Navigating the Tension between Being a Transformational Leader and an Efficient Leader?

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Abstract

Since its introduction in 2014, the quadruple aim of optimizing healthcare performance by reducing costs and improving population health, patient experience, and healthcare team well-being has not been realized. Lean, a formal quality improvement model aimed at eliminating waste, improving flow and quality of care, and increasing efficiency, has been inconsistently successful in healthcare due to poor implementation and organizational understanding. This discussion paper explores the potential for transformational leaders to support the use of lean through empowering clinical leaders. Transformational leadership is a relational style of leadership found to motivate followers by soliciting their perspectives on problem-solving while supporting each individual to reach their full potential. Although transformational leaders can foster the development of clinical leaders to influence and coordinate care, they must navigate the tension between supporting clinical leaders and the organizational demands for improved efficiency. The gains of supporting the use of lean by clinical leaders could be meaningful development of strategies aimed at the quadruple aim by supporting the daily efforts of front-line nurses and their leaders to improve the delivery of quality care.

Keywords: leadership, lean model, transformational leadership, healthcare

Healthcare in Canada is costly, and a significant portion of that funding is spent on adverse events. In 2022, the cost of healthcare in Canada was \$331 billion, up from \$200 billion in 2013 (Canadian Institute for Health Information [CIHI], 2022). Canada spends more on healthcare than Sweden, Australia, and France (CIHI, 2022). A CIHI (2022, November) report from 2014–2015 estimated that \$685 million was spent on hospital-based adverse events. In 2014, a framework known as "the quadruple aim" was proposed to optimize healthcare performance by reducing costs and improving population health, patient experience, and healthcare team well-being (Arnetz et al., 2020). Quality improvement efforts have not been successful, with approximately two-thirds failing despite focusing on the quadruple aim framework (Celebi Cakiroglu et al., 2021). Lean thinking is another strategy to reduce costs, decrease adverse events, and increase efficiency and patient and staff satisfaction (van Elp et al., 2021). Moreover, -the front-line, transformational leadership of nurse leaders has also been shown to improve healthcare organizations' overall performance, staff satisfaction, and quality of care, as well as create an empowered nursing workforce (Boamah, 2017). In this discussion paper, we explore how nurse leaders could navigate the tensions between being a transformational leader and an efficient leader and the use of the lean model in relation to the quadruple aim. We suggest that by mobilizing front-line clinical leaders, transformational leaders can promote both quality care and efficiency. Through this discussion paper, we will refer to the quadruple aim and acknowledge that the population of focus in this paper is limited to the context of care provided in healthcare facilities.

Transformational Leadership

Transformational leadership (T.L.) is a relational style of leadership consisting of behaviors intended to inspire and empower followers to go beyond what is expected and required (Abdul Salam et al., 2023). Often, leaders and followers are mutually motivated to do more than formally expected to achieve organizational goals (Boamah, 2017). The theory of TL comprises four components: (1) idealized influence: set a high standard for moral and ethical conduct paired with a vision aimed at winning the trust of followers; (2) inspirational motivation: a clearly articulated vision to inspire others to act; (3) intellectual stimulation: solicit followers perspectives on problems and consider a wide variety of opinions to inform decision-making; and (4) individualized consideration: attend to each employee's individual needs and mentor to support them to reach their full potential. Transformational leaders further support followers by providing access to four organizational factors: resources, opportunities to learn, support, and access to information (Asif et al., 2019; Boamah, 2017). Through the establishment of deep relationships, transformational leaders can recognize and support nurses' necessities, fulfill those needs, and allocate resources to encourage empowerment and autonomy (Asif et al., 2019). Nurses who work with TL have higher levels of job satisfaction, lower rates of staff turnover, and decreased rates of workplace bullying and emotional exhaustion (McCay et al., 2018).

As believers in evidence-based care, transformational leaders can influence employees to offer innovative ideas to solve problems. TL empowers nurses to feel more autonomous and self-efficacious; this encourages followers to take on initiatives and use novel approaches to care, resulting in better outcomes for patients in quality and safety of care (Asif et al., 2019). Managers whose leadership style is transformational are linked to care areas with reduced medication errors; patient falls, infection rates, and mortality rates (Boamah, 2017).

TL can experience challenges such as followers who are resistant to change, time constraints, lack of resources, hierarchical organizations, balancing short and long-term goals,

predetermined measured outcomes, and staff burnout (Cummings et al., 2018; Fast & Rankin, 2017). Budgets are central to nurse leaders' work, with fiscal accountability deeply embedded in their role (Fast & Rankin, 2017). Resource constraints paired with measured outcomes like nursing productivity (worked hours to paid hours) challenge nurse leaders to support staff's access to organizational factors and their ability to provide a clear vision for their followers (Fast & Rankin, 2017). Fast and Rankin (2017) use the term bifurcated consciousness to describe the tensions nurse leaders face. Bifurcated consciousness is defined as "two distinct modes of knowing exist simultaneously in an individual's consciousness" (Fast & Rankin, 2017, p. 7). For example, nurse managers focus on supporting appropriate nursing ratios to ensure the quality of care and staff satisfaction exists simultaneously with organizational expectations of over-time costs and budget limitations. The tension or bifurcation centers around the ask to do more with less. Thus, transformational leaders can find themselves at odds with their transformational vision as they try to balance budgets, ensure the quality of care, and support nursing satisfaction in a time of increasing pressure to retain nurses and reduce costs. Bercaw (2021) argues that what healthcare workers and administration lack is a system, structure, and processes to improve the performance and culture of our healthcare workforce. One proposed solution is the lean model.

Lean Thinking in Healthcare

"Lean thinking" is a quality improvement philosophy that originated in the automotive industry and has since been successfully employed in many industries (Charns et al., 2022). The goal of lean in healthcare is to facilitate the provision of cost-effective, high-quality, innovative healthcare that places the patient and care providers at the center of determining optimal care and what resources are essential to achieving the best outcomes (Udod et al., 2020) Lean comprises two defining characteristics: (a) philosophies aimed at transforming the workplace culture and focusing on continuous improvement by eliminating waste and improving the flow of patients, providers and suppliers, and processes; and (b) assessment activities or analytic tools that identify waste and improve value-added activities (Udod et al., 2020). Lean requires culture change, changes in process, leadership behavior, capability development, planning, and collaboration to be successful (Azevedo et al., 2020).

Although there are several variations of the lean model, Nowak et al. (2017) offer a useful five-step process comprised of (1) value, (2) value stream mapping, (3) flow, (4) pull, and (5) perfection. The first step (value) is to reduce waste through the reduction of non-value-added (NVA) activities. A value-added activity (VAA) is any product or service that is of value to the recipient (patient). An example would be a patient needing an x-ray, the process involves booking an appointment, checking in, having the x-ray, cleaning the room after the test, reading and interpreting the x-ray, documentation, and communicating the results. The VAA activities are the x-ray, reading, and communicating the results; the rest are NVA activities. Most processes are comprised of 95% NVA and 5% VAA. A lean focus is to find efficiencies in 95% of the process by looking for seven sources of waste: overproduction, waiting, inventory, motion, over-processing, defects, and transportation (Bercaw, 2021). The second step is value stream mapping, which involves the visualization of complex workflows through six steps: (1) determine the current state value stream map, including pre-measurements, (2) identify waste, (3) develop solutions for improvements, (4) convert the current value stream map into a future state, (5) implementation, and (6) outcome measurements (Nowak et al., 2017). The third step of flow is the exploration of patients, information, and resources through the healthcare system

(Bercaw, 2021). The goal is to ensure smooth and efficient movement that reduces delays or waiting. The fourth step of pull is the delivery of healthcare services that align with patient needs and avoid overproduction or underutilization of resources (Bercaw, 2021). The fifth and final step is perfection, which refers to continuous improvement through incremental changes based on measured outcomes. Having reliable access to data and metrics provides information on areas of improvement, impact assessments, and sustainability (Azevedo et al., 2020).

Challenges and Benefits of Lean

There have been numerous challenges with the use of lean in healthcare. The most identified challenges are constrained budgets, training, resources, leadership, lack of strong evidence, and resistance to change. A lack of uniform training has made it difficult to integrate lean into the work of change initiatives (Udod et al., 2020). The limited knowledge of how to use the tools and techniques associated with lean is attributed to disjointed implementation efforts (Udod et al., 2020). The first author has recently completed an online training certificate for the green belt in Six Sigma lean training. As a result she agrees that providing education alone cannot create a competent user of the lean model. Managers experience limited support in offering education and learning about lean (Udod et al., 2020). Often lean is attempted as a piecemeal application for small-enclosed projects rather than focusing on a holistic culture change to involve employees in determining improvements and behavioral changes (Maijala et al., 2018). There is a shared perception by leaders and front-line staff that lean is additional work, particularly when the lean model is implemented without shared decision-making or consideration of existing workloads (Udod et al., 2020). Despite these challenges, the value of the lean model is recognized by nurse leaders but they are found to be unsustainable (Udod et al., 2020).

A scoping literature review of the impact of lean management on healthcare professionals found a positive impact on staff morale, motivation, and job satisfaction in 52.9% of the articles (Mahmoud et al., 2021). Successful lean interventions included in this review were physical workplace redesign completed with staff engagement and participation in decision-making and the use of value stream mapping promoted staff participation, well-being, resource allocation, and a collective approach by all professional groups. Another systematic review of 40 lean applications in healthcare settings identified decreased length of hospital stay, reduced wait times for treatment and appointments, and improved patient and staff satisfaction (Tlapa et al., 2020). Conversely, 41.2% of the articles reviewed by Mahmoud et al. (2021) suggested that lean led to work intensification, job strain, anxiety, stress, and dehumanization. In one study, the adoption of lean was enforced with managerial coercion, threats of closure, and intensification of work conditions for resisting staff (Mahmoud et al., 2021). Thus, the outcomes from the use of lean are inconsistent and depend on the leadership style and true intentions behind the use of lean (Mahmoud et al.). Udod et al. (2020) described leadership as a fundamental ingredient for effective lean system transformation.

Lean Leadership

Lean leadership is a set of practices, tools, and behaviors focused on processes that support improvement (Udod et al., 2020). To succeed, lean leaders must be visible, provide the vision, and empower, trust, and engage the care team (Maijala et al., 2018). Engaging staff, promoting culture change, setting priorities, providing resources, communicating successfully, and facilitating cooperation enable lean (Azevedo et al., 2020). Protecting staff time for lean

events and providing a long-term vision for lean work (Azevedo et al., 2020). There are several similarities shared between the leadership required for lean and T.L., such as empowerment, providing a vision and resources

The Impact of Transformational Leadership and Lean on the Quadruple Aim

Healthcare in Canada is experiencing a combination of trends such as rapidly intensifying costs, inefficiencies, lack of customer-centeredness, and concerns around the provision of safe, quality care (Udod et al., 2020). Nurses in Canada are experiencing stress, anxiety, burnout, and nursing shortages, and Canadians are experiencing longer surgery wait times, poor healthcare access, and poor quality of care (Registered Nurses' Association of Ontario [RNAO], 2022). Research and statistics show that healthcare has a high ratio of preventable adverse events costing the healthcare system billions of dollars annually (Asif et al., 2019). Poor working conditions, inadequate staffing, low nursing morale, and the absence of appropriate leadership styles are attributed to the cause of adverse events (Mahmoud et al., 2021). TL has been found to decrease the number of adverse events due to its positive effect on staff expertise, empowerment, and a visionary approach (Mahmoud et al., 2021). It is essential that healthcare becomes more efficient, but can healthcare do more with less money? TL can address three of the four components of the quadruple aim and lean can address all four. Lacking from the literature is how transformational leaders can best incorporate lean within their practice teams.

How Can Transformational Nurse Leaders Use Lean Principles to Address the Quadruple Aim?

The tension between lean and TL lies in the challenges stated earlier. TL is challenged by fiscal pressures, limited resources, and time pressures. Lean requires dedicated resources and time to educate, implement, support, and evaluate. In an ideal situation, the transformational leader would have the resources to provide education and dedicate staff time to apply lean. Properly done, the goal would be to improve quality with the potential additional benefit of increasing efficiency. In our current healthcare system fiscal constraints, one wonders if a lean project identified the need for additional nurses, the ratio of nurses would increase. There is a push to improve efficiency to improve quality of care but limited response when there is a need to increase funding to enhance the quality of care, which constrains healthcare organizations from embracing the use of lean. There is a need to fiscally invest in lean or efficiency efforts before improved efficiency can occur. Expecting increased efficiency without the necessary investment in teams in order to properly address the concepts within lean is not likely to be successful. The lean model can potentially improve healthcare if properly embraced and supported by healthcare organizations. If not, it will continue to be a piecemeal tool with limited success.

We propose using lean as a resource for nurses to formally address strategies to improve patient outcomes and satisfaction. Lean provides the formal structure to support these efforts with the added component of metrics. Metrics and measurement are often lacking in current change management processes, and as such, it is hard to identify success and measure sustainability. Having data allows for the recognition of success, thereby further enhancing empowered work environments and continued efforts to address quality of care, as well as supporting the validity of money spent to save money and improve outcomes.

There are unique and shared challenges between the lean model, and TLs experience tension between supporting their teams and balancing budgets, while lean has been poorly

implemented. A transformational leader who has already established empowered work environments that encourage their staff to improve the quality of care could lean enhance those efforts? We propose that transformational leaders might find success in tapping into clinical leaders (CL) on their units to implement the lean model implement the lean model and implement it successfully.

Clinical Leadership

In addition to managers who practice TL, effective clinical leadership executed by frontline nurses also influences the provision of high-quality care (Boamah, 2017). A clinical leader (CL) is a registered nurse (RN) in a direct care position who influences and coordinates care processes within the interprofessional team (Boamah, 2017). CLs are seen as positive role models, and decision makers, and are clinically competent and effective communicators (Boamah, 2017). CLs are collaborative, have interpersonal understanding, and coordinate care in a way that promotes the health and well-being of their clients (Boamah, 2017). They have been found to improve the quality of care, reduce costs, and integrate research and best practices into their practice (Boamah, 2017). CLs working in empowered environments improve the efficiency and sustenance of care processes that benefit the healthcare team and delivery of patient care. A qualitative study found that nurse's problem-solving skills are based on the logic of addressing the root causes of the problem, which is supported by the lean model (Udod et al., 2020). Boamah (2017) identified a link between structurally empowering work conditions, nurses' clinical leadership, and its positive influence on adverse patient outcomes. Front-line nurses are critical to care because they are well-placed to identify workplace inefficiencies, motivate other members of the team to improve patient care and lead change initiatives. Who better to address workflow and non-value-added activities hindering the delivery of optimal care than front-line staff (Mianda & Voce, 2018)? Concentrating intensive education and training efforts for CLs would address the known challenges around education and increase the likelihood of success, as it would be easier to ensure comprehensive education for a dedicated few rather than all staff. Basic education would still be provided to all staff to ensure their understanding of lean applications. The TL could work towards ensuring CLs have dedicated time for lean projects.

The best approach to supporting the learning of the lean model for CLs would be to offer multiple time-spaced contact sessions as they have been shown to provide the learner with sufficient time and space to engage, reflect on the content, and then apply the knowledge and skills in the workplace (Mianda & Voce, 2018). Offering this training in a team approach allows for team building and the transfer of skills while also reducing resistance to change and reducing tension toward front-line staff who are taking on clinical leadership roles (Mianda & Voce, 2018).

By tapping into the benefits of TL, we would anticipate that CLs trained in lean practices would be supported to make meaningful changes to practice. Due to the lack of research on the lean model's use in healthcare, it is difficult to predict if TLs would successfully apply lean as a model to address the quadruple aim. However, the commonalities between the leadership needed for the lean model and TL could support the effort. We believe a TL would support their CLs in a robust and empowered use of lean strategies to strengthen the work already underway. A RL establishes an empowered team already working towards innovative problem-solving and novel approaches to care shown to improve the quality and safety of care. Lean would be the formal support to better direct efforts to improve care and efficiency.

Conclusion

Healthcare organizations depend on nurses to provide effective leadership in dynamic and complex settings. The current climate in healthcare focuses on reducing costs while improving care. Transformational leaders foster care teams already working towards improving the quadruple aim, but often do not include formalized processes. The Lean model offers such a formal process to enhance their improvements. However, a leader requires the assistance of clinical staff who understand the frontline issues to effect positive change. We believe that including clinical front line leaders in the lean model could enhance teams lead by transformational leaders in effectively approaching workflow issues, address challenges in workplace design, and use data to evaluate and monitor strategies and initiatives. The use of lean by TLs within their units and implementation led by CLs may be a solution to address all four components in the quadruple aim and, with time, may alleviate the tension experienced by TLs and their dedicated followers.

References

- Abdul Salam, H., Dumit, N., Clinton, M., & Mahfoud, Z. (2023). Transformational leadership and predictors of resilience among registered nurses: A cross-sectional survey in an underserved area. *BMC Nursing*, 22(1), Article 37. https://doi.org/10.1186/s12912-023-01192-1
- Arnetz, B. B., Goetz, C. M., Arnetz, J. E., Sudan, S., vanSchagen, J., Peirsma, K., & Reyelts, F. (2020). Enhancing healthcare efficiency to achieve the quadruple aim: An exploratory study. *BMC Research Notes*, *13*(1), Article 362. https://doi.org/10.1186/s13104-020-05199-8
- Asif, M., Jameel, A., Hussain, A., Hwang, J., & Sahito, N. (2019). Linking transformational leadership with nurse-assessed adverse patient outcomes and the quality of care: Assessing the role of job satisfaction and structural empowerment. *International Journal of Environmental Research and Public Health*, *16*(13), 2381–2396. https://doi.org/10.3390/ijerph16132381
- Azevedo, K. J., Gray, C. P., Gale, R. C., Urech, T. H., Ramirez, J. C., Wong, E. P., Lerner, B., Charns, M. P., & Vashi, A. A. (2020). Facilitators and barriers to the lean enterprise transformation program at the veterans health administration. *Health Care Management Review*, 46(4), 308–318. https://doi.org/10.1097/hmr.0000000000000270
- Bercaw, R. G. (2021). *Taking improvement from the assembly line to healthcare: The application of lean within the healthcare industry*. Productivity Press. https://doi.org/10.1201/b11739
- Boamah, S. (2017). Linking nurses' clinical leadership to patient care quality: The role of transformational leadership and workplace empowerment. *Canadian Journal of Nursing Research*, *50*(1), 9–19. https://doi.org/10.1177/0844562117732490
- Canadian Institute for Health Information [CIHI]. (2022). *Patient harm in Canadian hospitals? It does happen* [Infographic]. https://www.cihi.ca/en/patient-harm-in-canadian-hospitals-it-does
 - $happen\#: \sim : text = How\% 20 often\% 20 does\% 20 it\% 20 happen, of\% 20 2.4\% 20 million\% 20 hospital\% 20 stays$
- Canadian Institute for Health Information [CIHI]. (2022, November 3). *National health expenditure trends*, 2022 snapshot. https://www.cihi.ca/en/national-health-expenditure-trends-2022-

- snapshot#:~:text=Canada's%20per%20capita%20spending%20on,and%20Australia%20(CA%247%2C248)
- Celebi Cakiroglu, O., Ulutas Hobek, G., & Harmanci Seren, A. (2021). Nurses' views on change management in health care settings: A qualitative study. *Journal of Nursing Management*, 30(2), 439–446. https://doi.org/10.1111/jonm.13500
- Charns, M. P., Lerner, B., Yakovchenko, V., Urech, T. H., Shin, M. H., Kim, B., Engle, R. L., & Vashi, A. A. (2022). Achieving transformation to lean management systems in health care. *Health Services Research*, *58*(2), 343–355. https://doi.org/10.1111/1475-6773.14072
- Cummings, G. G., Tate, K., Lee, S., Wong, C. A., Paananen, T., Micaroni, S. P., & Chatterjee, G. E. (2018). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 85, 19–60. https://doi.org/10.1016/j.ijnurstu.2018.04.016
- Fast, O., & Rankin, J. (2017). Rationing nurses: Realities, practicalities, and nursing leadership theories. *Nursing Inquiry*, 25(2), e12227. https://doi.org/10.1111/nin.12227
- Mahmoud, Z., Angelé-Halgand, N., Churruca, K., Ellis, L. A., & Braithwaite, J. (2021). The impact of lean management on front-line healthcare professionals: A scoping review of the literature. *BMC Health Services Research*, *21*(1), Article 383. https://doi.org/10.1186/s12913-021-06344-0
- Maijala, R., Eloranta, S., Reunanen, T., & Ikonen, T. S. (2018). Successful implementation of lean as a managerial principle in health care: A conceptual analysis from systematic literature review. *International Journal of Technology Assessment in Health Care*, *34*(2), 134–146. https://doi.org/10.1017/s0266462318000193
- McCay, R., Lyles, A. A., & Larkey, L. (2018). Nurse leadership style, nurse satisfaction, and patient satisfaction. *Journal of Nursing Care Quality*, *33*(4), 361–367. https://doi.org/10.1097/ncq.000000000000317
- Mianda, S., & Voce, A. (2018). Developing and evaluating clinical leadership interventions for front-line healthcare providers: A review of the literature. *BMC Health Services Research*, *18*(1), Article 747. https://doi.org/10.1186/s12913-018-3561-4
- Nowak, M., Pfaff, H., & Karbach, U. (2017). Does value stream mapping affect the structure, process, and outcome quality in care facilities? A systematic review. *Systematic Reviews*, 6(1), Article 170. https://doi.org/10.1186/s13643-017-0563-y
- Ramori, K. A., Cudney, E. A., Elrod, C. C., & Antony, J. (2019). Lean business models in healthcare: A systematic review. *Total Quality Management & Business Excellence*, 32(5-6), 558–573. https://doi.org/10.1080/14783363.2019.1601995
- Registered Nurses' Association of Ontario [RNAO]. (2022, May 12). Nursing through a crisis: A comparative perspective. https://rnao.ca/sites/default/files/2022-05/Nursing%20Through%20Crisis%20-%20A%20Comparative%20Analysis%202022.pdf https://doi.org/10.1097/naq.00000000000111
- Tlapa, D., Zepeda-Lugo, C. A., Tortorella, G. L., Baez-Lopez, Y. A., Limon-Romero, J., Alvarado-Iniesta, A., & Rodriguez-Borbon, M. I. (2020). Effects of lean healthcare on patient flow: A systematic review. *Value in Health*, 23(2), 260–273. https://doi.org/10.1016/j.jval.2019.11.002
- Udod, S. A., Duchscher, J., Goodridge, D., Rotter, T., McGrath, P., & Hewitt, A. (2020). Nurse managers implementing the lean management system: A qualitative study in western

Canada. *Journal of Nursing Management*, *28*(2), 221–228. https://doi.org/10.1111/jonm.12898 van Elp, B., Roemeling, O., & Aij, K. (2021). Lean leadership: Towards continuous improvement capability in healthcare. *Health Services Management Research*, *35*(1), 7–15. https://doi.org/10.1177/09514848211001688