



People at the Core: Soulful Quality Improvement and Reflexive Nursing Leadership

Leinic Chung-Lee, RN, BScN, MN
PhD Candidate
Toronto Metropolitan University
Toronto, ON
Quality Improvement Specialist
Toronto Public Health
Toronto, ON

Jennifer Lapum, PhD, MN, BScN, RN
Professor
Toronto Metropolitan University
Toronto, ON

Linda Liang, RN, BScN
Quality Improvement Specialist
Toronto Public Health
Toronto, ON

Karen Beckermann, RN, BSc, MSc (A)
Associate Director
Toronto Public Health
Toronto, ON

Leah Welsh, RN, BScN, MPH
Manager
Toronto Public Health
Toronto, ON

Abstract

The integration of quality improvement (QI) into healthcare has become progressively common. Nurse leaders are foundational to balancing the paradox of efficiency-cost metrics and people-centred outcomes. This critical discussion challenges superficial engagement with QI activities and mechanical application of QI tools, while urging nurse leaders to adopt soulful, “thickly embodied” and people-centred approaches. This entails three interconnecting principles, which weave fluidly together in a deeply reflexive manner. By leading purposefully and critically, QI can be re-anchored to valuing people at the core, where patient, family and community well-being is intricately connected to that of the care workforce.

Introduction

The integration of quality improvement (QI) into healthcare has become progressively common. Healthcare organizations and practitioners have embraced QI into praxis from the implementation of small-scale improvement ideas to the execution of complex projects. While solutions to address problems are ideally generated by those experiencing the problems – a key tenet of QI – the attainment of impactful quality goals necessitates investment into organizational cultures rooted in improvement (Jabbal 2017). Amid the health human resource shortage (coupled with an immensely burdened healthcare system), nursing leaders can strategically bring nurses together from all practice areas to collectively actualize change for the better (Martin-Misener 2024). The purpose of this critical discussion is to inspire nurse leaders, nurses and multidisciplinary colleagues to challenge superficial engagement with QI and shift toward valuing patients, families and communities as the driving force to “thickly embodied” QI.

Background

The state of QI practices and science in nursing has been influenced by many disciplines and sectors. Lean, as a methodology, has been used by the manufacturing sector for decades (Scoville and Little 2014). Specifically, automobile production employed the ideas of flow and value-adding to achieve optimal assembly and defect-free manufacturing, putting an emphasis on efficiency. Three decades ago, health leaders began applying manufacturing principles in a novel approach to finding efficiencies in healthcare workflows and processes (Scoville and Little 2014). While lean principles and methods may be transferable to healthcare, the application is not easy and may be challenging to sustain (Kenney 2011). Aside from lean, the model for improvement integrates iterative cycles of improvement through planning, doing, examining and acting (Langley et al. 2009).

More recently, QI science has been increasingly recognized as a means for bolstering healthcare, involving systematic ways to explore processes and implement tools to support continuous improvement efforts (Queen’s Printer for Ontario 2012). QI science has been applied in healthcare in the areas of patient experience (Gleeson et al. 2016), clinical areas such as radiology and operating room (Niñerola et al. 2020), cancer, cardiovascular and emergency nursing care (Ontario Health 2024), just to name a few. There is growing interest in evidence-based QI (Hempel et al. 2022), benchmarking (Willmington et al. 2022) and organizational accreditation (Hussein et al. 2021). Many improvement stories have been shared, from practice storyboards locally to dissemination through peer-reviewed publications and presentations (Mathura et al. 2020; Morris et al. 2021).

During the COVID-19 pandemic, healthcare providers engaged in rapid improvement activities – whether explicitly named as QI or not – to manage the dire

conditions presented by the crisis (Khurshid et al. 2021). While facing intense moral distress (Lapum et al. 2021), nurses found themselves immersed in scenarios that required their active engagement and deliberate actions to positively change practice environments (Jingxia et al. 2022). This nursing tendency and desire to improve is unsurprising, as nurses commonly find themselves enveloped in some form of organizational change, which may present circumstances where patient safety and quality of care need attention (McMillan and Perron 2020). We believe that nurses do so not only for business process and workflow improvements but also to fulfill their steadfast commitment to patient well-being. We draw on Martin-Misener's (2024) powerful call – nurses “boldly leading health-care improvements” (p. 1) – to inspire this paper, as we invite nursing leaders to engage themselves in a soulful manner to reposition healthcare QI.

Resisting the Mechanical

While this paper is not intended to investigate how QI methodologies are executed in research, we are motivated to challenge the notion of the “auto-pilot.” By auto-pilot, we are referring to the systematic following of a set of steps without attention to context and the dynamic nature of healthcare. For example, one may be tempted to adhere to a strictly linear path toward the end goal, without reading cues and accounting for evolving needs and circumstances. Similarly, one may be so consumed with briskly completing tasks to meet efficiency goals that they inadvertently muffle the voices and needs of the human beings who are affected. Although it is often said that the “patient is not a car,” we also recognize that “neither are we” as nurses and leaders. We employ Lanoix's (2013) notion of “thickly embodied and relational care” to QI. Recently, Chung-Lee and Lapum (2024) adapted this approach to qualitative analysis, where they called on researchers to resist robotic and thin engagement with data analysis to “breathe life” and infuse nursing presence into research. In the context of research or QI, thin engagement involves merely and systematically following a set of procedures in a linear style in which efficiency is a valued principle. This kind of engagement does not permit critical dialogue, dynamic approaches and attention to context and people. With this in mind, we encourage nurses, leaders, QI practitioners and our colleagues to resist undertaking QI activities in superficial manners that are merely mechanical and routine.

“Thickly Embodied” and Soulful QI

“Thickly embodied” and soulful QI is when the fullness and contextual aspects of the persons and communities involved are garnered, and energy and life permeate throughout the process. We posit that “thickly embodied” QI entails three interconnecting principles: (1) embarking on QI activities deeply and critically (vs. superficially), and in a contextual manner (vs. a rigid, singular perspective); (2) valuing patient/family/community-centred and driven approaches

that are meaningful and sincerely committed to making a difference (vs. trivial non-purposeful activities); and (3) striving for joy through the QI journey (vs. mechanical processes with an absence of fulfillment and energy). The very essence of “thickly embodied” QI is *soulfulness*, through heightened awareness of these interwoven principles, while bringing the voices and perspectives of all interest-holders¹ together.

There is a multitude of impressive tools and resources available in the QI “toolbox” and thus, one may be easily enthralled with using all of them (NHS Improvement 2017). For example, some of these tools and resources in the toolbox include value stream mapping, spaghetti diagram (Scoville and Little 2014) and fishbone diagram (ASQ 2024). However, QI practitioners have a duty to assess and advise on which tools are most spatially temporally relevant (NHS Improvement 2017). QI tools must not be used for the mere sake of being used – an idea analogous to how Chung-Lee and Lapum (2024) described as the robotic act of checking off tick boxes when complying with prescriptive, analytical procedures without mindful and deep considerations. To clarify, as nurses and as QI practitioners, we are not averse to standards and best practices; in contrast, we see their significance. However, the QI tools should not lead and dictate their application. Rather, the use of these tools should be led by practitioners with purposeful judgement to the appropriateness of the which, when and how to adapt to circumstances, and more prudently – a clear vision of the *why*. We believe that nurse leaders embody the attributes to demonstrate attentiveness to the why and be responsive to the context. They are, moreover, inherently situated to articulate the vision and lead fluid, soulful QI approaches.

This critical application, where we are reminded to centre on patients, families and communities, shifts the trajectory from mechanically and routinely following QI rules to thoughtfully applying and adapting based on the nuances of each scenario. Likewise, this approach avoids the prevailing and sole focus on organizational cost avoidance and efficiencies to valuing the nurturing of “thickly embodied” relationships and better care. While we can and should apply QI, it must be done with a mindful *awareness* that healthcare is not an assembly line (Gale 2016). It is this underpinning that patients, families and communities consist of persons and circumstances – situatedness and context matter. Thus, at the minimum, QI activities ought to be people-centred.

Finally, “thickly embodied” QI necessitates that there is a dedication to workforce well-being and joy in QI. We have long been told about the triple aim of healthcare systems that considers improving population health, care experiences and reducing cost (IHI 2008) and, more recently, the quintuple aim that brings health equity and joy in work as key components to high-performing systems (Nundy et al.

2022). While there may be concerns about uncertainties of impact, it is imperative to acknowledge that QI is not “transactional” but “relational”; *why* an organization implements QI methods and resources warrant strategic and “intellectual framing” that links initiatives directly to improving health outcomes and advancing health equity, in lieu of singularly valorizing efficiency (Bloomquist et al. 2020).

Infusion of Reflexivity

To subvert from the robotic and move toward soulful QI, a critical lens must be integrated so that one may engage meaningfully and purposefully. One strategy to overcome a non-critical approach is to be reflexive. In the context of research, reflexivity involves an understanding of how subjectivity influences knowledge production (Olmos-Vega et al. 2023).

Applied to QI, reflexivity can move us beyond the undesired assembly line to “thickly embodied” approaches. Reflexivity has been explored in various manners in healthcare QI, including its formal adoption as a device for quality (van Loon and Zuiderent-Jerak 2012), communication and teamwork (McHugh et al. 2020). We intently hear beyond our own perspectives when challenging one another to be reflexive and recognize one’s positionality, including their personal, social and professional identity. If we do not critically examine our own positionality, we risk developing and implementing the QI processes in a biased manner with imbalances of power. This biased approach is easy to do because we often view a healthcare problem from our own perspective, possibly a “privileged” perspective in which we do not fully understand the context and nuances from the perspective of those affected by the problem. As a result, an un-reflexive QI approach also risks developing solutions that do not translate well to those involved in implementation and those affected by the implementation.

In a reflexive QI approach, we are attentive to the potential for unintended harms that arise from the implementation of solutions and tools that are misaligned with the context. Reflexivity could be a way to dismantle institutional structures that could magnify power imbalances in QI initiatives. By engaging reflexively, we promote a social justice approach and continuously question how QI could be used to reduce inequities. At the heart of this is ensuring that nurses can be relieved from potential moral injury that may result from thin engagement in QI and re-infuse joy to improve workplace well-being. Leading with reflexivity requires heartfelt emotions and challenging oneself, which we contend contributes to soulfulness in QI.

Implications

Nurse leaders are well-positioned to cultivate soulful and reflexive QI terroir and influence cultural shifts toward people-centred QI. First, nurse leaders can

address tensions – lean versus non-lean discourses, organizational change, rigid project management methods, moral distress and other emerging issues relevant to nursing. Having explicit and reflexive discussions about these trends can act to respect and integrate the voices of all interest holders and nurture practice environments that build relationships and trust, which enable nurses and the workforce to find joy. An openness to listen applies throughout QI processes – from description of problem areas to change ideas and beyond. While there are often pre-mapped deadlines with project milestones, it is imperative that QI practitioners have steady support from leaders to carry out activities at a pace that is acceptable for the people involved. Nurse leaders can support the identification of partnership opportunities with patients, families and communities. Partnership activities ought to progress at a pace that is led by the community (Arellano et al. 2018). Organizations ought not inadvertently convey impressions of rushing, thus, breaking the potential to build trust.

Second, nurse leaders could continue and strive toward becoming sponsors of QI projects while actively removing barriers to achieving success and conveying immense commitment to front-line teams (Scoville and Little 2014). This sponsorship involves communicating clear aims that are co-created with patients, families, communities and front-line teams, which asserts strong nursing influence on measurement, where measures move beyond cost to patient-focused outcomes. Nurse leaders are not naive – cost matters. However, they could counter the trend of prioritizing cost efficiencies over patient needs and care (Molina-Mula et al. 2018). Rather, the combination of valuing both areas (reducing wastes, enhancing efficiencies and improving patient outcomes) buffers the workforce from moral distress. Evaluating the effectiveness of QI should consider the multiple dimensions of the quintuple aim (Nundy et al. 2022), particularly pertinent in the currently burdened system, where disparate health outcomes are widely experienced across communities. We propose the need to increase the employment of mixed-methods approaches where quantitative and qualitative data complement each other to tell powerful change stories.

Third, nurse leaders could invest in creating space for nurses and healthcare colleagues to collaboratively practice reflexivity and “thickly embodied” soulful QI. As sponsors, they should invigorate breadth and depth in thinking when executing activities. Some initiatives are driven by patient and workforce needs (or in QI language, “pain points”), while others are tied to funding. For example, organizations in Ontario are expected to co-develop QI plans while engaging with patients and families, which facilitates people-centredness, and in turn, affects care experiences (Ontario Health 2022). Despite mandates, QI plans need not be carried out in mechanical fashions. We encourage pausing, reflecting and *feeling*.

Nurse leaders could shape the direction of projects and remind team members and organizations at large to join the movement with people as the core.

Finally, framing quality from a systems-wide lens is within the nurse leaders' capacities to role-model. The Institute for Healthcare Improvement suggests extending strategically beyond granular and narrow views of QI to a "Whole System Quality approach" that is multi-faceted from planning to doing, learning and beyond (Sampath et al. 2021). In contrast to approaching QI as distinct tasks and fragmented projects, we encourage nurse leaders to build a systems-quality culture at their organizations – one that is rooted in conscious awareness of the interconnectedness across quality-related pursuits, as well as re-affirming the value of nurses and colleagues. Table 1 presents two scenarios, with concrete comparisons and contrasts between mechanical versus soulful approaches. These examples are used to illustrate the interwoven principles of "thickly embodied" QI, and how nurse leaders may role-model the embodiment of soulful QI.

Table 1.		Examples of how nurse leaders can ensure QI is soulful
Scenario	Mechanical approach	Soulful QI approach
<p>Clinic flow. A QI project is initiated to address long patient wait times at a clinic and delays in sending out referrals to specialty services. Timelines are defined and tight.</p>	<ul style="list-style-type: none"> • Only numeric data are reviewed about wait times and delays while making assumptions of causes • Administrative meetings are held without the engagement of patients or providers about pain points • QI tools are chosen for execution without consideration of context • Use of tools for the sake of using tools and checking the box on completion • Sole outcome measure is cost avoidance (not to increase full-time equivalents) to reduce wait times 	<p>Nurse leaders convey the importance of:</p> <ul style="list-style-type: none"> • Understanding workload pressures and negative patient experiences • Clear commitment that improving the flow at the clinic is centred around the people – that is, why the QI project is needed – both to improve workflow and for timely care for patients • Engagement of the perspectives of patients and clinic providers in understanding impact (of wait and delays) and potential solutions – mindful of power dynamics • Analytical thinking about the appropriateness of tools based on spatial-temporal contexts – that is, letting people drive the use of tools • Embracing QI evaluation plans that include patient and clinic provider outcomes such as patient experience, joy and fulfillment – these do not need to be complicated and should avoid causing measurement fatigue (IHI 2021) • Personal thank you notes for participation in QI activities

Scenario	Mechanical approach	Soulful QI approach
National accreditation for nursing education programs. A school of nursing is preparing for an upcoming accreditation, which facilitates the identification of strengths and improvement opportunities.	<ul style="list-style-type: none"> • Completed in a merely retrospective manner in which standards are ticked off • Done in a way that negates attention to their own local context, student and faculty experience and strategic plans • Minimal or absent engagement with the professors, staff and students 	<ul style="list-style-type: none"> • Regular engagement and reflexive discussion with faculty, staff and students about the program and school strengths and opportunities for improvement • Embedded in the school's strategic plan • Integrated into the daily work of faculty and staff in a prospective manner • Celebration of efforts made throughout the academic years and during the actual accreditation process

Note: These are general scenarios and do not reflect any specific executed projects.
QI = quality improvement.

Conclusion

We argue that there are misconceptions about QI in healthcare and that there are varying levels of application (superficial and habitual vs. deep and heartfelt). A thoughtful, critical, reflexive approach to applying lean and other QI principles is crucial to maintaining “thickly embodied,” people-centred and high-quality health systems. Nurse leaders can bring the workforce together to reject lackadaisical ways of engaging in QI and facilitate the illumination toward better, more meaningful and soulful QI. Let us intently and openly let joy flow fluidly into and (re-)orient our QI activities.

Disclaimer

This article does not represent the views of and has not been endorsed by Toronto Public Health or Toronto Metropolitan University.

Note

1. “Interest-holders” has been identified as an emerging term to reflect people with interests in an issue (Akl et al. 2024).

Correspondence may be directed to Leinic Chung-Lee by e-mail at leinic.chung@torontomu.ca.

References

Akl, E.A., J. Khabsa, J. Petkovic, O. Magwood, L. Lytvyn, A. Motilall et al. 2024. “Interest-Holders”: A New Term to Replace “Stakeholders” in the Context of Health Research and Policy. *Cochrane Evidence Synthesis and Methods* 2(11): e70007. doi:10.1002/cesm.70007.

- Arellano, A., T. Halsall, T. Forneris and C. Gaudet. 2018. Results of a Utilization-Focused Evaluation of a Right to Play Program for Indigenous Youth. *Evaluation and Program Planning* 66: 156–64. doi:10.1016/j.evalprogplan.2017.08.001.
- American Society for Quality (ASQ). 2024. Fishbone. Retrieved March 14, 2025. <<https://asq.org/quality-resources/fishbone?srsltid=AfmBOoqVASDD6OajxOKYL6HZwETfmwRQHUIIM6EdMOuVYmFNidBR0LuB4>>.
- Bloomquist, C.D., J. Kryzanowski and T. Dunn-Pierce. 2020. Applying Quality Improvement Strategies Within Canadian Population Health Promotion. *Health Promotion International* 35(2): 422–31. doi:10.1093/heapro/daz017.
- Chung-Lee, L. and J. Lapum. 2024. Resisting the Robotic – Moving Fluidly Towards Soulful Qualitative Analysis. *International Journal of Qualitative Methods* 23. doi:10.1177/16094069241247475.
- Gale, A.H. 2016. The Hospital as a Factory and the Physician as an Assembly Line Worker. *Missouri Medicine* 113(1): 7–9.
- Gleeson, H., A. Calderon, V. Swami, J. Deighton, M. Wolpert and J. Edbrooke-Childs. 2016. Systematic Review of Approaches to Using Patient Experience Data for Quality Improvement in Healthcare Settings. *BMJ Open* 6(8): e011907. doi:10.1136/bmjopen-2016-011907.
- Hempel, S., M. Bolshakova, B.J. Turner, J. Dinalo, D. Rose, A. Motala et al. 2022. Evidence-Based Quality Improvement: A Scoping Review of the Literature. *Journal of General Internal Medicine* 37(16): 4257–67. doi:10.1007/s11606-022-07602-5.
- Hussein, M., M. Pavlova, M. Ghalwash and W. Groot. 2021. The Impact of Hospital Accreditation on the Quality of Healthcare: A Systematic Literature Review. *BMC Health Services Research* 21(1): 1057–12. doi:10.1186/s12913-021-07097-6.
- Institute for Healthcare Improvement (IHI). 2008. Triple Aim and Population Health. Retrieved May 28, 2023. <<https://www.ihl.org/improvement-areas/improvement-area-triple-aim-and-population-health>>.
- Institute for Healthcare Improvement (IHI). 2021, April 27. Tips for Measuring Joy in Work. Retrieved March 18, 2025. <<https://www.ihl.org/insights/tips-measuring-joy-work>>.
- Jabbal, J. 2017, November 9. Embedding a Culture of Quality Improvement. The King's Fund. Retrieved March 13, 2024. <<https://www.kingsfund.org.uk/insight-and-analysis/reports/embedding-culture-quality-improvement>>.
- Jingxia, C., Z. Longling, Z. Qiantao and J. Xiaolian. 2022. The Changes in the Nursing Practice Environment Brought by COVID-19 and Improvement Recommendations from the Nurses' Perspective: A Cross-Sectional Study. *BMC Health Services Research* 22(1): 754. doi:10.1186/s12913-022-08135-7.
- Kenney, C. 2011. *Transforming Health Care: Virginia Mason Medical Center's Pursuit of the Perfect Patient Experience*. Taylor & Francis Group.
- Khurshid, Z., E. McAuliffe and A. De Brún. 2021. Exploring Healthcare Staff Narratives to Understand the Role of Quality Improvement Methods in Innovative Practices During COVID-19. *BMC Health Service Research* 21: 1271. doi:10.1186/s12913-021-07297-0.
- Langley, G.L., R. Moen, K.M. Nolan, T.W. Nolan, C.L. Norman and L.P. Provost. 2009. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd ed.)*. Jossey-Bass Publishers.
- Lanoix, M. 2013. Labor as Embodied Practice: The Lessons of Care Work. *Hypatia* 28(1): 85–100.
- Lapum, J., M. Nguyen, S. Fredericks, S. Lai and J. McShane. 2021. “Goodbye ... Through a Glass Door”: Emotional Experiences of Working in COVID-19 Acute Care Hospital Environments. *Canadian Journal of Nursing Research* 53(1): 5-15. doi:10.1177/0844562120982420.
- Martin-Misener, R. 2024. Supporting Nurses to Stay and Find Joy in Boldly Leading Healthcare Improvements. *Canadian Journal of Nursing Leadership* 37(1): 1-4. doi:10.12927/cjnl.2024.27361.

- Mathura, P., M. Li, N. McMurtry and N. Kassam. 2020. Enhancing the Healthcare Quality Improvement Storyboard Using Photovoice. *BMJ Open Quality* 9(4): e001104. doi:10.1136/bmjopen-2020-001104.
- McHugh, S.K., R. Lawton, J.K. O'Hara and L. Sheard. 2020. Does Team Reflexivity Impact Teamwork and Communication in Interprofessional Hospital-Based Healthcare Teams? A Systematic Review and Narrative Synthesis. *BMJ Quality and Safety* 29(8): 672–83. doi:10.1136/bmjqs-2019-009921.
- McMillan, K. and A. Perron. 2020. Nurses' Engagement With Power, Voice and Politics Amidst Restructuring Efforts. *Nursing Inquiry* 27(3): e12345. doi:10.1111/nin.12345.
- Molina-Mula, J., E. Peter, J. Gallo-Estrada and C. Perelló-Campaner. 2018. Instrumentalisation of the Health System: An Examination of the Impact on Nursing Practice and Patient Autonomy. *Nursing Inquiry* 25(1): e12201. doi:10.1111/nin.12201.
- Morris, H., R. Jones, D. Tumin, J. Garris, J.A. Kohler, T.J. Reeder et al. 2021. Dissemination of Quality Improvement Project Results After Local Presentation. *American Journal of Medical Quality* 36(6): 395–401. doi:10.1097/01.JMQ.0000735488.70012.9b.
- NHS Improvement. 2017. *Building Capacity and Capability for Improvement: Embedding Quality Improvement Skills in NHS Providers*. Institute for Healthcare Improvement. Retrieved May 28, 2023. <https://qi.elft.nhs.uk/wp-content/uploads/2017/09/01-NHS107-Dosing_Document-010917_K_1-1.pdf>.
- Niñerola, A., M.V. Sánchez-Rebull and A.-B. Hernández-Lara. 2020. Quality Improvement in Healthcare: Six Sigma Systematic Review. *Health Policy* 124(4): 438–45. doi:10.1016/j.healthpol.2020.01.002.
- Nundy, S., L.A. Cooper and K.S. Mate. 2022. The Quintuple Aim for Health Care Improvement: A New Imperative to Advance Health Equity. *JAMA* 327(6): 521–22. doi:10.1001/jama.2021.25181.
- Olmos-Vega, F.M., R.E. Stalmeijer, L. Varpio and R. Kahlke. 2023. A Practical Guide to Reflexivity in Qualitative Research: AMEE Guide No. 149. *Medical Teacher* 45(3): 241–51. doi:10.1080/0142159X.2022.2057287.
- Ontario Health. 2022. Clinical Quality Improvement. Retrieved March 13, 2024. <<https://www.ontariohealth.ca/providing-health-care/clinical-quality-improvement>>.
- Ontario Health 2024. Clinical and Quality Programs. Retrieved March 14, 2025. <<https://www.ontariohealth.ca/about-us/our-programs/clinical-quality-programs>>.
- Queen's Printer for Ontario. 2012. Quality Improvement Guide. Retrieved March 14, 2025. <<https://www.hqontario.ca/portals/0/documents/qi/qi-quality-improve-guide-2012-en.pdf>>.
- Sampath, B., J. Rakover, K. Baldoza, K. Mate, J. Lenoci-Edwards and P. Barker. 2021. *White Paper: Whole System Quality: A Unified Approach to Building Responsive, Resilient Health Care Systems*. Institute for Healthcare Improvement. Retrieved August 17, 2024. <<https://www.ihl.org/sites/default/files/IHI-Whole-System-Quality-White-Paper.pdf>>.
- Scoville, R. and K. Little. 2014. White Paper: Comparing Lean and Quality Improvement. Institute for Healthcare Improvement. Retrieved March 13, 2024. <<https://www.ihl.org/resources/white-papers/comparing-lean-and-quality-improvement>>.
- van Loon, E. and T. Zuiderent-Jerak. 2012. Framing Reflexivity in Quality Improvement Devices in the Care for Older People. *Health Care Analysis* 20(2): 119–38. doi:10.1007/s10728-011-0179-7.
- Willmington, C., P. Belardi, A.M. Murante and M. Vainieri. 2022. The Contribution of Benchmarking to Quality Improvement in Healthcare. A Systematic Literature Review. *BMC Health Services Research* 22(1): 139. doi:10.1186/s12913-022-07467-8.