) Knowledge of how to practice compassionate leadership and that have high impact behaviours
  - b) Develop and provide support for all staff
  - c) A system for approaching and developing the right people for the right roles and developing their talents

We would recommend familiarising oneself with two streams of leadership literature so as to gain insight into the criteria for compassionate leadership. Compassion is a key part of the clinical skill set; however, it is often focused on patients not ourselves or our colleagues. Leadership in complex and challenging situations requires courage, resilience, belief in the aims, and objectives set.<sup>8,9</sup>

Leadership also requires insight into how one's own behaviour affects others and how caring for oneself ensures that resilience is sustained over time. High impact behaviours have been shown to include being person centred in word and deed, be an authentic presence at the front line, and a visible champion of improvement, remaining focused on the vision and the strategy, being transparent about results, progress, aims, and defects, encouraging and practising systems thinking, and collaborating across

boundaries. These behaviours may need development or more explicit articulation, but without them, your impact is diminished<sup>10</sup>

During the COVID-10 pandemic, much central guidance was issued daily in a “command and control” style from NHS England and Public Health England. This mirrored the national leadership of the emergency by central government. This was useful as it gave us rules to follow and we could site this as reason to change to bring the staff with us; however, the guidance was often behind the curve as local solutions to the area of focus had, by necessity, already been enacted. These local solutions then needed to be modified in light of the new national guidance. This created extra work but generally produced a better outcome as the NHS centrally had more access to new information about COVID-19 as it became available than we did on the ground. Another issue with national guidance was the conflicting nature between the NHS and other bodies such as Royal Colleges and specialist societies. This led to some confusion and argument on the ground. Given the fast pace of the emergency, this was hard to avoid, but the NHS leadership solution was that NHS guidance trumps everything else and is what was enacted.

In Bath, once the initial COVID-19 phase was over, the focus turned to rebuilding the hospital to deliver services for both COVID-19 patients and non-COVID patients in parallel. This was constrained by three major factors: social distancing of staff and patients, availability of anaesthetic drugs, and personal protective equipment supply. This meant that it was extremely difficult to rebuild resulting in many staff exhibiting exaggerated emotional responses. Compassionate leadership was used to reduce the cognitive dissonance and the time frames for change were increased to facilitate greater staff acceptance and allow people to come to terms with the situation, which ultimately led to better structures being created to deliver the next phase.

A recent report in the McKinsey Insights series entitled *Scaling rapid workforce conversion during COVID-19* provides a checklist for rapid learning at scale using the voice of the staff member<sup>11</sup>: “Don’t overwhelm me” (take time to explain), “Let me try” (don’t just tell me), “Help me when I most need it” (practical guides as well as well-timed information), “Give me a safety net and or a person to contact if I am concerned”, “Remind me why I am important” so that I have a sense of shared purpose. In a world where we seek to always listen to the patient, this reminds us to always listen to the staff and be compassionate whatever the urgency of the situation.

Talent management and staff support ensures that as a team and a leadership group one is constantly reviewing the present, the future and the development of your team members. We know that our staff are the most vital resource. Nurturing them and enabling them to hone their skills, engage and be motivated with and by change contributes to sustained and continuous improvements in the patient’s quality of care as well as the quality of the working day. The Kings Fund report, *Talent Management*, describes the need to think what is needed for today and the future department strategy, to consider where the talent is now

and where it is missing, to develop internally if possible or recognise the timescale and the existing situation require new skills.<sup>12</sup> This is not new thinking, but it is something that in dynamic and challenging times is often not given enough and ongoing attention. As this report summarises “Talent management is a set of integrated organisational workforce processes designed to attract, develop, motivate and retain productive engaged employees.” This applies to every part of the imaging or radiotherapy team at all times. Failing to pay this attention will lead to gaps, recruitment challenges, lost opportunities and lack of full engagement in service delivery and improvement.

3. Knowledge of improvement methods and how to use them at all levels
  - a) Leadership for improvement in practice
  - b) Applied training in improvement methods (from microsystems to system transformation)
  - c) Partnering with staff, patients and communities for improvement

Since 2007 Improvement Methods have been more formally used in the NHS to address concerns about safety, timeliness, effectiveness, efficiency, equity, and the person centredness of clinical care. The acronym STEEEP that covers these components of quality derives from one of the first reports on the definition of quality some 20 years ago.<sup>13</sup> Although focused on the US healthcare system, this definition of quality is now a universally used approach to ensuring that all components of quality are considered during dedicated improvement efforts. The purpose of using this approach is to avoid the risk of worsening some components in the efforts to improve others.

Knowing and using one specific or a combination of quality-improvement methods is valuable. They each require everyone to be clear on the aim, to understand the variation and various perspectives of all in the system (including the patient and family), then to develop ideas test and refine them as a team. Gaining confidence to explore, together, a complex challenge and then to iteratively design and adapt solutions that enhance each other is not a quick fix, but it is rewarding, engaging, creates resilient ways of working and enables continuous improvement.<sup>14</sup>

Leaders need to understand the approaches and give permission to others to explore and safely rethink their work. Applying the behaviours of compassionate leadership while coaching others will ensure all six aspects of quality are constantly considered so as to reduce the chances of any unintended and negative consequences of a change. There are many ways to develop oneself and one’s team. Quality improvement is now within the clinical curriculum and provides a good opportunity for multi-professional and generational teams to gain experience and become experts together.<sup>15</sup>

A positive element seen in the response to the COVID-19 emergency has been increased clinical leadership coupled with reduced governance and assurance. Detzner & Gunderman discuss the paradox of safety and creativity and

how they are both needed but are not entirely convergent.<sup>16</sup> This is an important balancing act for the medical leader and too much weighting of either can ultimately harm patient care. This unshackled and empowered new world has led to experts being able to deliver bottom-up continuous improvement in clinical pathways at pace. For example, in Bath, cancer services were moved to an independent hospital to remove a cohort of patients and isolate them from COVID-19. This move had many complexities and risks associated, yet it was delivered in a matter of days, with excellent patient experience, allowing chemotherapy to continue.

A vital part of quality-improvement methodology is data collection measurement and the use of run charts, control charts, and constant feedback ensures the team check and refine the ideas being tested. Improvement methods use analytical statistics rather than the before and after approach of an audit with a change point or in formal research with tightly controlled groups receiving or not the intervention.<sup>17</sup> The real world we work in means all patients are slightly different, all systems will vary in their performance over the time, we are developing an intervention or set of them to improve the way the work is done and the experience gained through that work by us and the patients. We need to learn in real time what actually makes an improvement and how to sustain it. Time-ordered data and attention to the feedback measurements enable constant learning and oversight for the period of the improvement effort.

#### 4. Support systems for learning at local, regional and national and International levels

- a) Improvement and support systems within organisations
- b) Data systems to support continuous improvement
- c) Systems and networks for sharing improvement work locally, regionally and nationally.

Organisations across the NHS have developed to support the concepts of quality improvement over the last 20 years. The value of the National Institute for Health and Care Excellence (NICE) in providing expert review and guidance has been a significant enhancement to the work of the Royal Colleges. Inspection and regulatory systems have developed to look increasingly at leadership for quality and patient safety.<sup>18</sup> This has more recently evolved to include staff experience and safety and no doubt, this will gain increased attention as the impact of COVID-19 is reflected upon.

It has been known for some years that there is a direct relationship between levels of engaged staff and local decision-making and patient experience and the quality of outcome.<sup>19</sup> During the pandemic many ways of working have been modified radically, many teams have needed to work at speed and with considerable local challenges to put in place the right care, right time, right place principles in the context of a new and evolving situation. In some circumstances, support may have been less than ideal, but

learning from where change has been necessary and been achieved and then adapting that to a new and better way to work in more normal times is the opportunity that COVID-19 provides. The use of positive thinking and relationship building as described previously will enable the team to describe improvement with evidence and data and to retain what worked confidently and with wider support for the future. As the pandemic evolves adaption may be needed to maintain the benefits experienced by service users, the radiology or radiotherapy team, and of course the patients. Change is a journey not an event.<sup>20</sup>

The ability to make rapid change and learn in positive iterative cycles was previously unseen in the NHS. The pandemic produced a burning platform for change unlike anything seen before. Once the initial phase of COVID-19 was over, it was vital to capture these beneficial changes and prevent recovery of old NHS ways, and instead create a “new normal”. This was done by creating new structures and reinforcing the new ways of working. It did, however, become more difficult to continue quality-improvement cycles at the same rate as the burning platform was no longer there and the staff were exhausted.

- 5) Enabling supportive and aligned regulation and oversight
  - a) National bodies working effectively together
  - b) Local systems and providers in control of and accountable for driving improvement
  - c) Helpful interventions and support offered from national bodies to local systems

In the last decade, the use of ‘Breakthrough Collaborative’ models to bring teams, with a common improvement goal, together to learn and share ideas and progress has supported regional and, in some cases, national efforts to improve care.<sup>21</sup> Any healthcare system is a complex research environment to study and success of these efforts is varied, but there is critical learning that we can all apply when seeking to build a culture of continuous improvement and to focus on the problems in our service. As we move forward in 2020 and 2021, paying attention to these ingredients for success can be adapted to local and regional efforts to retain the changes that have made the work easier to do and the outcome more reliable, effective and efficient. We now have the opportunity to build on the learning from tragedies. We should embed improvement methods and leadership skills as core to our clinical skill set. Knowing how to organise and to lead with compassion, with authenticity and with careful attention to the details that matter to patients and staff together has never been more important.

“To succeed, it appears that collaboratives must be well planned and resourced, encompass passionate professionals and leaders, have realistic expectations and be given enough time to show an impact. Impacts may be small at first and focus on care processes rather than downstream improvements for patients and systems”— The Health Foundation.



## Who should be included?

1. Gain buy-in from senior leaders who provide encouragement to take part.
2. Involve multidisciplinary teams, including nurses, allied health professionals and support staff, and consider involving patients and carers as part of the improvement teams.
3. Include organisations that volunteer rather than making participation mandatory.

## What should the focus be?

1. Focus on areas of change where a team approach is vital.
2. Be realistic about what collaborative approach can achieve.
3. Focus on topics where there is established good practice and a large gap between current and ideal performance.
4. Begin with a “theory of change”, so there is a clear link between activities and planned outcomes. How should the collaborative run?
5. Set clear goals that team members buy into and are held accountable for.
6. Provide standardised change interventions but allow for tailoring to the local context and needs.
7. Use multiple methods of communication to build a close participant network, including online and telephone support.
8. Include organisational coaching in addition to collaborative learning sessions.

## What resources are needed?

1. Ensure there is a solid IT infrastructure for collating data and sharing practice.
2. Use simple measurement tools.
3. Ensure organisational support, appropriate resourcing and enough time for changes to embed.
4. Evaluate outcomes robustly, including comparing teams that do and do not succeed.

## Conflict of interest

TW has as a Health Foundation and IHI Fellow undertaken some advisory work for IHI (The Institute for Healthcare Improvement, Boston, Massachusetts) and the Health Foundation, London England.

## References

1. NHS. *Developing people improving care NHS*. from. England; 2016, <https://improvement.nhs.uk/resources/developing-people-improving-care/>. [Accessed 31 March 2020].
2. Vincent C, Amalberti R. *Measurement and monitoring safety*. Available at: London: Health Foundation; 2013 <https://www.health.org.uk/>

- publications/the-measurement-and-monitoring-safety. [Accessed 31 March 2020].
3. Berwick D. *A promise to learn—a commitment to act: improving the safety of patients in England*. Available at: England: Department of Health and Social Care; 2013 <https://www.gov.uk/government/publications/berwick-review-into-patient-safety>.
4. West M Collective Leadership-fundamental to creating the cultures we need in the NHS 28-05-2018 <https://nam03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fblogs.bmj.com%2Fbmj%2F2014%2F05%2F28%2Fmichael-west-collective-leadership-fundamental-to-creating-the-cultures-we-need-in-the-nhs%2F&data=02%7C01%7Cj.creek%40elsevier.com%7Cde9115338e0046a9d43908d853c9cb8b%7C9274ee3f94254109a27f9fb15c10675d%7C0%7C0%7C637351474692181272&data=fxlxMYQqANjfyGRzE22mViMmmFaeOb%2BZSWcDRGtFHs%3D&reserved=0> (accessed Sept 2020).
5. Pascale R, Milleman M, Gioja L. *Surfing the edge of chaos*. London: Penguin Random House; 2001.
6. Cable D. Helping your team feel the purpose of their work. Harvard Business Review October 22. 2019. Available at: <https://nam03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fhbr.org%2F2019%2F10%2Fhelping-your-team-feel-the-purpose-in-their-work&data=02%7C01%7Cj.creek%40elsevier.com%7Cde9115338e0046a9d43908d853c9cb8b%7C9274ee3f94254109a27f9fb15c10675d%7C0%7C0%7C637351474692181272&data=jv1wNYINDJLRH7LcDzFSG4xqz8YTeFHVc5AyetGp40Y%3D&reserved=0> (accessed Sept 2020)..
7. Jones B, Vaux E, Olsson-Brown A. How to get started in quality improvement. *BMJ* 2019;**364**:2–4.
8. West M, Bailey S. *Five myths of compassionate leadership*. Available at: London: The Kings Fund; 2019 <https://www.kingsfund.org.uk/blog/2019/05/five-myths-compassionate-leadership>. [Accessed 4 April 2020].
9. West M, Eckert R, Armit K, et al. *Leadership in healthcare; a summary of the evidence faculty of medical leadership and management*. Available at: 2015 [https://www.kingsfund.org.uk/sites/default/files/field/field\\_publication\\_summary/leadership-in-health-care-apr15.pdf](https://www.kingsfund.org.uk/sites/default/files/field/field_publication_summary/leadership-in-health-care-apr15.pdf). [Accessed 28 April 2020].
10. Swenson S. *High impact behaviours—five things leaders can do to promote improvement*. Available at: Institute for Healthcare Improvement; 2017 January 10th <http://www.ihl.org/communities/blogs/high-impact-leadership-behaviors-five-things-leaders-can-do-to-promote-improvement>. [Accessed 4 April 2020].
11. Camp AH. *Scaling rapid workforce conversion during COVID 19*. Available at: McKinsey Insights; May 19th 2020 <https://www.mckinsey.com/business-functions/mckinsey-acceperate/our-insights/scaling-rapid-workforce-conversion-during-covid-19>. [Accessed 20 May 2020].
12. The Kings Fund. *Talent management*. Available at: London: The Kings Fund; 2015 [https://www.kingsfund.org.uk/sites/default/files/field/field\\_publication\\_file/talent-management-leadership-in-action-jun-2015.pdf](https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/talent-management-leadership-in-action-jun-2015.pdf). [Accessed 30 May 2020].
13. Institute of Medicine (US). *Committee on quality of health care in America. Crossing the quality chasm: a new health system for the 21st century*. Washington, DC: National Academies Press (US); 2001.
14. Batalden PB, Davidoff F. What is “quality improvement” and how can it transform healthcare? *Qual Saf Health Care* 2007;**16**(1):2–3. <https://doi.org/10.1136/qshc.2006.022046>.
15. Academy of Medical Royal Colleges. *Quality Improvement-training for better outcomes*. London. Available at: 2016 <https://www.aomrc.org.uk/reports-guidance/quality-improvement-training-better-outcomes/>. [Accessed 4 April 2020].
16. Detzner AA, Gunderman RB. How safety can undermine creativity. *AJR Am J Roentgenol* 2020;**215**:25–6. <https://doi.org/10.2214/AJR.19.22505>.
17. Shah A. Using date for improvement. *BMJ* 2019;**364**:189.
18. CQC England. *Guidance to providers success factors of committed leadership*. Available at: 2020 <https://www.cqc.org.uk/guidance-providers/all-services/success-factor-1-committed-leadership>. [Accessed 1 May 2020].

19. The Kings Fund. *Improving NHS care by engaging staff and devolving decision making*. London. Available at: 2013 <https://www.kingsfund.org.uk/publications/articles/improving-nhs-care-engaging-staff-and-devolving-decision-making>. [Accessed 5 May 2020].
20. Heath C, Heath D. *Switch: How to change things when change is hard when change is hard*. London: Random House Business Books; 2013. ISBN-10: 1847940323.
21. The Health Foundation. Improvement collaboratives in healthcare (No. 21). Available at: <https://nam03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.health.org.uk%2Fsites%2Fdefault%2Ffiles%2FImprovementCollaborativesInHealthcare.pdf&data=02%7C01%7Cj.creek%40elsevier.com%7Cde9115338e0046a9d43908d853c9cb8b%7C9274ee3f94254109a27f9fb15c10675d%7C0%7C0%7C637351474692181272&sdata=jRo95oRFmgO05bz9Xnv6maXYXEVUHniTezeBExKE5D0%3D&reserved=0> (accessed Sept 2020).